

Career Identity Development and the Five Factor Model

A Departmental Honors Thesis

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Abstract

This study examined the relationship between Marcia's model of Career Identity Development and the Five Factor Model of Personality in a sample of 69 undergraduate psychology majors enrolled in an "Orientation to Psychology as a Major" course. The relationship between the Tendency to Foreclose (TTF) and the Openness & Conscientiousness personality traits was examined using the Commitment to Career Choices Survey (CCCS) to assess career identity development and the OCEAN measure to assess personality traits. The CCCS was administered both at the beginning of the semester and again at the end. Results showed significant positive correlations between the TTF and Conscientiousness, as well as between the TTF and the six sub-facets of Conscientiousness at both the pre and post test. Negative correlations between TTF and Openness were also found to be significant. The results of this study indicate that levels of Conscientiousness and Openness may be valid predictors of a student's tendency to foreclose on a career. These findings can have implications such as administering personality measures in career development classes to predict and determine which students may need more guidance. The limitations of this study as well as future directions of research are also discussed.

Career Identity Development and the Five Factor Model

College is the first opportunity of choosing a major program of study from which a student will hopefully begin his or her professional career after graduation. The process of developing a career identity during this time can be rather stressful and cause significant anxiety for some (Meeus, 1993). Psychology is a very broad major with many options. While graduate school may initially be a popular option for many students, Macera & Cohen (2006) found that only approximately 55% of students in a career development course wanted to pursue graduate school immediately after completing an undergraduate degree when surveyed at the end of the semester compared to 62% when surveyed at the beginning of the semester. Numerous students will pursue careers with only a bachelor's degree before entertaining the thought of graduate school.

Career development courses are a way to help students consider different career paths and provide career exploration opportunities. Studies have examined the effectiveness of these development courses (Thomas & McDaniel, 2004; Macera & Cohen, 2006; Larkin, Pines, & Bechtel, 2002). The courses' objectives include increasing students' knowledge about various career options for psychology majors; increasing their confidence in the ability to make appropriate career decisions based on interests, values, and skills; and finally, to increase movement toward the achievement of their career identities (Thomas & McDaniel, 2004). To aid in accomplishing these goals, the use of portfolios was incorporated into a similar type of course (Larkin et al., 2002). A portfolio is a collection of documents and other evidence which illustrate progress toward a goal. These portfolios were used to help students develop competencies in the process of discovering and investigating a career of interest (Larkin et al., 2002).

Thomas & McDaniel (2004) found the previously mentioned form of career development course to be very effective. The goals were accomplished in that the course significantly increased the students' knowledge of career options, confidence in their abilities to make career decisions, and movement toward achieving career identities. Macera & Cohen (2006) found that students, when asked to provide feedback on a similar course, recommended that the course be offered again in the future.

A course, similar to those aforementioned, was developed at Ball State University with the main goals of providing career exploration opportunities and fostering change in career identity as a function of the course. This one-credit hour course is required for all psychology majors because there is no requirement for a career planning course in Ball State's general curriculum or in another departmental major to date. This course has similar goals to the previously mentioned career development courses in that the course is designed to provide students with an understanding about the field of psychology and the university's psychology department. Each student completed self-assessment measures and used those results to explore psychology careers that fit with their results. Based on skills and experiences needed, students planned their undergraduate curriculum and extracurricular activities which would provide them with the best opportunities.

Through written comments, instructors realized that some students were dissatisfied with the course. This appeared to be influenced by the varying class level of students, with freshmen through seniors in the course, along with only a single set of exercises for all students. Trying to teach an effective "one size fits all" course can be rather difficult when many students are at different points in their career development. Because the major is so diverse, students enter it either confused as to the proper career path or having an unrealistic idea of the right career path.

This course became tailored to individual students with a menu of options for assignments. This way, the course can apply to all students. The course is also designed around the person-environment fit model. The idea of the person-environment fit model is that a person's characteristics and interests are best exemplified when the environment matches those qualities (Lofquist & Dawis, 1991).

The emphasis of the person-environment fit model in the course is based off the five factor model of personality, otherwise known as the Big Five. Personality may be one factor that can provide some insight on how to adjust the course so that it fits the environmental needs of individual students rather than students as a whole.

One reason the department developed this course was because of the American Psychological Association's (APA) learning goals. The APA developed a set of learning goals for undergraduate psychology majors to reinforce the quality of education (Murray, 2002). Though not required, many psychology departments build their curriculum around each learning goal so that each one is met. Included within the learning goals are specific objectives that students should strive to meet. The course in the present study was developed to specifically meet the tenth goal, "Career Planning and Development." Within this goal, the APA suggests applying psychological principles to career decision-making, possible career paths, identifying realistic post-graduation plans, and ongoing professional development (Murray, 2002). While this goal includes career development, it fails to provide information on which theoretical construct to follow. The present study uses Marcia's (1966) model of career identity development to aid in achieving this goal.

Career Identity

Sense of identity involves knowing one's self and where one is going in life. This includes having a core set of beliefs and values which guide actions and decisions as well as having a sense of purpose (Lounsbury, Saudargas, & Gibson, 2004). Identity development is an important process that each person transitions through during his or her life. According to Marcia's model, adolescents go through different chronological stages, each of which provides an opportunity for individuals to move forward, remain the same, or regress through ego crises (Marcia, 2002.)

Identity is an internal, self-constructed organization of hopes, abilities, beliefs, and individual history (Meeus, 1993). In addition, Marcia includes two very important components to identity. These are commitment (the presence of strong certainty and beliefs) and exploration (active questioning of different identity options and searching for alternatives) (Luyckx, Goossens, & Soenens, 2006). Among the life areas where the exploration and commitment take place are occupation, social beliefs, and interpersonal values (Marcia, 2002). The present study focuses on the occupational dimension of identity development.

Marcia (1966) defines career identity development as having four stages. The stages are diffusion, moratorium, foreclosure, and achievement, each of which adolescents experience in their quest for a career identity (the achievement stage). During both the moratorium and diffusion stages, there is low commitment, but in moratorium, the individual is actively exploring possible aspects of his or her identity (Duriez, Soenens, & Beyers, 2004). In the foreclosure and achievement stages, there are high levels of commitment, but exploration is only taking place during the achievement stage.

Foreclosure refers to the unquestioned adoption of authorities' values and plans. In other words, these young adults accept their parents' values as their own (Marcia, 2002). Growth is

experienced when these young adults no longer believe that their parents' values and beliefs are absolute. However, not all adolescents leave the foreclosure stage. They are essentially grown up versions of what they were as a young kid. Individuals who are characterized as being "developmental" during the foreclosure stage are more likely to enter the achieved stage compared to those who are in a "firm" foreclosure. This is due to the rigidity of their style of thinking caused by the expected emotional toll of career exploration (Marcia, 1980; Marcia, 2002).

Individuals in the foreclosure stage are solid in their identities but not flexible. To remain free of anxiety and discomfort, these individuals need to remain in the same psychological and social conditions that they learned from their parents or other authority (Marcia, 2002).

Foreclosure is often associated with negative characteristics such as low levels of self-esteem, autonomy, and reasoning (Meeus, 1993). Individuals of this nature are also characterized as being cognitively rigid and having somewhat shallow relationships. However, they often give the appearance of having intimate relationships (Marcia, 2002). Furthermore, individuals in the foreclosure stage are less likely to have a positive attitude towards studying and they perform worse in school relative to individuals in other stages (Cross & Allen, 1970; Berzonsky, 1985).

The Five Factor Model

The five factor personality model consists of the characteristics Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience. Extraversion refers to the amount and intensity of interpersonal interaction, activity, and the capacity for joy (Duriez, Soenens, & Beyers, 2004). Duriez et al. (2004) go on to describe that agreeableness is an individual's interpersonal orientation along a continuum ranging from compassion at one end and antagonism at the other. The level of agreeableness is measured by the types of thoughts,

feelings, and actions an individual exhibits. Conscientiousness is an individual's degree of being reliable, trustworthy, orderly, and rule-following as well as being motivated and persistent (Lounsbury, et al., 2004; Duriez et al., 2004). The Neuroticism aspect of the Big Five refers to adjustment versus emotional instability. This facet identifies individuals who are prone to psychological distress and unrealistic ideas (Duriez et al., 2004). Lastly, Openness to experience measures one's toleration and the exploration of the unfamiliar. An individual who is high in openness to experience is receptive to new experiences and to learning new information (Lounsbury et al., 2004).

Janda (1999) explains that the characteristic of openness includes a number of subscales (i.e. imagination, artistic interests, emotionality, adventurousness, intellect, liberalism). Janda (1999) also describes six subscales to conscientiousness. These include self-efficacy, orderliness, dutifulness, achievement-striving, self-discipline, and cautiousness.

Present Study

Sense of Identity is significantly related to all of the Big Five traits which is evidence that personality traits are a salient part of identity (Lounsbury, Huffstetler, Leong, & Gibson, 2005). Personality traits distinguish who people are and these traits are partly responsible for determining identity. Openness to experience may have the biggest impact on identity development. Specifically, foreclosure is positively correlated with low levels of openness to experience (Helson & Srivastava, 2001; Clancy & Dollinger, 1993). Adolescents are more likely to consider new values and try new roles if they are more open to experience in both the interpersonal and ideological domains of identity development (Tesch & Cameron, 1987). However, no significant relationship was found with the occupation domain. We suspect that

this may not be the case with the present study because of the different measures that were used in the course.

The present study examines not only Openness to Experience, but Conscientiousness as well, and their relation to career development. The hypothesis is that individuals who score higher in levels of openness to experience and conscientiousness will exhibit less of a tendency to foreclose in career development. Conscientiousness should correlate with the tendency to foreclose and course grade because of the course structure. Course assignments are scored on answering questions and spelling/grammar. Attendance is another part of the class. Major point deductions are made for lack of attendance and late work. If someone is conscientious and succeeds in the course, that individual may also experience successful exploration. Openness should also correlate with course grade. Assignments require the exploration of oneself, alternative careers, and undergraduate experiences. It also utilizes a variety of activities such as opinion-oriented papers, class discussions, lectures, group work, and listening to guest speakers. Therefore, less open students should struggle more because of the nature of the course.

Many career development tasks have been found to cause anxiety, self-doubt, and confusion (Fuqua & Hartman, 1983). Some individuals are able to tolerate the ambiguity and openness of the development process easily, while others tend to foreclose on their career choices (Blustein & Strohmer, 1987). Few studies have examined the relationship between personality and career development, especially in the context of a career development class such as the one in the present study (Lounsbury et al., 2005). Since personality has been shown to be relatively stable over time, it is only logical to think of it as being a possible predictor of having an influence on career development stages.

Method

Participants

Data for this study came from course assignments and surveys completed at the beginning and end of the semester by 85 psychology majors enrolled in three separate sections of “Orientation to Psychology as a Major” during one academic semester. Fifteen students’ data were removed because they had incomplete or missing data which included leaving more than two responses blank on either measure ($N=69$). Of these remaining students, 76% of the sample was between the ages of 19 & 21 with a range of 17. Nearly 73% of the sample was Caucasian, and females comprised approximately 84% of the sample. There were 33 sophomores comprising 48 % of the sample, but there was only one freshman comprising just over 1% of the sample. At the end of the academic semester, the course instructor entered the data into a database and took out personally identifying information prior to providing the data to the principal investigator of this study.

Materials

OCEAN measure

OCEAN (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) is a self-report measure which assesses the level of each of the Big Five characteristics, as well as each subgroup within each factor (Janda, 1999). The measure consists of 300 items (60 per factor) which are answered using a five-point Likert scale to determine the accuracy of each statement (1=Very Inaccurate, 5=Very Accurate). This measure comprises a section of a book called Career Tests which contains many self-tests for individuals to aid in career exploration. The OCEAN measure is not used commercially but is very similar to those that are (Janda,

1999). This measure was based off of tests developed by research psychologists as tools to help them learn more about personality and its relationship with career development. The measure had alpha reliability coefficients over .60 for each factor (Goldberg, 1990). For the present study, the Cronbach alpha coefficient for openness was .89, .93 for conscientiousness, .95 for extraversion, .91 for agreeableness, and .94 for neuroticism.

Commitment to Career Choices Scale (CCCS)

The CCCS (Blustein et al., 1987) is a two-dimensional model of the commitment to career choices process. It consists of a seven point Likert scale (1=Never true about me, 7=Always true about me). The CCCS incorporates two separate subscales: the Vocational Exploration and Commitment (VEC) and the Tendency to Foreclose (TTF) (Blustein, Ellis, & Devenis, 1989). The VEC is a measure which examines variations in one's level of commitment to career choices. The TTF measures individual differences in how one commits to career choices. Both measures were found to show high reliability with Cronbach alpha coefficients of .78 for the TTF and .91 for the VEC (Blustein et al., 1989). For the present study, the Cronbach alpha coefficient for the TTF pre-test was .84 and .79 for the post-test. The Cronbach alpha coefficient for the VEC pre-test was .94 and .92 for the post-test.

Procedure

Participants were asked to complete the OCEAN measure outside of class during the first week of the semester through a Ball State University testing website. Students used a university identification number to log-in as evidence of completing the measure. After each subscale, participants were provided scores for all subscales as well as the factor score. In a later class period, students were given an interpretation guide and completed an in-class exercise to practice interpreting a profile. Students then used their own results to complete a writing assignment in

which they were required to describe themselves and their career goals. Students were also asked to complete the CCCS once during the first day of the semester and then again on the last day of the semester when they also completed course evaluations. The CCCS was administered in class and the students completed each measure for participation credit as a requirement for the course. Once the OCEAN and CCCS measures were completed, the results were entered into SPSS, with the data stripped of all identifying information to ensure anonymity.

Results

Descriptive statistics for all variables are presented in *Table 1*.

Table 1: *Mean (SD) score on OCEAN and CCCS subscales (N=69)*

		Mean	SD
OCEAN	Openness	221.51	21.84
	Conscientiousness	223.70	25.07
	Extraversion	218.23	29.12
	Agreeableness	224.86	22.52
	Neuroticism	157.48	28.12
TTF	Pre-test	27.61	8.21
	Post-test	26.26	7.09
	Change	1.35	6.52
VEC	Pre-test	65.90	20.65
	Post-test	59.68	18.33
	Change	6.22	14.30

Relationships among the Big Five and CCCS were examined through a series of correlations, which are presented in *Table 2*. There was a significant positive correlation between conscientiousness and the TTF pre-test, $r = 0.24, p < .05$ (one-tailed) and the TTF post-test, $r = .27, p < .05$ (one-tailed). The correlation between conscientiousness and change from pre-test to post-test was not significant. Essentially, if the conscientiousness levels were higher, there was a greater chance to have the tendency to foreclose, and vice versa. Both pre-test and post-test VEC scales had strong negative correlations with conscientiousness; $r = -0.42, p < .01$ (one-tailed) for the pre-test, and $r = -0.39, p < .01$ (one-tailed) for the post-test. As with the TTF, there was no significant relationship between conscientiousness and change from pre-test to post-test.

Openness was significantly negatively correlated with the pre-test and the post-test of the TTF ($r = -0.23, p < .05$ and $r = -0.21, p < .05$, respectively). There was no significant relationship with change.

Table 2: Correlations Between The Big Five & TTF/ VEC

	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
TTF					
Pre-Test	-0.23 ^a	0.24 ^a	-0.14	0.11	0.03
Post-Test	-0.21 ^a	0.27 ^a	-0.30 ^c	-0.07	0.09
Change (Pre - Post)	-0.06	0.01	0.16	0.22 ^c	-0.07
VEC					
Pre-Test	-0.16	-0.42 ^b	-0.11	0.01	0.10
Post-Test	0.20	-0.39 ^b	0.15	0.11	0.16
Change (Pre-Post)	0.02	0.11	0.04	0.16	-0.06

Note: a= $p < .05$; b= $p < .01$ (One-Tailed), c= $p < .05$ (Two-Tailed)

Although agreeableness was not significantly correlated with change in either the TTF or the VEC, it still had the highest correlations, $r = .16, p > .05$ (two-tailed) for the VEC and $r = .22, p < .05$ (two-tailed) for the TTF. It is interesting to note that when the agreeable subscales were examined, a significant correlation was found but only between the trust subscale and change in TTF ($r = 0.35, p < .01$ (two-tailed)).

Based on significant correlations between conscientiousness and the CCCS subscales, correlations between the CCCS subscales and conscientiousness subscales were next performed on the subscales of: Achievement-striving, self-efficacy, cautiousness, self-discipline, dutifulness, and orderliness. There were no significant relationships found with the change on both the TTF and the VEC with the subscales. However, the VEC had strong negative correlations with pre-test scores of achievement-striving ($r = -.34, p < .01$), self-efficacy ($r = -.51, p < .01$), cautiousness ($r = -.26, p < .05$), self-discipline ($r = -.43, p < .01$), and orderliness ($r = -.23, p = .05$). Nearly identical correlations were found for the post-test. The TTF had a strong positive correlation only with the subscales of self-discipline and cautiousness, ($r = 0.35, p < .01$ and $r = 0.37, p < .01$, respectively (two-tailed)).

Because of significant correlations between openness and the CCCS subscales, correlations were performed on the CCCS subscales and the openness subscales of adventurous, intellect, imagination, artistic interests, emotionality, and liberalism. The level of adventurousness showed a strong negative correlation with the TTF pre-test, $r = -0.29, p < .05$ (two-tailed). The negative correlation was even stronger with the TTF post-test, $r = -0.34, p < .01$ (two-tailed). The subscale of emotionality was negatively correlated with the VEC pre-test, $r = -0.27, p < .05$ (two-tailed), as well as the VEC post-test, $r = -0.33, p < .01$. No significant relationship was found with change in either the TTF or VEC.

Table 3: Mean Scores: Big Five, TTF, VEC in terms of Grades

	Grade < 90% n=24	Grade > 90% n=45	t value (df=67)
	Mean (SD)	Mean (SD)	
OCEAN			
Openness	226.42 (20.12)	218.89 (22.48)	-1.37
Conscientiousness	213.67 (24.09)	229.04 (24.16)	2.52 ^a
Extraversion	225.96 (32.34)	214.11 (26.72)	-1.63
Agreeableness	223.04 (20.03)	225.82 (23.91)	0.49
Neuroticism	158.67 (25.92)	156.84 (29.49)	-0.25
TTF			
Pre-Test	26.79 (8.41)	28.04 (8.16)	0.60
Post-Test	25.58 (7.85)	26.62 (6.72)	0.55
Change (Pre - Post)	1.21 (6.39)	1.42 (6.66)	0.13
VEC			
Pre-Test	71.67 (16.20)	62.82 (22.22)	-1.89
Post-Test	64.75 (18.40)	56.98 (17.92)	-1.69
Change (Pre-Post)	6.92 (17.44)	5.84 (12.52)	-0.27

Note: $a = p < .05$ (Two-tailed)

Since grades in this course are negatively skewed with the majority of students earning an A, overall grades and their relationship with the Big Five were examined using independent t-tests. Refer to *Table 3* for the means. The mean score of conscientiousness was significantly greater in the group who scored above a 90% in the class ($M = 229.04$) than the mean of the group who scored below 90% ($M = 213.67$), $t(67) = 2.52$, $p < .05$ (two-tailed). There was a moderate effect size, $d = 0.60$. As before, the subscales of conscientiousness were examined to

narrow the parts of the trait that showed an effect. Significant differences were found on self-efficacy ($t = 2.92, p < .01$), cautiousness ($t = 2.83, p < .05$), and self-discipline ($t = 1.97, p < .05$) with higher performing students scoring higher on each subscale than lower performing students.

Discussion

The purpose of this study was to examine whether openness and conscientiousness were related to the tendency to foreclose (TTF) in career development. Although previous research (Tesch & Cameron, 1987) reported a significant relationship between foreclosure and openness, the relationship in the present study was not as strong despite its significance. Those who were high on openness were less likely to foreclose. However, the course had relatively little impact on the change in the level of the tendency to foreclose between the times of the pre-test and the post-test.

People who were high on conscientiousness were significantly more likely to foreclose. As with openness, there was no significant increase or decrease in the levels of the TTF between the pre-test and the post-test. I predicted that high levels on openness would be negatively correlated to the TTF, and that high levels of conscientiousness would be negatively correlated with the TTF. Only the first of my hypotheses was supported by the data collected in this sample. I had also expected that there would be a significant change between the pre and post-test, but this was not the case.

A surprising finding was that although the trait of agreeableness was not significantly correlated with change in the TTF, it showed the highest correlations out of the rest of the Big Five. Students who were high on the agreeableness scale showed an increase in the TTF between the beginning of the semester and the end. People who were high in agreeableness also

showed the highest level of change on the VEC scale, although not significant. Specifically, those who were high in agreeableness exhibited less of a commitment to explore career options.

Although not part of the original research question, another important finding was that those who were high in conscientiousness were more likely to be committed to career exploration. This relationship was the strongest significant relationship out of all the other relationships. Despite the strength of this relationship, it was only strong for the pre-test and the post-test but not with change from the beginning of the semester to the end.

Each subscale of openness, conscientiousness, and agreeableness were examined to determine what type of relationship they had with the TTF scale and the VEC scale. Those who were high in the adventurousness subscale of openness had lower levels of the TTF, and those who were high in the subscale of emotionality were more committed to the exploration of careers. The subscales of conscientiousness had more significant relationships with the TTF and the VEC. People who were more likely to foreclose scored the highest on the self-discipline subscale. Those who were high in self-discipline were also more committed to explore career options. The same was true for those high in achievement-striving, self-efficacy, and dutifulness. The trend was, however, that the change between the beginning and the end was not significant with any of the subscales. The only agreeableness subscale that was strongly related to either the pre or post-test was trust. Those students who were high in trust became significantly more likely to foreclose at the end of the semester.

Originally, it may appear that the class has does not effect the levels of the TTF and VEC, but this could be due to the varying age levels of the students enrolled in the class. The results make it appear that the levels of TTF and VEC are stable characteristics that do not change. Since some of the students are juniors or seniors, and there are some non-traditional

students, the class may not have an effect on them, and is just a simple requirement to fulfill for graduation. If these students are more stable in their characteristics, the results we obtained make sense. If there were more students to sample from, it would be possible to exclude those who are of junior standing or higher and above a certain age. This study would then possibly yield different results.

While TTF can have a negative connotation to it, the stage is not necessarily a bad thing in the context of this class. For example, if someone who scored high on the agreeableness scale became more foreclosed, it could be because the course helped them briefly explore other options to get the grade, but then caused them to realize that no more personal exploration was needed. In this case, the student would have gone back into the foreclosure state after the class. The class helped the student become more confident that there was only one true career out there, and they had found it by briefly exploring in the class.

There are limitations to this study. First, there were only 69 students used in the study. This encompasses only one semester's worth of the class. A larger number of students would have possibly generated stronger results that had a lower probability of coincidence. Second, the Big Five measure used was an un-commercialized form of the NEO Personality Inventory (NEO-PI). The results may be more significant if this measure had been used, but this can be expensive. Not many programs can afford the cost. Also, most studies conducted on identity development use the Extended Objective Measure of Ego Identity Status (EOM-EIS) to measure identity development. Using this measure instead of the CCCS has an upside and a downside. While the EOM-EIS might elicit more reliable and significant results, it is very general, whereas the CCCS specifically narrows in on the occupational domain of identity development.

The implications of this study include using this measure to predict which students will need more direction in the class. For example, if someone were to score low on openness, his or her assignments could be altered so that the student has less tendency to foreclose and is able to explore careers more freely. Furthermore, students who are shown to be “at risk” could spend one-on-one time with a teaching assistant as well as direction on how to explore careers such as utilizing the resources the department and the university offer for career development.

To take this even further, instead of administering a whole personality measure, different parts of a measure may be given that will cut down the number of questions a student has to answer. For example, the adventurous subscale of openness had stronger negative correlations with the TTF than did the openness measure as a whole. Instead of having a student complete a whole measure, he or she could complete only the ten items within the adventurous subscale to predict the TTF.

There is evidence that the level of conscientiousness is a good predictor of who will do better in the class grade wise. Those who scored higher on conscientiousness tended to score better in the class. This also has implications in that more help could be provided to those who score low on conscientiousness. However, the level of foreclosure was not significantly related to success in the course despite other studies which have evidence to support that individuals with high levels of foreclosure tend to perform worse in school (Berzonsky, 1985; Cross & Allen, 1970). Therefore, it might not be the best predictor.

I would suggest that this study be replicated with a larger sample size. The results may be more significant. Also, the samples should be conducted over a series of semesters over many years. The reason for this is that the same professor may not be teaching each section of the class every year, so this would cut down the possible effects of the teacher and focus instead on

the effect of the class itself. Furthermore, I would suggest that only freshmen and sophomores be included in subsequent studies. They are more likely to be right in the midst of career identity development. A senior who has a job already lined up after college, would seem to be less likely to explore career options in the class, even though the student will unknowingly continue to develop a career identity outside of college. Each person develops at a different rate. When each individual's needs are met, proper identity development can be achieved.

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