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Affiliation motivation and interest in entrepreneurial careers

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Abstract

Purpose – The goal of this paper is to better understand affiliation motivation patterns among students interested in pursuing entrepreneurial/self-employment careers as compared to students less interested in pursuing entrepreneurial careers.

Design/methodology/approach – The study sample included 424 college students enrolled in upper-division business courses in a public institution in the Mid-Atlantic region of the USA. Structural equation modeling was used to examine the effects of four dimensions of affiliation motivation on entrepreneurial aspirations.

Findings – Interest in entrepreneurial careers was negatively associated with the need for emotional support and positively associated with the need for positive stimulation from other persons. Therefore, persons with entrepreneurial interests enjoy interacting with other people, but they are not emotionally dependent upon them. Neither the need for social comparison nor the need for attention varied as a function of entrepreneurial aspirations.

Research limitations/implications – Future research should distinguish among persons seeking different types of entrepreneurial and self-employment opportunities, as well as compare business students both to students studying fields other than business and persons established in careers.

Practical implications – Knowledge of persons' affiliation motivation patterns may contribute to effective career counseling and career development.

Originality/value – This paper contributes to greater understanding of the distinguishing characteristics of persons aspiring to be entrepreneurs by assessing four subcategories of affiliation motivation rather than treating it as a one-dimensional concept.

Keywords Affiliation motivation, Career development, Entrepreneurship, Motivation (psychology), Careers, United States of America

Paper type Research paper

Entrepreneurship has become an increasingly important and highly researched area for management scholars. Much of the research has focused on identifying the traits and motives of entrepreneurs, as well as the demographic characteristics that may predispose individuals toward entrepreneurial careers as opposed to those in other fields such as organizational management (e.g. Collins *et al.*, 2004; Hansemark, 2000, 2003; Lachman, 1980; McClelland, 1965; Meyer *et al.*, 1961). In addition, research has investigated the qualities and behaviors that lead to entrepreneurial success (e.g. Baron and Markman, 2000; McClelland, 1987; Rauch and Frese, 2000, 2007; Rauch *et al.*, 2009). It has been argued that although personality traits may predispose persons to become entrepreneurs, entrepreneurial skills can be taught (Neck *et al.*, 1999). The differences between entrepreneurship and other business endeavors are thought by many to be great enough to justify the offering of distinctive programs in entrepreneurship at numerous universities (Hisrich and O'Kinneide, 1996).



The term “entrepreneurship” has been used inconsistently in the literature (Bennett and Dann, 2000). It has been used as a proxy for self-employment and business ownership, as well as entrepreneurial activity (Beugelsdijk and Noorderhaven, 2005). In our investigation of entrepreneurial career interests, we use the terms “entrepreneurship” and “self-employment” interchangeably to include individuals who have a desire to develop and/or implement an idea for an enterprise (Cubico *et al.*, 2010; Kets de Vries, 1996). As we will discuss, there are numerous personality traits that may contribute to persons becoming entrepreneurs. However, we focus specifically on affiliation motivation.

Affiliation motivation, i.e. the desire to have social contact and positive interaction with others (Hill, 1987) or to establish and maintain relationships with others (Wong and Csikszentmihalyi, 1991), has not been studied among entrepreneurs to the extent that achievement motivation, *locus* of control, and many other traits have been. The literature that does exist gives contradictory views as to whether entrepreneurs do or should possess a high level (Baron and Markman, 2000; Zhao and Seibert, 2006) or a low level (Henderson, 1974; Lachman, 1980) of affiliation motivation. Moreover, resolution of these inconsistencies is likely to have significant implications for career counseling. Since there is evidence that affiliation motivation is a multi-dimensional construct (Blankstein *et al.*, 1989; Hill, 1987; Leary *et al.*, 2003), it may be that individuals with entrepreneurial career aspirations will score relatively high on some dimensions and relatively low on others. Therefore, a goal of this study is to determine whether students most interested in pursuing entrepreneurial/self employment careers exhibit different affiliation motivation patterns as compared to their less entrepreneurial peers.

Characteristics of entrepreneurs

Numerous traits have been ascribed to entrepreneurs; however, there have been contradictory findings with respect to the relationships of these characteristics to entrepreneurship (Hansemark, 2000, 2003; Koh, 1996; Malach-Pines *et al.*, 2002; Miner and Raju, 2004; Rauch and Frese, 2000; Zhao and Seibert, 2006). A greater than average need for achievement is among the most frequently identified qualities (e.g. Collins *et al.*, 2004; Lee, 1996; McClelland, 1961, 1965, 1987; Miner, 2000; Miner *et al.*, 1994; Rauch and Frese, 2000, 2007; Stewart and Roth, 2007; Wainer and Rubin, 1969). The desire for significant achievement seems consistent with the finding that entrepreneurs are often found to be highly motivated to obtain feedback on their performance (Kets de Vries, 1985, 1996; McClelland, 1961; McKenna, 1996; Rauch and Frese, 2000). Having an internal *locus* of control also has frequently been found to be associated with entrepreneurial tendencies (Babalola, 2009; Cromie and Johns, 1983; Hansemark, 2003; Rauch and Frese, 2000). Furthermore, a propensity to take moderate-level risks has been identified as characteristic of entrepreneurs (e.g. Kreiser *et al.*, 2002; McClelland, 1961; Stewart and Roth, 2001; Stewart *et al.*, 1998), as has possessing a proactive personality (Crant, 1996; Kreiser *et al.*, 2002; Lumpkin and Dess, 1996; McClelland, 1987; Rauch and Frese, 2007; Rauch *et al.*, 2009; Tan, 2008). Other noted attributes of entrepreneurs include a relatively high level of goal-setting behavior and perseverance, as well as a high level of energy and self-confidence (e.g. Busenitz and Barney, 1997; Neck *et al.*, 1999; Van Eeden *et al.*, 2005; Zhao *et al.*, 2005). Entrepreneurs have also been found to love a challenge and seek significance in their work (Malach-Pines *et al.*, 2002).

Moreover, entrepreneurs have been found to place greater value on autonomy, freedom and independence than do organizational managers (Cromie, 1987; Fagenson, 1993; Lumpkin and Dess, 1996; Rauch and Frese, 2007; Rauch *et al.*, 2009; Scheinberg and MacMillan, 1988).

Based on frequency of occurrence in the literature, Vecchio (2003) listed a set of “Big Five” entrepreneurial dimensions: risk-taking propensity, need for achievement, need for autonomy, self-efficacy, and *locus* of control. However, he questioned the predictive utility of these dimensions. While the associations of traits with entrepreneurial activity have been frequently found to be statistically significant, the effect sizes have been relatively small (Meyer *et al.*, 1961; Rauch and Frese, 2000). It has been suggested that if a high correlation were obtained in this area, it may be an indicator of a poorly designed study (Rauch and Frese, 2000). Moreover, it has been suggested that the trait approach may have little value because the diversity among entrepreneurs may be greater than that between entrepreneurs and non-entrepreneurs (Rauch and Frese, 2000). Another, less extreme position, suggests that, due to low correlations between traits and entrepreneurship tendencies, multiple variables and moderators need to be investigated simultaneously in order to better predict entrepreneurial activity (Rauch and Frese, 2000, 2007; Rauch *et al.*, 2009).

Rauch and Frese (2000) noted that the decision to engage in entrepreneurial activity is not likely due to one, but rather to a combination of personal characteristics. Successful entrepreneurship, however, depends not only on personal characteristics, but on other factors as well. Rauch and Frese (2000) presented a model of successful entrepreneurship that included personal characteristics and the environment, as well as actions. Entrepreneurs’ characteristics have been described using trait, task motivation, human capital, and typological approaches. The trait approach focuses on individual characteristics such as need for achievement or *locus* of control. Although motives can be considered to be traits, the task motivation approach considers patterns or combinations of motives. The human capital approach concentrates on the knowledge and experience the entrepreneur has obtained, while the typological approach classifies entrepreneurs into sub-groups based on attributes such as demographic characteristics or business strategies. A specific approach focusing on entrepreneurial strategies is the entrepreneurial orientation approach (Kreiser *et al.*, 2002; Lumpkin and Dess, 1996; Rauch *et al.*, 2009). Such strategies may include innovation, proactiveness, and risk taking (Kreiser *et al.*, 2002). Although all of these approaches seem to have the potential to yield valuable insights into entrepreneurial behavior, the present study focuses on personal characteristics that may be related to interest in entrepreneurial careers. Such interest, of course, does not guarantee the attitudes, knowledge, behaviors, or environmental conditions necessary for success. However, certain personal characteristics may be a necessary foundation (Rauch and Frese, 2000).

Entrepreneurs’ social motivation

Despite the many studies of entrepreneurs’ attributes, little attention has focused on their social motives and attitudes. Among those reports that address the topic, conflicting views are presented. Although McClelland (1987) described entrepreneurs as having a commitment to others, they are sometimes portrayed as non-conformists or “lone wolves” who do not fit well in traditional organizations (Henderson, 1974).

In addition, they have been portrayed as having a “sense of distrust” (Kets de Vries, 1985, 1996). Based on these negative characterizations, it is plausible that entrepreneurs may have below average affiliation motivation.

Lachman (1980, p. 110) suggested that high achievement motivation combined with low affiliation motivation “may facilitate entrepreneurial behavior more than other combinations”. Having low affiliation motivation, however, does not mean that entrepreneurs are lacking in social skills. Social skills do appear to be important for entrepreneurial success, as they are generally necessary for an entrepreneur to convince others to invest in or buy a product or service (Baron and Markman, 2000; Zhao and Seibert, 2006). Also, entrepreneurs have been described as operating more face-to-face than through the written media common to the bureaucracies of larger organizations (Miner *et al.*, 1989). McClelland (1985) and Hill (1987) concluded that interpersonal motivation and social ability are relatively independent dimensions. It seems that one may have social skills that are adequate for successful interpersonal interactions, yet have a relatively low desire for affiliation.

Contrary to the view of entrepreneurs as being loners or otherwise socially impaired, some researchers have hypothesized that entrepreneurs have relatively high affiliation motivation. Apospori *et al.* (2005) suggested that the affiliation motive could lead one to create a business to provide for and pass something on to one’s family. Therefore, they hypothesized that entrepreneurs would exceed professional chief executive officers (CEOs) in affiliation motivation. However, they found no such difference. Similarly, Lee (1996), in comparing the affiliation motives of entrepreneurs and organizational employees, obtained no difference. On the other hand, social networking, especially with friends and relatives, has been shown to be prevalent during the establishment of business firms (Davidsson and Honig, 2003; Greve and Salaff, 2003; Jack, 2005) and positively associated with entrepreneurial success (Brüderl and Preisendörfer, 1998). These friends and relatives are often sources of knowledge and other resources. Moreover, Wainer and Rubin (1969) found entrepreneurs with only moderate levels of need for achievement were successful when they had a high need for affiliation. This may mean that the ability to form close personal relationships enabled these individuals to acquire needed assistance from colleagues. There is evidence that there are multiple types of affiliation motivation (Blankstein *et al.*, 1989; Hill, 1987; Leary *et al.*, 2003). It seems plausible that when entrepreneurs and comparison groups such as management professionals have been found to have similar levels of affiliation motivation, varying patterns of affiliation tendencies would have emerged had multiple dimensions been measured rather than overall affiliation motivation.

Hill (1987) developed the Interpersonal Orientation Scale (IOS), an instrument including four dimensions of affiliation motivation: social comparison (e.g. desiring to participate in activities with others in order to compare one’s performance), attention (e.g. wanting to be seen as the center of things), emotional support (e.g. wanting other people around when stressed or distraught), and positive stimulation (e.g. enjoying being with others and having close friendships). The social comparison and attention dimensions have been described as reflecting an orientation of self-interest or self-enhancement and were both found to be associated with the competitiveness component of achievement motivation (Hill, 1987). Since entrepreneurs score high on achievement motivation, they may be motivated to seek affiliation experiences that

confirm their successes in competitive endeavors. Such a desire may be related to the motive for feedback, common to high achievers such as entrepreneurs (McClelland, 1961). Entrepreneurs may seek feedback in the form of approval that confirms their ability and importance (McKenna, 1996; Scheinberg and MacMillan, 1988). These portrayals seem to suggest that entrepreneurs would have a high need to confirm their superiority through social comparison in order to have a basis from which to attain feelings of achievement and importance. Therefore, we propose:

- H1. There is a positive relationship between entrepreneurial interest and need for social comparison with others.

Kets de Vries (1985, 1996) described entrepreneurs as having a “desire for applause.” Similarly, Vijaya and Kamalanabhan (1998) depicted entrepreneurs as social trendsetters, as opposed to followers, and as driven by the needs of dominance and exhibition. Entrepreneurs would likely have a high need for attention in order display their accomplishments and receive feedback and would consider attention to be a reward. This may be the case despite the fact that entrepreneurs are often secretive regarding many details of their entrepreneurial activities that they consider to be proprietary (Louis *et al.*, 2001). That is, entrepreneurs may seek attention to their outcomes, but not their business processes. Therefore, we propose:

- H2. There is a positive relationship between entrepreneurial interest and need for attention from others.

Despite the possible attractiveness of some forms of affiliation to entrepreneurs, some of their personal characteristics may lead them to minimize certain types of affiliation activities. Entrepreneurs’ sense of personal responsibility for performance (McClelland, 1961), internal *locus* of control (Babalola, 2009; Cromie and Johns, 1983; Hansemark, 2003; Rauch and Frese, 2000), high level of self-confidence (Busenitz and Barney, 1997; Neck *et al.*, 1999; Zhao *et al.*, 2005), and desire for autonomy (Cromie, 1987; Fagenson, 1993; Lumpkin and Dess, 1996; Rauch and Frese, 2007; Rauch *et al.*, 2009; Scheinberg and MacMillan, 1988) may contribute to a lack of desire to seek out others to assist and comfort them when they are enduring difficult challenges or stress. This characteristic may contribute to the view that entrepreneurs are non-conformists or “lone wolves” who do not fit well in traditional organizations (Henderson, 1974) and would lead us to expect that they would score low on the need for emotional support. Therefore, we propose:

- H3. There is a negative relationship between entrepreneurial interest and need for emotional support from others.

Leary *et al.* (2003) described persons who score high on positive stimulation as enjoying close relationships and the observing of others. However, persons scoring high on the positive stimulation dimension of the IOS were not averse to being alone. In fact, they engaged in more rather than fewer solitary activities than those scoring lower on positive stimulation. Leary *et al.* (2003) concluded that enjoying solitary activities does not mean people necessarily have low affiliation motivation. Constantian (1982) obtained results consistent with this conclusion, as she found that liking solitude and liking being with people were not significantly related. Persons needing highly stimulating environments may achieve satisfaction through both

interpersonal interaction and solitary activities. This may be the case for many entrepreneurs, given their generally high energy levels (Van Eeden *et al.*, 2005; Zhao *et al.*, 2005). Entrepreneurs may not need much emotional support from others, but their high energy levels may lead to obtaining satisfaction from a wide variety of activities. They may need to be alone during their creative periods, but otherwise enjoy being with others and having close social relationships. Therefore, we propose:

- H4.* There is a positive relationship between entrepreneurial interest and need for positive stimulation from others.

Method

Sample and procedure

Participants in the present study were undergraduate business students attending a public university in the mid-Atlantic region of the USA. Surveys were administered to students enrolled in upper-division management courses. Students were told that their participation in the study was voluntary. Nevertheless, all 424 of the distributed surveys were completed, perhaps because the students could respond to the surveys during class time. Of those respondents reporting their gender, 251 (59.6 percent) of the respondents were male, 170 (40.4 percent) were female. The majority of the respondents were between the ages of 20-24 (80.9 percent) and either in their junior (72.3 percent) or senior (25.4 percent) year. In addition, 15.3 percent of respondents were working full time when the survey was completed, while 47.2 percent were working part time, and 36.3 percent were not employed. Moreover, 34 respondents (8 percent) had, at some point, held a full-time managerial/professional position and 40 respondents (9.4 percent) had held a part-time managerial or professional position; 82 (19.3 percent) had held a full-time non-managerial position, while 238 (56.1 percent) had held only a part-time non-managerial position.

Measures

Affiliation motivation was measured using the 26-item Interpersonal Orientation Scale (IOS). The items are presented in the Appendix. The instrument contains five-point scales ranging from "not at all true" to "completely true." This measure has been validated in the literature and has been shown to yield four dimensions of affiliation motivation (Hill, 1987). Alpha coefficients for the four dimensions of affiliation motivation were all acceptable (social comparison, $\alpha = 0.70$; emotional support, $\alpha = 0.79$; attention, $\alpha = 0.82$; positive stimulation, $\alpha = 0.82$).

The Views on Self-Employment Scale (VSE) consists of five items reflecting the respondent's intention to become self-employed based on self-assessed abilities to create and run a business (Singh and DeNoble, 2003). Items included, "I have the ability to recognize ideas for self-employment," "I feel confident enough to quit a secure job in a large corporation and start my own business," "I intend to become self-employed," "I have the ability to run a business," and "In addition to school/work, I would devote my free time to the further researching and planning of my own business." The instrument originally contained seven-point scales ranging from "extremely inaccurate" to "extremely accurate." For this study, the scales were reduced to five points in order to be consistent with the other measures used. The VSE showed strong internal reliability ($\alpha = 0.86$).

Controls

We controlled for age, gender, current employment status, and job tenure. We controlled for age because entrepreneurial intentions have been found to vary with age (Schwarz *et al.*, 2009). Respondents indicated which of five categories included their current ages (1 = under 20; 2 = 20-24; 3 = 25-29; 4 = 30-34; 5 = 35 or over). Given that many studies have found that men and women differ in entrepreneurial interest (e.g. Hisrich and Grachev, 1995; Malach-Pines and Schwartz, 2008; Singh and DeNoble, 2003; Tanova *et al.*, 2008; Walker and Webster, 2007; Zhao *et al.*, 2005) and in affiliation needs (Hill, 1987; Coy and Kovacs-Long, 2005; O'Connor, 2001), we created a dummy variable (0 = male, 1 = female) and controlled for gender in all analyses. Also, since work experience has been found to influence entrepreneurial aspirations (Scott and Twomey, 1988), we also controlled for respondents' current employment status (0 = not employed; 1 = employed part-time; 2 = employed full-time), and the length of time (months) respondents have held their current positions.

Analyses

We used structural equation modeling with AMOS 18 (Arbuckle, 2005) to examine the fit of our measurement and structural models to the data and to test our hypotheses. We first tested the measurement model using confirmatory factor analysis of the relationships between the indicators and their respective latent variables. The test of the structural model allowed us to test our hypotheses. The fit statistics examined included chi-square goodness-of-fit statistic, chi-square statistic/degrees of freedom, RMSEA (Browne and Cudeck, 1993), and CFI (Bentler, 1990).

Indicators

We performed latent variable structural equation modeling to test our models. For each variable, we used parcels of the scale items (i.e. averages of several scale items) as indicators of the latent variables. As suggested in the literature, we used three or four indicators for each latent variable (Kenny, 1977). We followed the procedure suggested by Mathieu and Farr (1991) to create parcels each of the affiliation dimensions (attention, emotional support, social comparison, and positive stimulation) as well as the dependent variable (entrepreneurial views). Averages of the items based on their factors loadings were created with items with the lowest and highest factor loadings combined to form the first indicator. Items with the next lowest and highest factor loadings were combined to form the second indicator, and so on until all of the items were used. Since positive stimulation, social comparison, and entrepreneurial views had an odd number of items, the final parcel for each included the mean of three items.

Results

Table I shows the means, standard deviations and correlations between the indicators used to test the model.

Measurement model

In order to validate the four multi-dimensional structure of the affiliation motivation construct, we first conducted confirmatory factor analyses to assess the structure of the observed measures of the four dimensions of affiliation motivation. We compared the fit of a one-factor measurement model in which all 26 items were loaded onto one latent

Indicator	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Age	2.13	0.58																			
2. Gender ^a	0.40	0.49	0.06																		
3. Current employment status ^b	0.79	0.69	0.26 ^{***}	0.09																	
4. Tenure in current position ^c	28.05	23.71	0.25 ^{***}	0.08	0.14 ^{***}																
5. Social comparison 1	3.21	0.76	-0.14 ^{***}	-0.09	-0.05	-0.10 [*]															
6. Social comparison 2	3.33	0.85	-0.15 ^{***}	-0.07	0.06	-0.17 ^{***}	0.57 ^{***}														
7. Social comparison 3	3.39	1.05	-0.06 ^{***}	0.03	0.03	-0.08	0.35 ^{***}	0.41 ^{***}													
8. Attention 1	2.83	0.94	-0.15 ^{***}	-0.09	-0.02	-0.09	0.38 ^{***}	0.38 ^{***}	0.35 ^{***}												
9. Attention 2	2.57	1.04	-0.13 ^{***}	-0.16 ^{***}	-0.05	-0.10 [*]	0.40 ^{***}	0.40 ^{***}	0.24 ^{***}	0.59 ^{***}											
10. Attention 3	3.09	0.95	-0.17 ^{***}	-0.12 [*]	-0.04	-0.06	0.45 ^{***}	0.40 ^{***}	0.29 ^{***}	0.59 ^{***}	0.64 ^{***}										
11. Emotional support 1	2.74	0.90	0.01	0.12 [*]	0.00	0.03	0.33 ^{***}	0.32 ^{***}	0.27 ^{***}	0.38 ^{***}	0.32 ^{***}	0.26 ^{***}									
12. Emotional support 2	3.55	0.94	-0.05	0.24 ^{***}	-0.06	-0.05	0.26 ^{***}	0.32 ^{***}	0.19 ^{***}	0.21 ^{***}	0.19 ^{***}	0.19 ^{***}	0.52 ^{***}								
13. Emotional support 3	3.41	0.85	-0.06	0.07	-0.00	-0.02	0.29 ^{***}	0.32 ^{***}	0.19 ^{***}	0.20 ^{***}	0.21 ^{***}	0.20 ^{***}	0.55 ^{***}	0.55 ^{***}							
14. Positive stimulation 1	3.09	0.87	-0.06	0.06	-0.05	0.01	0.33 ^{***}	0.27 ^{***}	0.30 ^{***}	0.30 ^{***}	0.32 ^{***}	0.36 ^{***}	0.36 ^{***}	0.36 ^{***}	0.33 ^{***}						
15. Positive stimulation 2	2.86	0.95	-0.05	0.01	0.01	-0.01	0.35 ^{***}	0.27 ^{***}	0.22 ^{***}	0.32 ^{***}	0.40 ^{***}	0.35 ^{***}	0.49 ^{***}	0.33 ^{***}	0.40 ^{***}	0.54 ^{***}					
16. Positive stimulation 3	2.83	0.90	-0.03	-0.03	0.03	-0.01	0.31 ^{***}	0.23 ^{***}	0.21 ^{***}	0.28 ^{***}	0.37 ^{***}	0.33 ^{***}	0.42 ^{***}	0.25 ^{***}	0.32 ^{***}	0.48 [*]	0.78 ^{***}				
17. Positive stimulation 4	3.58	0.76	-0.15 ^{***}	-0.04	0.01	-0.04	0.35 ^{***}	0.30 [*]	0.30 [*]	0.35 ^{***}	0.36 ^{***}	0.41 ^{***}	0.34 ^{***}	0.27 ^{***}	0.28 ^{***}	0.47 ^{***}	0.56 ^{***}	0.52 ^{***}			
18. Entrepreneurial interest 1	3.68	0.98	0.10 [*]	-0.18 ^{***}	0.09	0.06	-0.01	-0.12 [*]	-0.06	-0.03	-0.03	-0.00	-0.12 [*]	-0.15 ^{***}	-0.03	0.03	0.07	0.12 ^{***}	0.10 [*]		
19. Entrepreneurial interest 2	3.25	1.16	0.17 ^{***}	-0.16 ^{***}	0.04	0.06	-0.06	-0.13 ^{***}	-0.08	-0.04	-0.05	-0.01	-0.10 [*]	-0.12 [*]	-0.03	0.04	0.06	0.09	0.10 [*]	0.73 ^{***}	
20. Entrepreneurial interest 3	2.67	1.27	0.11 [*]	-0.14 ^{***}	0.05	0.05	-0.05	-0.17 ^{***}	-0.14 ^{***}	-0.07	-0.03	-0.01	-0.10 [*]	-0.15 ^{***}	-0.07	0.04	0.07	0.11 ^{***}	0.02	0.58 ^{***}	0.64 ^{***}

Notes: $n = 424$; *0 = Male; 1 = Female; *0 = No employed; 1 = Employed part time; 2 = Employed full time; *Months; ^{*} $p < 0.05$; ^{***} $p < 0.01$

Table I.
Means, standard
deviations, and
correlations for controls
variables, observed
variables, and indicators

variable. Results indicated a poor fit, χ^2 (299), $n = 424 = 1,609.58$, $p < 0.000$ ($\chi^2/\text{df} = 5.38$, RMSEA = 0.10, and CFI = 0.63). We then compared the fit of the one-factor model to a four-factor model in which each of the items were loaded onto their expected dimensions of affiliation motivation. Results indicated that the four-factor model fit the data well, χ^2 (421), $n = 424 = 861.54$, $p < 0.000$ ($\chi^2/\text{df} = 2.05$, RMSEA = 0.05, and CFI = 0.90), and significantly better than the one-factor model ($\Delta\chi^2 = 748.04^{**}$, $\Delta\text{df} = 122$).

We then tested a measurement model using the item parcels discussed above as indicators of the four dimensions of affiliation motivation and entrepreneurial interests. As shown in Table II, the standardized regression weights for the indicators ranged from 0.52 to 0.93 and all of the relationships between the indicators and their respective latent variables were statistically significant ($p < 0.001$).

As with all self-report data, there is the potential for the occurrence of common method variance. We conducted two tests to determine the extent to which method variance is present in the current study. First, we conducted a Harmon single-factor test (Podsakoff and Organ, 1986). Results indicated the presence of seven factors with an eigenvalue over one, suggesting that common method effects are not a likely contaminant of results of this study. To further confirm these results, we conducted a second, latent variable, test. We first conducted a CFA loading each indicator on its expected latent construct, χ^2 (421) = 861.54, $p < 0.001$, CFI = 0.90, RMSEA = 0.05. Next, we ran a second model adding a first-order factor, with all of the measures as indicators, to our model (Podsakoff *et al.*, 2003). Results from these analyses indicated that while the method factor did slightly improve the model fit, χ^2 (392) = 747.92, $p < 0.001$, CFI = 0.92, RMSEA = 0.05, it accounted for only a small portion (9 percent) of the total variance, which is significantly less than the amount of method variance commonly found in the applied psychology literature (25 percent) (Williams *et al.*, 1989). Taken together, these results suggest that common method variance is not a pervasive problem in the current study.

Latent variable	Indicator	Standardized loading
Need for social comparison with others	Social comparison 1	0.74
	Social comparison 2	0.76
	Social comparison 3	0.52
Need for attention from others	Attention 1	0.74
	Attention 2	0.80
	Attention 3	0.80
Need for emotional support from others	Emotional support 1	0.78
	Emotional support 2	0.70
	Emotional support 3	0.73
	General self-efficacy 4	0.93
Need for positive stimulation from others	Positive stimulation 1	0.62
	Positive stimulation 2	0.91
	Positive stimulation 3	0.84
	Positive stimulation 4	0.65
Entrepreneurial interests	Entrepreneurial interests 1	0.83
	Entrepreneurial interests 2	0.89
	Entrepreneurial interests 3	0.72

Table II.
Standardized loadings of
latent variables on
indicators

Structural model

The results indicate that our structural model fit the data well, χ^2 (137), $n = 424 = 236.79$, $p < 0.000$ ($\chi^2/df = 1.73$, RMSEA = 0.04, CFI = 0.97). The path coefficients among the study variables are shown in Figure 1.

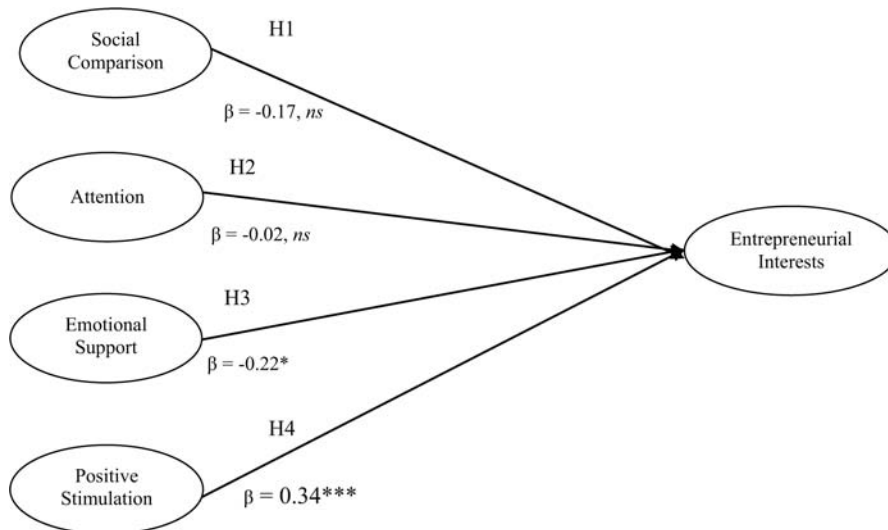
No support was found for *H1* or *H2*, which predicted positive relationships between the need for social comparison with others and attention from others with entrepreneurial interests, respectively (need for social comparison, $\beta = -0.17$, n.s.; attention from others, $\beta = -0.02$, n.s.). However, support was found for *H3* in that entrepreneurial interests were negatively related to need for emotional support from others ($\beta = -0.22$, $p < 0.05$) and for *H4*, which predicted a positive relationship between need for positive stimulation and entrepreneurial interests ($\beta = 0.34$, $p < 0.001$).

Discussion

The present study contributes to the literature concerning traits associated with career aspirations, specifically, entrepreneurial interests. Using an instrument measuring four affiliation motivation dimensions, we found that the importance of the individual dimensions varied as a function of students' entrepreneurial interests. Interestingly, only need for emotional support and need for positive stimulation were associated with entrepreneurial career interests, while the need for social comparison and need for attention were not found to be related to entrepreneurial interests.

Theoretical implications

Consistent with our expectations, individuals who have an interest in entrepreneurial endeavors demonstrated a relatively low need for emotional support during difficult



Notes: *Controlling for: Age, Gender, Current employment status, Tenure in current position. χ^2 (137), $N = 424 = 236.79$, $p < 0.000$; $\chi^2/df = 1.73$; RMSEA = 0.04; CFI = 0.97
* $p < 0.05$; ** $p < 0.01$.; *** $p < 0.001$

Figure 1.
Hypothesized model

times, perhaps because they are self-reliant, self-confident, and do not require affirmation from others. These respondents did, however, indicate that they seek positive stimulation from others in the form of such activities as forming friendships and interacting with others to a relatively great extent. Therefore, those with entrepreneurial ambitions do value other people and often succeed in establishing professionally and socially beneficial relationships, but they are not emotionally dependent upon others. The low need for emotional support is consistent with the often-cited entrepreneurial trait of need for autonomy (Cromie, 1987; Fagenson, 1993; Lumpkin and Dess, 1996; Rauch and Frese, 2007; Rauch *et al.*, 2009; Scheinberg and MacMillan, 1988). Thus, it seems that the traits of being professionally independent and seeking out others for enjoyable and fulfilling experiences are not incompatible.

Interestingly, and contrary to our expectations, individuals with entrepreneurial desires had neither a higher need for attention, nor a higher need to compare themselves with others. Since our sample consisted of students in business courses, it would be expected that most students would be generally interested in careers in entrepreneurship or organizational management, or both. Although successful corporate managers tend to have lower achievement motivation than entrepreneurs (McClelland and Burnham, 1976), managers are likely to have higher achievement motivation than non-managers (McClelland and Boyatzis, 1982). Since the social comparison and attention dimensions were both found to be associated with the competitiveness component of achievement motivation (Hill, 1987), a comparison of business students with non-business students, who may be less competitive, may yield results more consistent with our expectations.

Another possible explanation for the lack of association between the needs for social comparison and attention with entrepreneurial interests is that although entrepreneurs may have a tendency to seek confirmation of their successes, they seem to simultaneously desire to keep some activities secret in order to maintain a competitive advantage (Louis *et al.*, 2001). Also, entrepreneurs are often quite self confident (e.g. Busenitz and Barney, 1997; Neck *et al.*, 1999; Van Eeden *et al.*, 2005; Zhao *et al.*, 2005), a trait that may, in some instances, lead them to feel that social comparisons are unnecessary. Therefore, opposing tendencies may yield a net effect of entrepreneurs' needs for social comparison and attention being no greater than those of other populations.

Implications for practice

Our findings highlight the importance of identifying and exploring the various career path options available to students based upon their unique combination of motive strengths. The stability of motives may provide a means for the successful career counseling of college students early in their college careers. For example, McClelland (1965) found that established entrepreneurs had, years earlier as undergraduates, scored higher in need for achievement than did non-entrepreneurial individuals working in the field of business. Based on this finding, it was posited that college students with a high need for achievement would tend to gravitate toward occupations that are entrepreneurial in nature in order to satisfy their achievement aspirations. Thus, coupled with previous research, our findings suggest that career guidance can be more effective with an understanding of the affiliation motive strengths. For example, those students with a high need for achievement, along with a high need for positive

stimulation from others, but with a low need for emotional support should, perhaps, be steered into entrepreneurship courses. On the other hand, information indicating a desire for emotional support from others may be a sign that an individual would be a better fit in a traditional organizational career.

Further, career counseling should not end when a person begins a career. Although employer support for employee career development has been on the decline (Arthur *et al.*, 2005), there are benefits for organizations that provide workers with ongoing career counseling (Verbruggen *et al.*, 2007). These benefits can include employees having more satisfying careers. Employees' career satisfaction has positive implications for both individuals and organizations (Allen *et al.*, 1998; Rotondo *et al.*, 2007). Dissatisfaction in the form of a perceived discrepancy between one's actual employment circumstance and one's expected situation has been explained in terms of relative deprivation theory (Feldman *et al.*, 1997). Workers who felt deprived of fulfilling careers reported more instances of depression and lower levels of current job satisfaction than did their non-deprived counterparts. These negative feelings have been linked to decreased organizational performance (Rotondo *et al.*, 2007). Counseling, including an assessment of affiliation motives, may be used to steer some employees toward entrepreneurial opportunities within an organization. The confidence and enthusiasm that entrepreneurially-inclined employees bring to projects may even spread to the less creative employees of the organization (Busenitz and Barney, 1997). A cautionary note, however, is that while personality testing may be used for guidance, the relatively low correlations of personality dimensions with work behaviors implies that there is a potential for unfair discrimination if testing is used for personnel selection purposes (Stone-Romero, 2005).

Implications for society

Counseling which assists workers in finding careers that fit their motives and abilities contributes to the well being of society as a whole by facilitating productivity. Although job satisfaction does not guarantee high job performance levels, it seems to help more often than not. A meta-analysis obtained an estimated true mean correlation of 0.30 between job satisfaction and work performance (Judge *et al.*, 2001). Also, successful efforts to identify and nurture individuals with entrepreneurial leanings offers great potential to enhance the economic well being of society by creating jobs and providing a stimulating effect to the economy. Several studies, including a recent meta-analysis, have confirmed that newer firms contribute disproportionately to net employment growth (Henrekson and Johansson, 2010). Therefore, effective career counseling benefits, individuals, organizations, and society in general.

Limitations and future research

As is the case with all research, our study has limitations. For example, the lack of distinction among the various forms of entrepreneurial activities and self-employment is evident. There is a need to expand our perspective of entrepreneurship beyond a disposition for self-employment to a greater awareness of what an entrepreneurial propensity means and the differing contexts, both traditional organizations and self-employment, available to the more entrepreneurially-focused students. While entrepreneurial characteristics have been identified, context may be an under-appreciated variable. Those with entrepreneurial traits and characteristics

may choose to pursue those needs in different contexts, which suggest differing implications for career assessment and planning. It is increasingly evident that entrepreneurship may be manifested in ways other than self-employment. Stewart *et al.* (1998), for instance, concluded that entrepreneurs differ dramatically, not only from managers, but also from small business owners in terms of greater propensity for creativity and risk taking. Entrepreneurs, then, may be viewed as distinct from both managers and self-employed small business owners.

Another limitation involves the use of a business student sample, which limits the generalizability of the findings. Future research could extend the study's approach to the investigation of students pursuing fields other than business. Non-business students may well differ more from entrepreneurial students in affiliation motivation than do non-entrepreneurial business students. As noted above, those students may be less competitive and less motivated to obtain attention and make social comparisons than are students with entrepreneurial interests. Also, while the present sample is appropriate for the study of career aspirations prior to career entry, it would be of interest to investigate the affiliation motives of persons who have already entered the entrepreneurial and other professions. Moreover, a longitudinal approach would allow for the examination of changes in motivation as individual careers progress.

Conclusion

In sum, this study suggests that individuals with entrepreneurial interests do not necessarily have low affiliation motivation, but tend to have desires for social contacts for somewhat different reasons than do persons with less interest in entrepreneurial pursuits. Persons with entrepreneurial interests enjoy interacting with other people, but they are not emotionally dependent on them. These findings have implications for career counseling and ongoing career development efforts.

References

- Allen, T.D., Poteet, M.L. and Russell, J.E.A. (1998), "Attitudes of managers who are more or less career plateaued", *The Career Development Quarterly*, Vol. 47 No. 2, pp. 159-72.
- Apospori, E., Papalexandris, N. and Galanaki, E. (2005), "Entrepreneurial and professional CEOs: differences in motive and responsibility profile", *Leadership & Organizational Development Journal*, Vol. 26 No. 2, pp. 141-62.
- Arbuckle, J.L. (2005), *AMOS 6.0 User's Guide*, Amos Development, Chicago, IL.
- Arthur, M.B., Khapova, S.N. and Wilderom, C.P.M. (2005), "Career success in a boundaryless career world", *Journal of Organizational Behavior*, Vol. 26 No. 2, pp. 177-202.
- Babalola, S.S. (2009), "Women entrepreneurial innovative behaviour: the role of psychological capital", *International Journal of Business and Management*, Vol. 4 No. 11, pp. 184-92.
- Baron, R.A. and Markman, G.D. (2000), "Beyond social capital: how social skills can enhance entrepreneurs' success", *Academy of Management Executive*, Vol. 14 No. 1, pp. 106-16.
- Bennett, R. and Dann, S. (2000), "The changing experience of Australian female entrepreneurs", *Gender, Work, and Organization*, Vol. 7 No. 2, pp. 75-83.
- Bentler, P. (1990), "Comparative fit indexes in structural models", *Psychological Bulletin*, Vol. 107, pp. 238-46.
- Beugelsdijk, S. and Noorderhaven, N. (2005), "Personality characteristics of self-employed: an empirical study", *Small Business Economics*, Vol. 24, pp. 159-67.

-
- Blankstein, K.R., Flett, G.L., Koledin, S. and Bortolotto, R. (1989), "Affect intensity and dimensions of affiliation motivation", *Personality and Individual Differences*, Vol. 10, pp. 1201-3.
- Browne, M.W. and Cudeck, R. (1993), "Alternative ways of assessing model fit", in Bollen, K.A. and Long, J.S. (Eds), *Testing Structural Equation Models*, Sage Publications, Newbury Park, CA, pp. 136-62.
- Brüderl, J. and Preisendörfer, P. (1998), "Network support and the success of newly founded businesses", *Small Business Economics*, Vol. 10 No. 3, pp. 213-25.
- Busenitz, L.W. and Barney, J.B. (1997), "Differences between entrepreneurs and managers in large organizations: biases and heuristics in strategic decision-making", *Journal of Business Venturing*, Vol. 12 No. 1, pp. 9-30.
- Collins, C.J., Hanges, P.J. and Locke, E.A. (2004), "The relationship of achievement motivation to entrepreneurial behavior: a meta-analysis", *Human Performance*, Vol. 17 No. 1, pp. 95-117.
- Constantian, C.A. (1982), "Solitude: attitudes, beliefs, and behavior in regard to spending time alone", *Dissertation Abstracts International*, Vol. 42 Nos 12-B, Pt 1, p. 4968.
- Coy, D.R. and Kovacs-Long, J. (2005), "Maslow and Miller: an exploration of gender and affiliation in the journey to competence", *Journal of Counseling and Development*, Vol. 83, pp. 138-45.
- Crant, J.M. (1996), "The proactive personality scale as a predictor of entrepreneurial intentions", *Journal of Small Business Management*, Vol. 34 No. 3, pp. 42-9.
- Cromie, S. (1987), "Motivations of aspiring male and female entrepreneurs", *Journal of Occupational Behavior*, Vol. 8, pp. 251-61.
- Cromie, S. and Johns, S. (1983), "Irish entrepreneurs: some personal characteristics", *Journal of Occupational Behavior*, Vol. 4, pp. 317-24.
- Cubico, S., Bortolani, E., Favretto, G. and Sartori, R. (2010), "Describing the entrepreneurial profile: the entrepreneurial aptitude test (TAI)", *International Journal of Entrepreneurship and Small Business*, Vol. 11, pp. 424-35.
- Davidsson, P. and Honig, B. (2003), "The role of social and human capital among nascent entrepreneurs", *Journal of Business Venturing*, Vol. 18 No. 3, pp. 301-31.
- Fagenson, E.A. (1993), "Personal value systems of men and women entrepreneurs versus managers", *Journal of Business Venturing*, Vol. 8 No. 5, pp. 409-30.
- Feldman, D.C., Leana, C.R. and Turnley, W.H. (1997), "A relative deprivation approach to understanding underemployment", in Cooper, C.L. and Rousseau, D.M. (Eds), *Trends in Organizational Behavior*, Vol. 4, Wiley, New York, NY, pp. 43-60.
- Greve, A. and Salaff, J.W. (2003), "Social networks and entrepreneurship", *Entrepreneurship, Theory and Practice*, Vol. 28 No. 1, pp. 1-22.
- Hansemak, O.C. (2000), "Predictive validity of TAT and CMPS on the entrepreneurial activity, 'start of a new business': a longitudinal study", *Journal of Managerial Psychology*, Vol. 15, pp. 634-54.
- Hansemak, O.C. (2003), "Need for achievement, locus of control and the prediction of business start-ups: a longitudinal study", *Journal of Economic Psychology*, Vol. 24, pp. 301-19.
- Henderson, R.I. (1974), "The best of two worlds: the entrepreneurial manager", *Journal of Small Business Management*, Vol. 12 No. 4, pp. 4-7.
- Henrekson, M. and Johansson, D. (2010), "Gazelles as job creators: a survey and interpretation of the evidence", *Small Business Economics*, Vol. 35, pp. 227-44.
- Hill, C.A. (1987), "Affiliation motivation: people who need people ... but in different ways", *Journal of Personality and Social Psychology*, Vol. 52 No. 5, pp. 1008-18.
- Hisrich, R.D. and Grachev, M.V. (1995), "The Russian entrepreneur: characteristics and prescriptions for success", *Journal of Managerial Psychology*, Vol. 10, pp. 3-9.

- Hisrich, R.D. and O'Kinneide, B. (1996), "Entrepreneurial activities in Europe-oriented institutions", *Journal of Managerial Psychology*, Vol. 11 No. 2, pp. 45-64.
- Jack, S.L. (2005), "The role, use and activation of strong and weak ties: a qualitative analysis", *Journal of Management Studies*, Vol. 42 No. 6, pp. 1233-59.
- Judge, T.A., Thoresen, C.J., Bono, J.E. and Patton, G.K. (2001), "The job satisfaction-job performance relationship: a qualitative and quantitative review", *Psychological Bulletin*, Vol. 127, pp. 376-407.
- Kenny, D.A. (1977), *Correlation and Causality*, Wiley, New York, NY.
- Kets de Vries, M.F.R. (1985), "The dark side of entrepreneurship", *Harvard Business Review*, Vol. 63 No. 6, pp. 160-7.
- Kets de Vries, M.F.R. (1996), "The anatomy of the entrepreneur: clinical observations", *Human Relations*, Vol. 49, pp. 853-83.
- Koh, H.C. (1996), "Testing hypotheses of entrepreneurial characteristics: a study of Hong Kong MBA students", *Journal of Managerial Psychology*, Vol. 11 No. 2, pp. 12-25.
- Kreiser, P.M., Marino, L.D. and Weaver, K.M. (2002), "Assessing the psychometric properties of the entrepreneurial orientation scale: a multi-country analysis", *Entrepreneurship Theory and Practice*, Vol. 26 No. 4, pp. 71-94.
- Lachman, R. (1980), "Toward measurement of entrepreneurial tendencies", *Management International Review*, Vol. 20 No. 2, pp. 108-16.
- Leary, M.R., Herbst, K.C. and McCrary, F. (2003), "Finding pleasure in solitary activities: desire for aloneness or disinterest in social contact?", *Personality and Individual Differences*, Vol. 35, pp. 59-68.
- Lee, J. (1996), "The motivation of women entrepreneurs in Singapore", *Women in Management Review*, Vol. 11 No. 2, pp. 18-29.
- Louis, K.S., Jones, L.M., Anderson, M.S., Blumenthal, D. and Campbell, E.G. (2001), "Entrepreneurship, secrecy, and productivity: a comparison of clinical and non-clinical life sciences faculty", *Journal of Technology Transfer*, Vol. 26, pp. 233-45.
- Lumpkin, G.T. and Dess, G.G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academy of Management Review*, Vol. 21 No. 1, pp. 135-72.
- McClelland, D.C. (1961), *The Achieving Society*, Van Nostrand, Princeton, NJ.
- McClelland, D.C. (1965), "Achievement and entrepreneurship: a longitudinal study", *Journal of Personality and Social Psychology*, Vol. 1, pp. 389-92.
- McClelland, D.C. (1985), "How motives, skills, and values determine what people do", *American Psychologist*, Vol. 40, pp. 812-25.
- McClelland, D.C. (1987), "Characteristics of successful entrepreneurs", *Journal of Creative Behavior*, Vol. 21, pp. 219-33.
- McClelland, D.C. and Boyatzis, R.E. (1982), "Leadership motive-pattern and long-term success in management", *Journal of Applied Psychology*, Vol. 67 No. 6, pp. 737-43.
- McClelland, D.C. and Burnham, D.H. (1976), "Power is the great motivator", *Harvard Business Review*, Vol. 54 No. 2, pp. 100-10.
- McKenna, S.D. (1996), "The darker side of the entrepreneur", *Leadership & Organization Development Journal*, Vol. 17 No. 6, pp. 41-5.
- Malach-Pines, A. and Schwartz, D. (2008), "Now you see them, now you don't: gender differences in entrepreneurship", *Journal of Managerial Psychology*, Vol. 23, pp. 811-32.
- Malach-Pines, A., Sadeh, A., Dvir, D. and Yafe-Yanai, O. (2002), "Entrepreneurs and managers: similar yet different", *The International Journal of Organizational Analysis*, Vol. 10 No. 2, pp. 172-90.

-
- Mathieu, J.E. and Farr, J.L. (1991), "Further evidence for the discriminant validity of measures of organizational commitment, job involvement, and job satisfaction", *Journal of Applied Psychology*, Vol. 76, pp. 127-33.
- Meyer, H.H., Walker, W.B. and Litwin, G.H. (1961), "Motive patterns and risk preferences associated with entrepreneurship", *Journal of Abnormal and Social Psychology*, Vol. 63 No. 3, pp. 570-4.
- Miner, J.B. (2000), "Testing a psychological typology of entrepreneurship using business founders", *Journal of Applied Behavioral Science*, Vol. 36 No. 1, pp. 43-69.
- Miner, J.B. and Raju, N.S. (2004), "Risk propensity differences between managers and entrepreneurs and between low- and high-growth entrepreneurs: a reply in a more conservative vein", *Journal of Applied Psychology*, Vol. 89 No. 1, pp. 1-13.
- Miner, J.B., Smith, N.R. and Bracker, J.S. (1989), "Role of entrepreneurial task motivation in the growth of technologically innovative firms", *Journal of Applied Psychology*, Vol. 74 No. 4, pp. 554-60.
- Miner, J.B., Smith, N.R. and Bracker, J.S. (1994), "Role of entrepreneurial task motivation in the growth of technologically innovative firms: interpretations from follow-up data", *Journal of Applied Psychology*, Vol. 79 No. 4, pp. 627-30.
- Neck, C.P., Neck, H.M., Manz, C.C. and Godwin, J. (1999), "I think I can; I think I can': a self-leadership perspective toward enhancing entrepreneur thought patterns, self-efficacy, and performance", *Journal of Managerial Psychology*, Vol. 14, pp. 477-501.
- O'Connor, V.J. (2001), "Women and men in senior management – a 'different needs' hypothesis", *Women in Management Review*, Vol. 16 No. 8, pp. 400-4.
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-reports in organizational research: problems and prospects", *Journal of Management*, Vol. 12, pp. 531-44.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88, pp. 879-903.
- Rauch, A. and Frese, M. (2000), "Psychological approaches to entrepreneurial success: a general model and an overview of findings", in Cooper, C.L. and Robertson, I.T. (Eds), *International Review of Industrial and Organizational Psychology*, Vol. 15, Wiley, Chichester, pp. 101-41.
- Rauch, A. and Frese, M. (2007), "Let's put the person back into entrepreneurship research: a meta-analysis on the relationship between business owners' personality traits, business creation, and success", *European Journal of Work and Organizational Psychology*, Vol. 16, pp. 353-85.
- Rauch, A., Wiklund, J., Lumpkin, G.T. and Frese, M. (2009), "Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future", *Entrepreneurship Theory and Practice*, Vol. 33, pp. 761-87.
- Rotondo, D.M., Kincaid, J.F. and Decker, W.H. (2007), "Relative career deprivation: personal and work-related outcomes", *Review of Business Research*, Vol. 7 No. 4, pp. 36-44.
- Scheinberg, S. and MacMillan, I.C. (1988), "An 11 country study of motivation to start a business", in Kirchhoff, B.A., Long, W.A., McMullan, W.E., Vesper, K.H. and Wetzel, W.E. (Eds), *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA, pp. 669-87.
- Schwarz, E.J., Wdowiak, M.A., Almer-Jarz, D.A. and Breitenacker, R.J. (2009), "The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: an Austrian perspective", *Education + Training*, Vol. 51 No. 4, pp. 272-91.
- Scott, M.G. and Twomey, D.F. (1988), "The long-term supply of entrepreneurs: students' career aspirations in relation to entrepreneurship", *Journal of Small Business Management*, Vol. 26 No. 4, pp. 5-13.

- Singh, G. and DeNoble, A. (2003), "Views on self-employment and personality: an exploratory study", *Journal of Developmental Entrepreneurship*, Vol. 8 No. 3, pp. 265-81.
- Stewart, W.H. and Roth, P.L. (2001), "Risk propensity differences between entrepreneurs and managers: a meta-analytic review", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 145-53.
- Stewart, W.H. and Roth, P.L. (2007), "A meta-analysis of achievement motivation differences between entrepreneurs and managers", *Journal of Small Business Management*, Vol. 45 No. 4, pp. 401-21.
- Stewart, W.H., Watson, W.E., Carland, J.C. and Carland, J.W. (1998), "A proclivity for entrepreneurship: a comparison of entrepreneurs, small business owners, and corporate managers", *Journal of Business Venturing*, Vol. 14, pp. 189-214.
- Stone-Romero, E.F. (2005), "Personality-based stigmas and unfair discrimination in work organizations", in Dipboye, R.L. and Colella, A. (Eds), *Discrimination at Work: The Psychological and Organizational Bases*, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 255-80.
- Tan, J. (2008), "Breaking the 'bamboo curtain' and the 'glass ceiling': the experience of women entrepreneurs in high-tech industries in an emerging market", *Journal of Business Ethics*, Vol. 80, pp. 547-64.
- Tanova, C., Karatas-Özkan, M. and İnal, G. (2008), "The process of choosing a management career: evaluation of gender and contextual dynamics in a comparative study of six countries: Hungary, Israel, North Cyprus, Turkey, UK, and the USA", *Career Development International*, Vol. 13, pp. 291-305.
- Van Eeden, S., Louw, L. and Venter, D. (2005), "Entrepreneurial traits of undergraduate commerce students: a three-country comparison", *Management Dynamics*, Vol. 14 No. 3, pp. 26-43.
- Vecchio, R.P. (2003), "Entrepreneurship and leadership: common trends and common threads", *Human Resource Management Review*, Vol. 13, pp. 302-27.
- Verbruggen, M., Sels, L. and Forrier, A. (2007), "Unraveling the relationship between organizational career management and the need for external career counseling", *Journal of Vocational Behavior*, Vol. 71, pp. 69-83.
- Vijaya, V. and Kamalanabhan, T.J. (1998), "A scale to assess entrepreneurial motivation", *Journal of Entrepreneurship*, Vol. 7 No. 2, pp. 183-98.
- Wainer, H.A. and Rubin, I.M. (1969), "Motivation of research and development entrepreneurs: determinants of company success", *Journal of Applied Psychology*, Vol. 53 No. 3, pp. 178-84.
- Walker, E.A. and Webster, B.J. (2007), "Gender, age, and self-employment: some things change, some stay the same", *Women in Management Review*, Vol. 22 No. 2, pp. 122-35.
- Williams, L.J., Cote, J.A. and Buckley, M.R. (1989), "Lack of method variance in self-reported affect and perceptions at work: reality or artifact?", *Journal of Applied Psychology*, Vol. 74, pp. 462-8.
- Wong, M.M. and Csikszentmihalyi, M. (1991), "'Affiliation motivation and daily experience: some issues on gender differences", *Journal of Personality and Social Psychology*, Vol. 60 No. 1, pp. 154-64.
- Zhao, H. and Seibert, S.E. (2006), "The big five personality dimensions and entrepreneurial status: a meta-analytical review", *Journal of Applied Psychology*, Vol. 91, pp. 259-71.
- Zhao, H., Seibert, S.E. and Hills, G.E. (2005), "The mediating role of self-efficacy in the development of entrepreneurial intentions", *Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1265-72.

Further reading

- Stahl, M.J. (1986), *Managerial and Technical Motivation: Assessing Needs for Achievement, Power, and Affiliation*, Praeger, New York, NY.

Appendix. The Interpersonal Orientation Scale (IOS)

Please rate the statements on how true or descriptive each is for you.

Rating scale: 1 = Not at all true; 2 = Slightly true; 3 = Somewhat true; 4 = Mostly true; 5 = Completely true

- (1) One of my greatest sources of comfort when things get rough is being with other people.
- (2) I prefer to participate in activities alongside other people rather than by myself because I like to see how I am doing on the activity.
- (3) The main thing I like about being around other people is the warm glow I get from contact with them.
- (4) It seems like whenever something bad or disturbing happens to me I often just want to be with a close, reliable friend.
- (5) I mainly like people who seem strongly drawn to me and who seem infatuated with me.
- (6) I think I get satisfaction out of contact with others more than most people.
- (7) When I am not certain about how well I am doing at something, I usually like to be around others so I can compare myself to them.
- (8) I like to be around people when I can be the center of attention.
- (9) When I have not done very well on something that is very important to me, I can get to feeling better simply by being around other people.
- (10) Just being around others and finding out about them is one of the most interesting things I can think of doing.
- (11) I seem to get satisfaction from being with others more than a lot of other people do.
- (12) If I am uncertain about what is expected of me, such as on a task or in a social situation, I usually like to be able to look to certain others for cues.
- (13) I feel like I have really accomplished something valuable when I am able to get close to someone.
- (14) I find that when I am unsure of what is going on I often have the desire to be around other people who are experiencing the same thing I am.
- (15) During times when I have to go through something painful, I usually find that having someone with me makes it less painful.
- (16) I often have a strong need to be around people who are impressed with what I am like and what I do.
- (17) If I feel unhappy or kind of depressed, I usually try to be around other people to make me feel better.
- (18) I find that I often look to certain other people to see how I compare to others.
- (19) I mainly like to be around others who think I am an important, exciting person.
- (20) I think it would be satisfying if I could have very close friendships with quite a few people.
- (21) I often have a strong desire to get people I am around to notice me and appreciate what I am like.
- (22) I do not like being with people who may give me less than positive feedback about myself.
- (23) I usually have the greatest need to have other people around me when I feel upset about something.
- (24) I think being close to others, listening to them, and relating to them on a one-to-one level is one of my favorite and most satisfying pastimes.

- (25) I would find it very satisfying to be able to form new friendships with whomever I like.
(26) One of the most enjoyable things I can think of that I like to do is just watching people and seeing what they are like.

Note: Emotional support – items 1, 4, 9, 15, 17, 23; Attention – items 5, 8, 16, 19, 21, 22; Positive stimulation – items 3, 6, 10, 11, 13, 20, 24, 25, 26; Social comparison – items 2, 7, 12, 14, 18.

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