



The Impact of Strategic Independence and Mentoring on Entrepreneurial Orientation: Exploring the Propensity of Millennials to Transition into Full Adulthood

Eric G. Kirby¹, Robert Konopaske², and Susan L. Kirby³

Texas State University, USA

Abstract. Popular culture has reinforced some of the negative traits associated with young adults and their inability or unwillingness to enter fully into adulthood. However this study focuses on positive dispositional traits and mentoring in the study of entrepreneurial orientation among Millennials, defined as people born between 1980 and 2000. Entrepreneurial orientation is measured at the individual level as a person's propensity to be innovative, enterprising, and open to taking risks. This study utilizes the new composite trait of strategic independence, which is comprised of planfulness and achievement striving, to assess a person's propensity to make and persevere with long-term plans. Using hierarchical regression analysis on survey data collected from 355 young adults in the United States, we found that strategic independence and mentoring were both significantly positively related to entrepreneurial orientation. Implications for theory and practice, limitations, and future research are discussed.

Keywords: entrepreneurial orientation, strategic independence, mentoring effectiveness.

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1. Introduction

The popular stereotype of today's young adults is that they are narcissistic, possess overdeveloped self-esteem, and believe they know more and are capable of more than their actual abilities (Henderson, 2014). Studies have found young adults often feel they are entitled to rewards (Miller and Konopaske, 2014). Additionally, critics claim they are delaying their transition to adulthood by continuing to live with their parents after college graduation and are reluctant to

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1. Contact Author: Department of Management, Texas State University, San Marcos, TX 78666, USA, egkirby@txstate.edu, Office: 512-245-2606
 2. ak19@txstate.edu
 3. sk10@txstate.edu

take on 'adult roles' such as starting careers and beginning families (Reese, 2012). A brief search of popular web sites like YouTube will yield dozens of parody videos mocking the collective personality of today's young adults. A similar search will also result in hundreds of hits regarding their struggles fitting in to today's workplace. While it is easy to focus on the negative traits of this generation, there are complex reasons for their behaviors, particularly when it comes to their economic motivations and orientations.

There are some significant economic and societal influences that may be contributing to young adults' delayed transition to adulthood. Today's young adults are collectively known as the Millennial Generation. Like with most generational categorizations, there is not a universally agreed upon beginning and ending date. Generally speaking, the Millennials were born sometime from the late 1970s/early 1980s through the late 1990s/early 2000s. For the purposes of this study, we are adopting the definition of the Pew Research Center (2014) as being those people born between 1980 and 2000. Notwithstanding that the Millennial generation has lived through two foreign wars, two stock market bubbles (dot.com and housing), and a major recession, these young adults continue to confront major challenges as they emerge into adulthood (Deloitte Touche Tohmatsu, 2014). The uncertainty of the economic and societal environments may be translating into a hesitancy to make long-term commitments. The Pew Research Center (2014), which tracks data measuring traditional indicators of adulthood, reported that 26 percent of Millennials between the ages of 18-32 are married compared with 36 percent of Gen X (born between 1965-1979) and 48 percent of Baby Boomers (born between 1946-1964) when they were the same age.

Underemployment, defined as college graduates working in jobs that do not require a college degree, is another challenge facing young adults. Though Millennials are the most educated generation in the United States, 68 percent of young people report they "Don't earn/have enough now" (Pew Research Center, 2014). A study of the United States Census Bureau and Bureau of Labor Statistics using data from 1990-2013 reported the underemployment rate of recent college graduates increased from 33 percent in 2001 to 44 percent in 2012 (Abel, Deitz, and Su, 2014). The study also found a decline in the quality of jobs held by recent college graduates as many of these individuals increasingly accept low-wage or part-time jobs (Abel et al., 2014). Exacerbating the problem of underemployment is that in the wake of the 2008 recession, some laid off experienced workers have been willing to take entry-level positions that would typically be available to recent college graduates (PBS, 2013). Also, a Gallup poll found that over one-third of Americans do not plan to retire until after the age of 65; this rate has more than doubled compared to 14 percent in 1995 (Riffkin, 2015). This phenomenon of underemployment can lead to young adults' increased financial dependence on parents or immediate families (Gabor, 2014). One result of this "income interrupted" is the boomerang kids phenomenon in which young adults, after they

graduate college or live on their own, return to the homes of parents or other family members until they can obtain adequate employment and sustainable financial independence (Davidson, 2014).

Due in part to these economic factors, almost two-thirds of surveyed Millennials say they have the goal of starting their own business. They are inspired by the successes of Millennial billionaires like Mark Zuckerberg of Facebook and Sean Parker of Napster and Spotify fame. A recent poll of Millennial workers found that 72 percent want to quit their 'regular job' to become more independent, with 61 percent saying they will likely quit within the next two years (Jager, 2013). While only seven percent of Millennials work for Fortune 500 companies (Institute of Real Estate Management, 2012), Millennials perceive that their career success is going to require them to be more agile and entrepreneurial than earlier generations. Interestingly, 90 percent of surveyed workers indicate that being an entrepreneur is about having a mindset rather than just starting a company and that being entrepreneurial means freedom; being able to work wherever, whenever, and on whatever work interests them (Jager, 2013). Given this perception, companies are becoming aware of the need to allow Millennials to behave more entrepreneurially even in more traditional jobs by allowing them more control over their time, work, and budgets (Institute of Real Estate Management, 2012). Thus, entrepreneurial orientation is increasingly becoming an important trait for Millennials who strike out on their own or work within corporate settings.

The purpose of this study is to better understand the entrepreneurial orientation of today's young adults. In general, the research question addressed is whether there is a relationship between Millennials' abilities to make and carry out long-term plans and their entrepreneurial orientation and, if so, can this orientation be further developed? Our motivation is to explore some of the drivers that cause students to vary in their abilities to seek out and exploit new opportunities, as these are the same skills that will help them develop successful careers in the evolving economic world. Additionally, we wish to know if faculty can provide guidance and counseling to improve the abilities of students in this area. Given the need for Millennial to become more entrepreneurial, it is important to better understand this propensity so that university faculty can better prepare today's students to become tomorrow's business leaders and overcome the negative stereotypes of their generation.

2. Theoretical Development and Hypotheses

2.1. Entrepreneurial Orientation

Entrepreneurial orientation (EO) is the propensity to be innovative, enterprising, and open to taking risks (cf., Ferreira et al., 2015). Being entrepreneurial involves

seeing opportunities for new ideas, taking the initiative to develop and implement those ideas, and having the willingness to risk failure in the pursuit of success (Kollmann et al., 2007). Because these skills are valuable, entrepreneurial orientation has been studied at the firm and individual levels in terms of developing new products, founding new organizations, or further developing existing organizations (Cardon et al., 2013). However, organizations are ultimately comprised of people. It is these managers and employees, as individuals or groups, who scan the environment, make decisions, and take actions whether in large companies or startups. Therefore, we focus this study on individual-level entrepreneurial orientation.

Much of the research to date on individual EO has examined the personality traits, attitudes, behaviors, and demographic characteristics that impact an individual's EO (cf., Bolton and Lane, 2012). A relatively constant finding is that individual EO is related to autonomy, competitiveness, innovativeness, proactiveness, and risk-taking (Bolton and Lane, 2012). However, there is still little agreement on the other causes and outcomes of EO (Ferreira et al., 2015). As noted by Ferreira et al., "the issue is not just identifying traits, attitudes, context or intentions, but also understanding what underlies these elements and how they interact" (2015, p. 2692).

As previously mentioned, approximately two-thirds of surveyed Millennials say their goal is to start their own business. This is consistent with the finding that very few work for Fortune 500 companies (Institute of Real Estate Management, 2012), and the vast majority want to quit their 'regular job' to become more independent (Jager, 2013). Simultaneously, however, they are also a generation accustomed to teamwork, collaboration, and external support (Arnett, 2007). Therefore, the purpose of this paper is to examine the impact that the personality construct of strategic independence and external mentoring likely have on individual entrepreneurial orientation among Millennials, a variable strongly impacting firm performance (Lechner and Gudmundsson, 2014).

2.2. Strategic Independence

One area within the personality research domain that could benefit from additional research as it impacts Millennials is the development of strategic independence, a composite trait to build understanding regarding the degree to which young people are predisposed to make and persevere with long-term plans. We define strategic independence as one's propensity to make and adhere to plans in order to achieve long-term goals. In this paper, we treat strategic independence as a "multidimensional aggregate construct where a composite factor is comprised of dimensions that may or may not be related" (Judge et al., 2003, p. 305); where the composite construct consists of achievement striving and planfulness. Studying this composite trait is important because young people are

increasingly experiencing a “prolonged identity exploration” (Mechler and Bourke, 2011) that is thought to contribute to the delay of reaching such hallmarks of adulthood as starting families, finishing college, obtaining financial independence, and launching careers (Arnett, 2007). This “failure to launch” phenomenon, coupled with record levels of underemployment, encourages us to develop our understanding of the issues surrounding young adults’ dispositions to be enterprising and persistent.

Within the context of young adults who are prone to delaying their transition to adulthood (Arnett, 2007), we feel that achievement striving and planfulness are potentially important variables along with mentoring to explain variance in entrepreneurial orientation. In order to understand more about strategic independence, we will discuss the two traits of which it is comprised: achievement striving and planfulness.

Achievement striving has been defined as having high levels of aspiration, willingness to work hard to achieve goals, purposefulness, and a sense of direction in life (Costa and McCrae, 1992). According to Marinova et al. (2013, p. 1262): “Individuals high in achievement striving set high goals for themselves and tend to persist in those goals. They can also be expected to demonstrate self-management as well as goal-setting capability...” Recent research has explored the degree to which achievement striving relates to performance and leadership criteria. For example, Thomason et al. (2011) reported that achievement striving relates positively to supervisors’ evaluations of the managerial potential of employees. Another study found that achievement striving predicted leadership emergence among employees (Marinova et al., 2013).

Planfulness is the second dimension of strategic independence. This construct is a component of the California Psychological Inventory (CPI) and is relevant to the goal of learning more about the predispositions of young adults. Planfulness assesses an individual’s need for achievement in structured situations such as college and captures the degree to which an individual is organized, efficient, foresighted, productive, thorough, persevering, and seen by others as capable and reliable (Gough, 1995).

CPI has been used by researchers to “assess attributes of personality relevant to behavior in everyday settings such as school, work, the family, and relationships to peers” (Gough and Lanning, 1986, p. 205). The CPI has been used in a variety of research studies, including how scores on the CPI relate to individuals’ career choices and decisions (Bartnick et al., 1985) and career profiles (Gough, 1995).

In the current study we focus on the planfulness as it is of unique relevance to our goal of learning more about the predispositions of Millennial college students towards an entrepreneurial orientation. The planfulness scale was originally developed as the “achievement via conformance” subscale (CPI; Gough, 1996). Achievement via conformance measures an individual’s need for achievement in structured situations (Gough, 1995). College represents a

structured situation in that students follow specific schedules for classes, receive syllabi with pre-planned assignments, and so forth. The achievement via conformance scale captures the degree to which an individual is organized, efficient, foresighted, productive, thorough, persevering, and seen by others as capable and reliable (Gough, 1995). Not surprisingly, these characteristics are also positively correlated with entrepreneurial activities (Bolton and Lane, 2012). Therefore, we propose:

H1: Strategic independence will be positively related to entrepreneurial orientation among Millennials, ceteris paribus.

2.3. Mentoring

Over the past three decades, mentoring has drawn a considerable amount of interest from both researchers and practitioners, alike. Following Kram's (1985) seminal work that introduced the dimensions of career and psychosocial mentoring, there has been a substantial amount of research investigating its myriad behavioral, attitudinal, motivational, and relational outcomes (cf., O'Brien et al., 2010). Though many definitions of mentoring have been identified in the literature (Crisp and Cruz, 2009), there is general agreement that mentoring is the process by which a more experienced individual (a mentor) provides psychosocial and career-related support to a less experienced individual (the protégé) with the goal of enhancing the protégé's personal and professional development (Kram, 1985).

Research indicates that mentoring enhances favorable employee outcomes such as work and career attitudes, and certain career outcomes as higher pay and more promotions for protégés (Allen et al., 2008). After studying early career managers and professionals working in a variety of organizations, Whitely et al. (1991) reported that career mentoring was related to both promotion rate and total compensation.

Some young adults seek and receive academic, student club, and career-oriented mentoring while in college. Sources of such mentoring may include faculty, university staff, peers, and so forth (Kram and Isabella, 1985). College mentors are in a good position not only to counsel protégés on ways to achieve academic success, but also to facilitate opportunities to build career-related skills and experiences (Eby et al., 2008).

There is also a positive relationship between mentoring and entrepreneurial propensities (Redien-Collot and Lefebvre, 2015; Thaddeus et al., 2015). Young adults that receive coaching and guidance are more likely to express an orientation towards entrepreneurial activities (Thaddeus et al., 2015). Though sparse, research also suggests that mentoring in a college environment can help students to engage in planning that is related to college-career transitions (cf.,

Crisp and Cruz, 2009). For example, Renn et al. (2014) reported that mentor career support positively predicted college student career planning and job search intentions. When applied to the current study, we believe that effective mentoring by faculty, student club advisors, and career services advisors will exert a positive influence on young adults' entrepreneurial orientation above the impact of personality traits. Taken together, we propose:

H2: Mentoring will be positively related to entrepreneurial orientation among Millennials over-and-above the impact of strategic independence, ceteris paribus.

3. Methods

3.1. Sample and Procedures

Using a cross-sectional self-report questionnaire approach, complete and useable data were collected confidentially in 2015 from students enrolled in three upper level undergraduate management courses at a large southwestern university. Participation was voluntary and a nominal amount of extra credit was provided to students in exchange for completing the questionnaire. Of the 677 total students, 505 chose to complete the survey, for a response rate of 75.2%. For quality control, we removed all surveys that did not fully complete all of the scales in the survey. This resulted in 355 questionnaires in this study (52.4% of the total students ultimately providing usable surveys). Participants' ages ranged from 18-38 with a mean age of 22 years. Forty-nine percent of respondents were female. Respondents' self-reported racial and ethnic categories were: 57.1% Caucasian, 27.8% Hispanic, 6.6% African American, 2.6% Asian, and 5.9% other. With regard to their major areas of study, 80.1% were business majors and 19.9% were non-business majors.

3.2. Dependent Variable

The dependent variable for this study was entrepreneurial orientation. At the individual level, EO measures a person's propensity towards engaging in entrepreneurial activities. It was measured using Bolton and Lane's (2012) 10-item Individual Entrepreneurial Orientation scale. The items were scored on a 7-point Likert-type scale (1 = never to 7 = all the time) and averaged to arrive at a single result, with a higher score indicating greater individual entrepreneurial orientation. Sample items include "I like to take bold action by venturing into the unknown," "I prefer to try my own unique way when learning new things rather

than doing it like everyone else does,” and “I prefer to ‘step-up’ and get things going on projects rather than sit back and wait for someone else to do it.” Reliability for the scale, as measured by Cronbach’s alpha, was calculated at 0.80.

3.3. Independent Variables

This study examines the impact of two independent variables of entrepreneurial orientation: strategic independence and mentoring.

3.3.1. Strategic Independence

Strategic independence, a compound trait, was measured by combining two narrow-band traits: 1) the 15-item achievement striving facet of conscientiousness from the Revised NEO Personality Inventory (Costa and McCrae, 1992); and 2) the 10-item planfulness (IPIP version of the Achievement via Conformance Ac) subscale (Gough, 1996). Data were gathered from respondents using a 7-point Likert type response scale (anchors were 1 = “never” and 7 = “always”) and averaged to arrive at a single result, with a higher score indicating greater strategic independence. Sample items include: “I stick to my chosen path” and “I go straight for the goal.” Cronbach’s alpha for scores on this compound trait scale was 0.90.

3.3.2. Mentoring

Respondents were asked to think about the times they interacted with their college professors, advisors of student groups, and career services advisors. Data were gathered on the frequency of interaction with each of these three groups of people in a mentoring capacity. The scores ranged from 1 = “not at all” to 7 = “all of the time.”

3.4. Control Measures

To assess the unique impact of strategic independence and mentoring on entrepreneurial orientation, we controlled for variables assessed in prior related studies (cf., Crant, 1996; Rauch and Frese, 2007; Rozell and Kapila, 2010). In particular, they were sex, major, age, ethnicity, socially desirable responses, proactivity, narcissism, and grit.

3.4.1. Sex

Prior research investigating the impact of gender on entrepreneurial orientation found that women are less likely to express entrepreneurial propensities than are men (Crant, 1996). Therefore we control for the subject gender with females coded as 0 and males as 1.

3.4.2. Major

Several studies have explored the impact of educational major as a variable in their research models when exploring entrepreneurial propensities (cf., Karhunen and Ledyeva, 2010; Tkachev and Kolvereid, 1999). Majoring in business was often a significant variable explaining entrepreneurial propensities, with students who majored in business or economics reporting higher levels (Karhunen and Ledyeva, 2010; Tkachev and Kolvereid, 1999). We controlled for academic major, with 0 = non-business major and 1 = business major.

3.4.3. Age

Although older students often have more diverse skills and experience (Kalantaridis and Labrianidis, 2004), prior studies have shown that age is negatively related to entrepreneurial activities (Levesque and Minniti, 2006). It is theorized that this may be due to opportunity costs; the risks and costs of failure increase with age. Therefore the age of students was operationalized in number of years.

3.4.4. Ethnicity

Prior research has found that people in minority ethnic groups are more reluctant to exhibit entrepreneurial tendencies (cf., Rozell and Kapila, 2010). In particular, Chang, Kellermanns, and Chrisman (2007) observed this among Hispanics in the United States. The present study was conducted at a Hispanic-serving institution in the southwestern United States, where the student body is approximately one-third Hispanic. Therefore we controlled for ethnicity with non-Hispanic being coded as 0 and Hispanic as 1.

3.4.5. Socially Desirable Responses (SDR)

Social desirability can be considered a style of responding that contaminates and distorts measures of psychological variables (Nicholson and Hogan, 1990). Therefore, SDR must be controlled in any study using psychological variables (Crant, 1996). SDR was assessed using Reynold's (1982) 13-item short form of Marlowe-Crowne's social desirability scale, with sample items including "No matter who I'm talking to, I'm always a good listener" and "I have never deliberately said something to hurt someone's feelings." Higher score indicate greater level of socially desirable responses. Internal consistency reliability for the scale was calculated at 0.76

3.4.6. Proactive Personality

In a study of university graduate and undergraduate students, Crant (1996) found a significant positive relationship between proactive personality traits and entrepreneurial orientation. This relationship occurred even while controlling for the effects of other demographic variables, such as age and education. Therefore, we controlled for the effects of proactive personality using the 17-item proactive personality scale developed by Bateman and Crant (1993). Sample items include "I am constantly on the lookout for new ways to improve my life" and "I am great at turning problems into opportunities." Scores were averaged to arrive at a single result, with a higher score indicating a greater level of proactive personality. The scale reliability was calculated at 0.88.

3.4.7. Narcissism

Narcissism is correlated with self-efficacy, locus of control, and risk propensity (Ackerman et al., 2011). Even after controlling for the effects of these traits, narcissism is positively related to entrepreneurial propensities (Mathieu and St-Jean, 2013). In fact, entrepreneurs score higher on narcissism scales than any other vocational groups. Therefore, we control for the effects of narcissism by using the six-item entitlement-narcissism scale developed by Raskin and Terry (1988). Sample items include "I have strong will power" and "If I ruled the world, it would be a much better place." The six items were averaged to arrive at a single result, with a higher score indicating greater level of narcissism. The scale reliability was calculated at 0.71.

3.4.8. Grit

Grit is defined as perseverance and passion for long-term goals, and is positively related to success in numerous endeavors (Duckworth et al., 2007). Perseverance and the ability to stick with an action to its conclusion is positively related to entrepreneurial activities (Lumpkin and Brigham, 2011). This relationship has held across a wide range of cultures, ranging from the United States (Duckworth et al., 2007) and Western Europe (Van Gelderen et al., 2008) to Malaysia (Ndubisi, 2008) and tribal groups in Northern Nigeria (Halliru, 2013). Additionally, grit is a trait that is gaining acceptance in primary education as an important component of success (Tough, 2013). To measure this construct, the 12-item Grit Scale was used from Duckworth et al. (2007). When collecting data from participants, a 5-item Likert type response scale was used anchored by 1 = “not like me at all” and 5 = “very much like me.” Sample items include “I have overcome setbacks to conquer an important challenge” and “I have been obsessed with a certain idea or project for a short time but later lost interest” (reverse scored). Cronbach’s alpha was 0.71.

4. Results

4.1. Descriptive Statistics

Table 1 presents means, standard deviations, and correlation coefficients for the variables in the study. Multiple measures of different elements of the same phenomenon are important for improved construct validity; however they are frequently intercorrelated with one another (Pedhazur and Schmelkin, 1991). An examination of the correlation matrix indicates that all of the correlation coefficients are considerably less than 0.8 in absolute value, a frequently cited and commonly used threshold for the detection of multicollinearity (Kennedy, 2008).

Table 1: Descriptive Statistics and Correlation Coefficients (n=355)

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12
1. Ent. Orientation	3.74	.58												
2. Sex	.48	.50	.17**											
3. Major	.81	3.96	-.05	.04										
4. Age	21.95	3.24	.05	.25**	-.01									
5. Ethnicity	.25	.44	.12*	-.05	-.03	.02								
6. SDR	6.10	2.87	.16**	.03	.00	.07	.19**							
7. Proactivity	5.39	.75	.49**	.05	.01	.05	.16**	.21**						
8. Narcissism	3.63	.62	.37**	.14**	-.09	.04	.15**	.09	.40**					
9. Grit	3.46	.47	.28**	.03	.03	.10	.16**	.38**	.37**	.19**				
10. Strategic Ind.	4.79	.63	.46**	-.00	.00	.08	.17**	.32**	.57**	.29**	.64**			
11. Faculty Mentor	2.74	1.08	.24**	-.04	.12*	-.05	-.02	.14**	.17**	.07	.18**	.27**		
12. Club Mentor	2.81	1.43	.19**	-.07	.06	-.24**	-.01	.02	.10	.02	.05	.10	.22**	
13. Career Mentor	2.62	1.21	.19**	-.05	-.01	-.11*	.05	.14**	.08	.04	.13*	.14*	.39**	.34**

* significant at $p < .05$

** significant at $p < .01$

4.2. Hierarchical Regression Models

To first assess the impact of the independent variables on entrepreneurial orientation, hierarchical regression analysis was employed. This technique was used to assess the impact of the predictor measures on entrepreneurial orientation over-and-above the effects of the control variables, and is consistent with the methodology applied in other explorations of the interrelated constructs surrounding entrepreneurial orientation (cf., Bolton and Lane, 2012). Following the recommendations of Cohen and Cohen (1983), the demographic and trait-based control variables were entered into the initial equation. Specifically, these were sex, major, age, ethnicity, socially desirable responses, proactive personality, narcissism, and grit. To test the first hypothesis, strategic independence was entered in the second block. Finally, the impact of mentoring was assessed over-and-above the demographics and the composite trait of strategic independence. Thus, the three measures of mentoring (frequency of interaction with faculty members, club advisors, and career advisors) were added in the third block.

An important issue in hierarchical regression analysis is that of practical significance. Although a measure can be statistically significant, questions can be raised over whether it is practically significant. Does the measure improve decision making and task prediction enough to justify its inclusion? Yates and Taub (2003) argue that, in behavioral research, if a measure is relatively easy and cost-free to administer, it can be said to have practical significance if it aids in the prediction of the outcome under study.

While there are multiple ways of determining practical significance, a widely accepted method is through an assessment of incremental validity (Hunsley and Meyer, 2003). Incremental validity is defined as “the extent to which a measure adds to the prediction of a criterion beyond what can be predicted with other data” (Hunsley and Meyer, 2003, p. 443). Incremental validity can be assessed by calculating a measure’s semi-partial r when using hierarchical regression analysis (Cohen, 1992). The semi-partial r is computed as the square root of the R^2 value for the regression equation. Most relationships fall within $r = 0.10$ to 0.30 in behavioral research (Hunsley and Meyer, 2003). Cohen (1992) identifies this as the small to medium range. As variables are added to an equation, r increments generally decrease because variables in behavioral research are frequently interrelated (Nunnally and Bernstein, 1994). Hunley and Meyer (2003) propose when a third (or more) variable is included in a regression analysis, a semi-partial r of 0.15 or greater is a reasonable contribution to the equation, thus indicating practical significance.

The results of the hierarchical regression equations testing Hypotheses 1 and 2 are shown in Table 2. All three steps in the model are significant, and the F value in each model is also significant, signifying that each block of variables significantly improves the explanatory power over the preceding model. Also, the semi-partial r values for all blocks exceed Hunley and Meyer’s 0.15 threshold, thereby indicating the models have practical significance. In Step 2, strategic independence is positive and significant, thus supporting Hypothesis 1. In Step 3, the ΔF -score is significant, thus supporting Hypothesis 2. However only two of the three measures of mentoring effectiveness are positive and significant, which will be discussed in the next section.

Table 2: Results of Hierarchical Regression Analysis on Entrepreneurial Orientation (n=355)

Variable	Step 1 (controls)			Step 2 (independence)			Step 3 (mentoring)		
	B	s.e.	β	B	s.e.	β	B	s.e.	β
Constant	.46	.70		.17	.69		-.31	.68	
Sex	.15	.05	.14**	.16	.05	.15**	.17	.05	.16**
Major	-.07	.06	-.05	-.07	.06	-.05	-.09	.06	-.07
Age	-.00	.01	-.03	-.00	.01	-.02	.00	.01	.02
Ethnicity	.02	.06	.10	.02	.06	.01	.03	.06	.02
SDR	.08	.12	.03	.03	.12	.01	-.01	.12	-.00
Proactivity	.27	.04	.38**	.21	.04	.29**	.20	.04	.28**
Narcissism	.16	.04	.18**	.15	.04	.16**	.15	.04	.16**
Grit	.11	.06	.09	-.02	.07	-.02	-.03	.07	-.03
Strategic Ind.				.20	.06	.23**	.18	.06	.20**
Faculty Mentor							.05	.03	.10*
Club Mentor							.05	.02	.13**
Career Mentor							.03	.02	.06
F-score		19.51**			19.23**			17.14**	
Δ F-score		19.51**			12.06**			7.58*	
R ²		.31			.33			.38	
Δ R ²		.31			.02			.04	
Adjusted R ²		.29			.32			.35	
Semi-partial <i>r</i>		.56			.15			.20	

* $p < .05$; ** $p < .01$

5. Discussion

In early 2015 Millennials became the single largest generation in the United States labor force, with 53.5 million workers, amounting to 34 percent of the workforce (Fry, 2015). The prevalence of negative stereotypes about this generation, coupled with the persistent belief about their reluctance to accept adult roles, is causing concern among some observers and critics over our economic future. One key factor in creating and maintaining a thriving economy is an entrepreneurial spirit, as exemplified by 13 percent of adults in the United States involved in start-up firms (Kelley, Singer, and Herrington, 2016). Of note is that nearly 25 percent of today's entrepreneurs are from the Millennial generation (Fairlie et al., 2015). Given that Millennials make up one-third of the U.S. work force, but only one-quarter of the entrepreneurs, it is all the more significant that entrepreneurial orientation is encouraged among this group. Hence, it is important that we better understand the determinants of EO.

Our study examined the impact of strategic independence on the entrepreneurial orientation of Millennial college students. One key finding is that

Millennials who possess the ability to make and persevere with long-term plans are also more likely to express a stronger entrepreneurial orientation, thereby supporting Hypothesis 1. Entrepreneurial orientation is positively associated with autonomy, competitiveness, innovativeness, proactiveness, and risk-taking (Bolton and Lane, 2012). Therefore, it is not surprising that striving and planfulness are also positively associated with EO. The ability to make a plan and see it through is likely to be related to success in many entrepreneurial endeavors.

It is also interesting to note that the mean EO score among this study's participants was 3.74 on a 7.0 scale. On the surface it might appear that the subjects possessed slightly below average entrepreneurial orientations, in general. However, other recent studies of American business undergraduates using the same operationalization of EO found lower scores. For example, DeGennaro, Wright and Panza (2016) reported a mean EO score for their subjects of 2.42.

What is somewhat surprising is that the control variable of grit was not a statistically significant predictor of EO across any of the models even though several previous studies have shown a significant relationship between the two variables (Van Gelderen et al., 2008; Halliru, 2013; Ndubisi, 2008). We suspect this is due more to a statistical issue than a theoretical one and that the effects normally explained by grit are being dominated by strategic independence, particularly since it is significant at $p = 0.08$ in the base model, but falls of to $p > 0.6$ in the two subsequent models containing strategic independence.

Overall, mentoring was positively related to entrepreneurial orientation over-and-above the effect of strategic independence, with two of the three measures being individually significant. Therefore, Hypothesis 2 is also supported. Extant research has found that mentoring has a myriad of positive behavioral, attitudinal, motivational, and relational outcomes on protégés (O'Brien et al., 2010). Also, mentoring in a college setting has helped encouraged young adults to engage in career planning (Crisp and Cruz, 2009; Renn et al., 2014) and development (Kram and Isabella, 1985). It is not surprising that this study found mentoring to relate positively to young adults' predispositions to be innovative and enterprising in order to achieve long-term goals like launching new businesses activities.

It is interesting to note that only two of the three measures of mentoring were individually significant. Frequency of interaction with faculty and club advisors, both of which were statistically significant predictors of EO, involve dealing with faculty members. The third measure, frequency of interaction with career advisors, assesses mentoring by a non-instructional employee. At the university where the study was conducted, career advising is done by full-time advisors in the university career services office. We suspect that Millennial students may find the mentoring done by faculty more impactful. Faculty are generally perceived to be high-status senior individuals. Career service advisors, on the other hand, are typically younger administrators some of whom are only recently graduated from

college. We surmise that the regard and respect with which students hold the person who is providing the mentoring may have a moderating role on the impact of the mentoring.

5.1. Limitations and Future Research

Like all research, the current study has strengths and limitations. Strengths include the fact that the majority of scales included reverse scored items, used Likert (e.g., strongly agree) and Likert type (e.g., “Not like me at all”) scales, and scales with different anchoring points (e.g., 1-7 and 1-5) to mitigate the risk of common method variance (Podsakoff et al., 2003). The risk of social response bias was addressed by making the questionnaires anonymous and controlling statistically for socially desirable responses. Even with these controls in place, cross-sectional, single-source research designs greatly reduce one’s ability to infer causality. Another key strength of the current study is its use of validated measures of several of the constructs, including proactive personality, grit, and narcissism.

While entrepreneurial orientation is highly correlated with entrepreneurial action (Wiklund, 1999), they are not the same thing. Future research could demonstrate the relationship between strategic independence and mentoring and Millennials’ transition to full adulthood in a more direct way by using business start-ups or engagement in corporate venturing as the dependent variable.

Future researchers could also further explore the impact of strategic independence on other performance measures. It is also feasible that it may moderate the impact of other positive dispositional variables, thereby helping us better understand and possibly decrease the negative stereotypes often associated with the Millennial generation.

5.2. Conclusion

The purpose of this study was to better understand the entrepreneurial orientation of today’s young adults. As the importance for Millennials to become more entrepreneurial increases, it is necessary to better understand how this mindset can be facilitated to prepare today’s students to meet the challenges they will face in the rapidly evolving economic landscape. Although Millennials are not engaging in traditional entrepreneurial ventures at the same rate as older generations (Fairlie et al., 2015), they are expressing the need to engage in entrepreneurial behaviors in other types of organizations (Institute of Real Estate Management, 2012). In other words, they are redefining what we think of as an entrepreneur.

The current study offers value to the entrepreneurial and personality research domains in a variety of ways. First, we have utilized the new composite trait of strategic independence, which is an important predictor of EO. To the best of our knowledge, no other researchers have studied this phenomenon. This trait, with its components of achievement-striving and planfulness, is a parsimonious construct that builds understanding of what it takes for young adults to transition out of college and into entrepreneurial ventures. Young adults with high levels of strategic independence are much less likely to be perceived in a negative light and therefore we should have less to fear about their future success.

Second, we find that student interaction with faculty mentors positively impacts entrepreneurial orientation. Even after accounting for the effects of the various demographic and personality traits, faculty interaction matters. Prior research has shown direct training in entrepreneurial skills to be effective (Levie et al., 2014), while we demonstrated that by offering their guidance and support, faculty members can also increase the propensity of Millennials to be innovative, proactive, and open to taking risks. When faculty members interact with their students, they can have a positive impact on their lives.

In conclusion, the results of the current research study suggest that young adults who are proactive, possess strategic independence, and receive frequent mentoring are more likely to express an entrepreneurial orientation. It is precisely these types of young adults that are likely to change the negative stereotypes often associated with Millennials and early career employees as they pursue entrepreneurial behaviors, whether as independent startups or within existing organizations.

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