

International Small Business Journal

<http://isb.sagepub.com/>

Effects of Self-concept Traits and Entrepreneurial Orientation on Firm Performance

June M. L. Poon, Raja Azimah Ainuddin and Sa'Odah Haji Junit

International Small Business Journal 2006 24: 61

DOI: 10.1177/0266242606059779

The online version of this article can be found at:

<http://isb.sagepub.com/content/24/1/61>

Published by:



<http://www.sagepublications.com>

Additional services and information for *International Small Business Journal* can be found at:

Email Alerts: <http://isb.sagepub.com/cgi/alerts>

Subscriptions: <http://isb.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://isb.sagepub.com/content/24/1/61.refs.html>



Effects of Self-concept Traits and Entrepreneurial Orientation on Firm Performance

JUNE M. L. POON, RAJA AZIMAH AINUDDIN
Universiti Kebangsaan Malaysia

SA'ODAH HAJI JUNIT
Ministry of Finance, Malaysia

This study examined relationships among three self-concept traits, entrepreneurial orientation, and firm performance using survey data from 96 entrepreneurs. We used path analysis to test the direct and indirect effects of the trait variables on perceptual measures of firm performance. Entrepreneurial orientation – operationalized to reflect the dimensions of innovativeness, proactiveness, and propensity to take risks – was used as the mediating variable for explaining the relationship between self-concept traits and firm performance. The results indicated that internal locus of control was positively related to firm performance, and entrepreneurial orientation did not play a mediating role in this relationship. In contrast, generalized self-efficacy had no direct effects on firm performance; however, it influenced firm performance positively through its effect on entrepreneurial orientation. Finally, self-attributed achievement motive was not significantly related to entrepreneurial orientation or firm performance. Implications of the findings and suggestions for future research are discussed.

KEYWORDS: achievement motive; entrepreneurial orientation; firm performance; generalized self-efficacy; locus of control; self-concept traits

There is much debate about the continued emphasis on dispositions in management research. Although some scholars have questioned the utility of dispositional research (cf. Davis-Blake and Pfeffer, 1989), others have argued that dispositions are useful predictors of organizationally relevant outcomes and should be incorporated into theories of behaviour in organizations (cf. House et al., 1996). Within the entrepreneurship domain, failure to identify a set of dispositional characteristics for profiling an entrepreneur has led some scholars to shift their attention to entrepreneurial behaviours. Accordingly, although many past studies have used an individual level of analysis, recent research has

focused on firm-level behaviours in explaining entrepreneurial performance (Wiklund, 1999) on the basis that behaviours give meaning to the entrepreneurial process and allow for more managerial intervention (Covin and Slevin, 1991: 8).

Other entrepreneurship scholars, however, contend that there is no entrepreneurship without the entrepreneur and that it remains worthwhile studying entrepreneurship at the individual level (e.g. using a trait-based approach) because entrepreneurs are the energizers of the entrepreneurial process (Johnson, 1990: 48). Although we concur with this view, we also believe it is important that dispositional characteristics be related to specific firm-level behaviours for explaining and predicting firm-level outcomes for a more complete understanding of the entrepreneurship process. To date, however, few studies have examined how dispositional traits, firm-level behaviours, and firm-level outcomes are related (Naffziger et al., 1994). One exception is the recent study by Baum et al. (2001) that tested a multidimensional model of venture growth by incorporating individual (e.g. traits), firm (e.g. competitive strategy), and environmental variables (e.g. environmental dynamism).

In this study, we tested a model that used both individual-level and firm-level variables for explaining the performance of entrepreneur-led firms. We used firm performance as our dependent variable because of its importance to individuals, organizations, and society. Also, firm performance is an outcome that all entrepreneurs must address. For our individual-level independent variables, we selected three self-concept traits that have theoretical relationships with firm performance. Two of the variables – achievement motive and internal locus of control – have been the focus of much dispositional research on entrepreneurship (for a review see Shane et al., 2003). The third variable – generalized self-efficacy – however, has received relatively little attention in the entrepreneurship literature, although self-efficacy has been found to be an important determinant of many life and work outcomes (for reviews see Bandura, 1986, 1997).

For our firm-level behavioural variable, we looked at entrepreneurial orientation. Although a review of the entrepreneurship literature revealed theoretical models (cf. Chrisman et al., 1998; Johnson, 1990) and empirical works (e.g. Baum et al., 2001; Lee and Tsang, 2001) suggesting that certain traits influence entrepreneurial performance and success, there is little theoretical or empirical work that has been offered to explain the mechanisms through which these traits affect performance. Therefore, in this study, in addition to examining the direct effects of self-concept traits on firm performance, we explored entrepreneurial orientation as a process variable through which such traits affect firm performance. We know of no prior research that has done this.

In sum, this study aimed to examine the direct effects of self-concept traits on firm performance as well as investigate the role of entrepreneurial orientation as a potential mediating variable for explaining how or why such traits affect firm performance. These objectives are consistent with our view of an entrepreneur as someone characterized by certain dispositions and attributes who (1) is motivated to discover, evaluate, and exploit entrepreneurial opportunities; (2)

demonstrates initiative and creativity; (3) is able to organize and turn resources to practical use; and (4) accepts risk and failure (Hisrich, 1990; Shane and Venkataraman, 2000; Thomas and Mueller, 2000).

Conceptual Framework and Hypotheses

Achievement Motive and Performance

A motive or need for achievement refers to a desire to do well in order to achieve a sense of personal accomplishment (McClelland, 1961). People with a strong motive for achievement have a strong desire to be successful, prefer to be personally responsible for decisions and outcomes, want objective performance feedback, set moderate achievement goals, and take calculated risks. McClelland et al. (1989) have classified measures of achievement motive into two types: implicit motive (assessed using projective measures such as the Thematic Apperception Test) and self-attributed motive (assessed using self-report measures such as questionnaires). According to McClelland et al. (1989: 692), the two motives have different behavioural correlates; implicit motives are better at predicting behavioural trends over time (e.g. career success), whereas self-attributed motives are better at predicting responses to immediate and specific situations (e.g. test performance). In this study, we examined the effects of self-attributed motive for achievement because this conscious perception of what is important constitutes part of a person's self-concept (Spangler, 1992).

Theoretically, people with a strong desire to succeed should be more likely to exploit entrepreneurial opportunities and perform better than those with a weaker desire to succeed (Shane and Venkataraman, 2000). Empirically, Spangler (1992), in a meta-analysis of 105 studies, showed need for achievement to be positively related to various outcomes – including school grades, laboratory measures of performance, and career success – for both projective and self-report measures. In the entrepreneurship area, there is evidence that achievement motive predisposes people to engage in entrepreneurial activities and is more pronounced among entrepreneurs than non-entrepreneurs (e.g. Ahmed, 1985; McClelland, 1965). In addition, this trait has been shown to predict entrepreneurial performance and success in both Western (e.g. Miner et al., 1989, 1994) and non-Western contexts (e.g. Singh, 1978; Yasin, 1996). Although not all studies relating this trait to performance found significant relationships, the majority did find a positive link (for a review see Johnson, 1990). For example, Miner et al. (1994), in a longitudinal study, found their measure of achievement motivation to significantly predict firm performance (i.e. growth in number of employees, sales growth, and entrepreneur annual income). Thus, we propose:

Hypothesis 1. Achievement motive will be positively related to firm performance.

Internal Locus of Control and Performance

Locus of control refers to people's perception of their ability to exercise control over the environment (Rotter, 1966). People with an internal locus of control believe that their own traits or behaviours (e.g. effort) determine outcomes in life

(e.g. personal successes), whereas people with an external locus of control believe that outcomes are determined by external factors (e.g. fate).

Theoretically, relative to people low on internal locus of control, people high on this trait should exert more effort and persist toward acquiring valued outcomes because they feel able to control outcomes. Greater effort and perseverance generally lead to higher performance (Bandura, 1993; Locke and Latham, 1990; Markman and Baron, 2003). Empirically, previous studies have found locus of control to be associated with (1) academic achievement (for a review see Findley and Cooper, 1983); (2) coping with organizational change (e.g. Judge et al., 1999; and (3) job motivation, job performance, and career success (for a quantitative review see Judge and Bono, 2001; for a narrative review see Spector, 1982). Given that previous studies have established associations between locus of control and performance-related outcomes, it would be reasonable to expect a similar link between this trait (as exhibited by entrepreneurs) and the performance of entrepreneur-led firms. There is, in fact, some evidence for such a relationship. For example, Lee and Tsang (2001), using a sample of Chinese entrepreneurs in Singapore, found internal locus of control to be positively related to venture growth. On the basis of the theoretical arguments and empirical evidence, we propose:

Hypothesis 2. Internal locus of control will be positively related to firm performance.

Self-efficacy and Performance

Self-efficacy, a concept that owes a great deal of its development to Bandura (1977, 1986), refers to one's perceived ability to accomplish a certain level of performance. Wood and Bandura (1989: 408) used this concept to refer to 'beliefs in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands'. Self-efficacy is a primary determinant of motivation and behaviour (Bandura, 1986) and has been demonstrated to enhance performance across diverse situations (e.g. Barling and Beattie, 1983; Gist et al., 1989; Gist et al., 1991; Locke et al., 1984; Silver et al., 1995).

Although originally conceptualized as a task-specific construct, there is now support for the existence of a general form of self-efficacy (e.g. Lennings, 1994; Sherer et al., 1982). People with varied and numerous experiences of success are expected to have positive self-efficacy expectancies in a greater variety of situations resulting in general self-efficacy expectancies (Sherer et al., 1982: 664). Generalized self-efficacy refers to people's estimate of their 'fundamental ability to cope, perform, and be successful' (Judge and Bono, 2001: 80). We used generalized self-efficacy instead of task-specific self-efficacy in this study because the former more closely reflects a stable disposition.

In a meta-analytic review of core self-evaluation traits, Judge and Bono (2001) found generalized self-efficacy to be positively related to job performance. In the entrepreneurship area, although there is no direct evidence that the generalized self-efficacy of entrepreneurs affects the performance of the firms they manage, there is a suggestion that self-efficacy has effects on entrepreneurial intentions

and actions (Boyd and Vozikis, 1994). Also, some researchers have found (1) self-efficacy to distinguish between business founders and non-founders (e.g. Chen et al., 1998), (2) founders' self-perceived competence to be associated positively with venture performance (e.g. Chandler and Jansen, 1992), and (3) self-efficacy for venture growth to predict venture growth (e.g. Baum and Locke, 2004). On the basis of these findings and given the pervasive positive effects of self-efficacy on general performance, we propose:

Hypothesis 3. Generalized self-efficacy will be positively related to firm performance.

Mediating Role of Entrepreneurial Orientation

In general, entrepreneurial orientation or posture refers to top management's strategy in relation to innovativeness, proactiveness, and risk taking. Innovativeness reflects the propensity of a firm to engage in new ideas and creative processes that may result in new products, services, or technological processes; proactiveness refers to the extent to which a firm is a leader or follower; and risk taking is the extent to which a firm is willing to make large and risky resource commitments (Lumpkin and Dess, 1996). Firms with an entrepreneurial orientation are willing to innovate, be proactive relative to marketplace opportunities, be aggressive toward competitors, and take risks (Covin and Slevin, 1991; Lumpkin and Dess, 1996). It is, therefore, a firm-level, behavioural process of entrepreneurship. In entrepreneur-led firms, however, the behaviours of the firm and that of the entrepreneur are likely to be the same.

Zahra (1993) suggests incorporating executives' characteristics into models of firm-level entrepreneurship, for example, as possible antecedents of a firm's entrepreneurial orientation. The personal characteristics of entrepreneurs will influence the type of firm that will be created and the way the firm will be managed (Lafuente and Salas, 1989). In addition, there is some evidence that entrepreneurial orientation is significantly related to firm performance (e.g. Becherer and Maurer, 1997, 1999; Smart and Conant, 1994). Although there is no direct evidence that entrepreneurial orientation mediates the relationship between traits and firm performance, there is evidence that the relation of personality traits with venture performance is mediated by competitive strategy (e.g. Baum et al., 2001).

Entrepreneurial Orientation and Firm Performance The importance of entrepreneurial orientation and its influence on firm performance have been highlighted in both theoretical discussions and empirical research. At the theoretical level, entrepreneurial orientation is said to have positive effects on performance because firms with this strategic posture have first-mover advantages and are able to capitalize on emerging opportunities, giving them a competitive advantage that, ultimately, translates into better financial results (Wiklund, 1999: 39). At the empirical level, past studies have shown positive relationships between entrepreneurial orientation and firm performance (e.g. Frese et al., 2002; Hult et al., 2004; Lee et al., 2001; Smart and Conant, 1994; Swierczek and Thai, 2003; Wiklund, 1999; Wiklund and Shepherd, 2005; Yusuf, 2002). For example, a longitudinal

study found entrepreneurial orientation to have positive, long-term effects on the growth and financial performance of small firms, even after controlling for a number of organizational and environmental variables (e.g. Wiklund, 1999). More recent empirical evidence for an entrepreneurial orientation-performance link include evidence from studies on (1) technological start-up ventures in Korea (e.g. Lee et al., 2001), (2) small-scale businesses in Namibia (e.g. Frese et al., 2002), (3) small and medium enterprises in Vietnam (e.g. Swierczek and Thai, 2003), (4) industrial firms in US (e.g. Hult et al., 2004), and (5) small businesses in Sweden (e.g. Wiklund and Shepherd, 2005).

Traits and Entrepreneurial Orientation As pointed out by Kirkpatrick and Locke (1991), traits alone are not sufficient for successful business leadership; those with the requisite traits must take certain actions to be successful. Possessing the relevant traits, however, makes it more likely that such actions would be taken (Kirkpatrick and Locke, 1991). What specifically are these actions or behaviours for entrepreneurs possessing certain self-concept traits? In this study, we propose that entrepreneurial orientation may be a useful process variable for explaining the effects of certain traits on firm performance. Specifically, we believe traits such as internal locus of control and generalized self-efficacy will have an influence on entrepreneurs' approach to the competitive environment as reflected in the strategic actions that their firm takes.

People with high internal locus of control believe that they are able to exercise control over their environment and are unlikely to conform to external influences. Therefore, entrepreneurs with high internal locus of control, relative to those low on this trait, will be more likely to try new approaches, pursue new opportunities, initiate change instead of reacting to events, and take risks. These behaviours are consistent with the innovative, proactive, and risk-taking characteristics of entrepreneurial orientation. Firms led by entrepreneurs who engage in these behaviours will be likely to adopt such an orientation also. In contrast, entrepreneurs who believe there is little they can do to change things will not be motivated to attempt to do so. Firms led by entrepreneurs with such a passive orientation, likewise, will reflect this orientation.

Similarly, we expect the same process to work for generalized self-efficacy. In deciding whether or not to act on the environment, people must evaluate not only how much influence they can exercise over it but also how capable they are (Parker, 1993: 951). According to Bandura (1986), efficacy judgments not only determine peoples' choice of activities but also their level of effort and persistence. When faced with real or perceived obstacles, high self-efficacy individuals exert more effort than people with low self-efficacy. They also tend to persist in the face of difficulties and in attempting to execute new behaviours. Therefore, to the degree that entrepreneurs perceive themselves to be efficacious, they may be more willing to take on the challenge of introducing new products, act on their environment, and take on risky projects because they believe in their abilities. In contrast, entrepreneurs who do not feel efficacious are likely to stay with the status quo, be passive or reactive, and avoid risky situations because they believe they do not have what it takes to succeed. To conclude, an entrepreneur who has

a high sense of generalized self-efficacy will be more likely to create a firm that has an entrepreneurial orientation than will one who has a low sense of generalized self-efficacy.

Although we expect entrepreneurs high on achievement motive to be more likely to take a forward-looking and competitive perspective (related to the innovativeness and proactiveness dimensions of entrepreneurial orientation) relative to those low on this trait, the preference for moderate risks of the former is not consistent with behaviours related to high risk (the risk-taking dimension of entrepreneurial orientation). Furthermore, we are not aware of any systematic research that has established achievement motive as a predictor of entrepreneurial orientation. Therefore, we did not formulate any hypothesis relating these two variables.

As discussed, internal locus of control and generalized self-efficacy should influence entrepreneurs and, subsequently, the firms they lead to adopt an entrepreneurial orientation – that is, engage in innovative, proactive, and risk-taking behaviours. The performance of the firms, in turn, should reflect these behaviours. Therefore, we propose:

Hypothesis 4. Internal locus of control will be positively related to entrepreneurial orientation (H4a), generalized self-efficacy will be positively related to entrepreneurial orientation (H4b), and entrepreneurial orientation will be positively related to firm performance (H4c). In other words, the relationship between internal locus of control and generalized self-efficacy with firm performance will be mediated by entrepreneurial orientation.

The four hypotheses discussed in this section form the basis for the research model shown in Figure 1.

Method

Sample and Procedure

Participants were entrepreneurs of companies selected from listings of small and medium-sized enterprises. (For the purpose of this study, we regard an entrepreneur as someone who operates his or her own business.) We mailed the self-administered questionnaire to 600 entrepreneurs with a cover letter describing the study, inviting participation, and assuring confidentiality. Entrepreneurs who did not respond by the stated deadline were mailed a reminder letter accompanied by a replacement questionnaire. We received 104 responses (17%), but we used only 96 (16%) in the analyses. We disqualified seven respondents who had (1) just started or purchased their business, (2) not identified themselves as an entrepreneur, or (3) not provided data that we considered essential for the analyses. One respondent was dropped from the sample because preliminary analyses found this case to be an outlier that caused one of the variables (generalized self-efficacy) to have high kurtosis.

The mean age of the respondents was 44.31 years ($SD = 8.09$), and about 94% were men. Only one respondent had not completed high school; 24% of the respondents held a high school certificate, 31% held diplomas, 18% held a

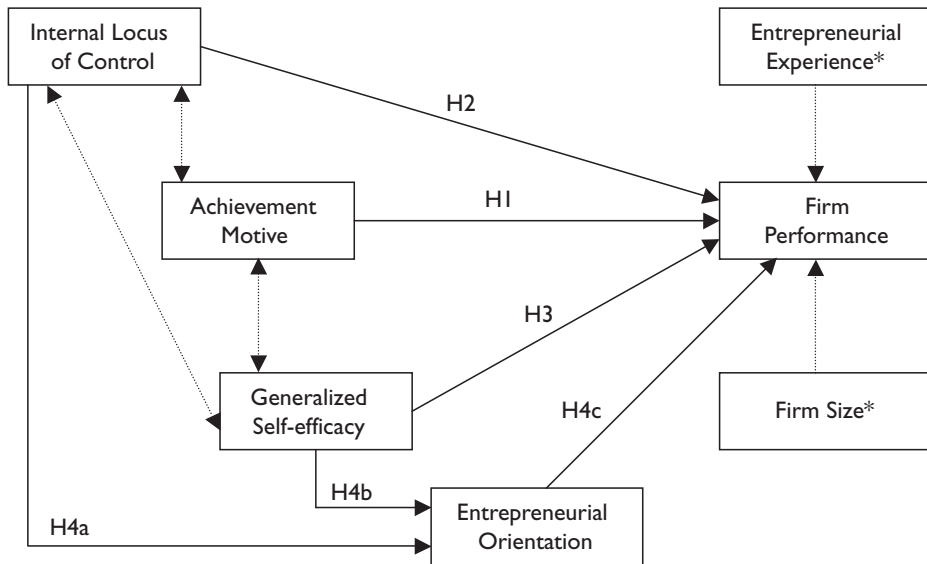


Figure 1. Hypothesized Model of Self-Concept Traits, Entrepreneurial Orientation, and Firm Performance

Notes: Hypotheses 1 to 3 (H1, H2, H3) test direct effects, and Hypotheses 4a to 4c (H4a, H4b, H4c) test indirect effects. The double-headed, dotted arrows indicate that the independent variables (self-concept traits) are proposed to covary among one another. Control variables are denoted by an asterisk.

bachelor's degree, 19% held a graduate degree, and 7% had professional or other qualifications. The business activities of this sample were manufacturing (64%), services (32%), and trading (4%). The average entrepreneur employed 128 employees (SD = 296.78) and had 9.43 years of entrepreneurial experience (SD = 6.67).

Measures

A few of the measures we used in this study were developed by adapting various measures that used different response formats. For example, originally, the locus of control measure used a forced-choice format, the self-efficacy measure used a 14-point Likert scale, and the entrepreneurial orientation measure used a 7-point semantic differential scale. In this study, however, we used the same response format – that is, a 5-point Likert-type scale – for our measures to avoid confusing respondents. Unless stated otherwise, the scale anchors used ranged from 'strongly disagree' (1) to 'strongly agree' (5). We formed a composite score for each measure by averaging the responses across the items used for the measure. Higher scores on a measure of a construct reflected higher levels of the construct.

Achievement Motive We measured self-attributed achievement motive with eight items written to assess entrepreneurs' preference for personal responsibility

(e.g. 'I like to accept responsibility for my own performance'), feedback (e.g. 'I want to know how well I have been doing'), and moderately difficult tasks and risks (e.g. 'I enjoy working on moderately difficult and challenging tasks'). The alpha reliability of the scale was .61.

Internal Locus of Control Rotter's (1966) locus of control scale provided the basis from which we developed our internal locus of control scale. Although Rotter's scale was developed to measure only a general expectancy and not designed for use in specific domains of activity (Furnham and Steele, 1993), it can be argued that entrepreneurial activities are generic activities and specific measures of locus of control are not needed for entrepreneurial selection and research (Cromie, 2000). Also, our interest was on studying the effects of self-concept traits. Therefore, a measure of locus of control at the person level was more appropriate for this study than one at the firm level, such as the strategic locus of control scale developed by Hodgkinson (1992). Example items of our 9-item scale include 'The earnings I make are the result of my own efforts; luck has little or nothing to do with it' and 'A great deal that happens to me is probably a matter of chance' (reverse coded). The alpha reliability of the scale was .61.

Generalized Self-efficacy We measured generalized self-efficacy using 10 items taken from the general self-efficacy subscale of the self-efficacy scale developed by Sherer et al. (1982) and used by other researchers (e.g. Schaubrouek and Merritt, 1997). Sherer et al. (1982) provided evidence for both nomological and criterion validity for their scale. Example items include 'Failures just make me try harder' and 'I feel insecure about my ability to do things' (reverse coded). The alpha reliability of the scale was .77.

Entrepreneurial Orientation We assessed entrepreneurial orientation with nine items adapted from Covin and Slevin (1989) and Miller and Friesen (1982). Our entrepreneurial orientation measure reflected three dimensions (each measured with three items): innovativeness (e.g. 'In the past 5 years, my company has marketed many new lines of products or services'); proactiveness (e.g. 'In dealing with its competitors, my company typically initiates actions to which competitors then respond'); and propensity to take risks (e.g. 'In general, the top managers of my company favor high-risk projects with chances of very high returns'). The alpha reliability of the scale was .84.

Firm Performance Because business owners tend not to reveal their business financial data (Naman and Slevin, 1993) and asking for such data might have precluded any response at all, we used perceptual measures to assess firm performance. The use of subjective, self-report measures of performance is also consistent with past research practices (e.g. Covin and Slevin, 1989; Lyles and Salk, 1996; Smart and Conant, 1994). Furthermore, there is research evidence that top managers' perceptions of the performance of their firm are highly consistent with how their firm actually performed as indicated by objective measures (e.g. Dess and Robinson, 1984; Wall et al., 2004).

Recognizing that firm performance is multidimensional and following the suggestion of Wiklund (1999), we assessed both growth and financial performance by asking respondents to rate their company growth, sales volume, market share, and profit using a scale ranging from 'very poor' (1) to 'very good' (5). Respondents rated these four performance criteria relative to that of competitors as well as benchmarked against their own expectations, thus yielding an 8-item performance scale with an alpha reliability of .86.

Control Variables Because entrepreneurial experience has been proposed as one of the best predictors of success (Hisrich, 1990) and shown to explain variance in entrepreneurial performance (e.g. Lee and Tsang, 2001; Schiller and Crewson, 1997), we controlled for this variable in our analysis. In addition, we controlled for the effect of firm size because many studies have found this variable to be an important determinant of organizational processes and performance (Baum et al., 2001). We used the number of years an entrepreneur had been active as an entrepreneur as an indicator of entrepreneurial experience and number of employees in 2000 as a proxy for firm size. The natural logarithm of each of these two measures was taken to generate a more normal distribution before they were entered as control variables in the analysis.

Data Analysis

We tested the study hypotheses using the EQS 5.1 statistical program (Bentler, 1995) with maximum likelihood estimation procedures and the covariance matrix as input for the analysis. We used an observed variable, path analytic framework because of the modest sample size. With a sample size of 96 and 18 parameters to be estimated, the sample size to estimated parameter ratio of 5.3 just met the recommended minimum ratio of 5 (Bentler, 1995). Scores that were missing in a random fashion were replaced with their respective mean (cf. Tabachnick and Fidell, 1989: 64).

We assessed overall model fit by examining the magnitude of the ratio of the chi-square to its degrees of freedom, comparative fit index (CFI), goodness-of-fit index (GFI), and normed fit index (NFI). We also assessed the fit of the internal structure of our model by looking at the parameter estimates. The significance of each path coefficient was determined by the ratio of the unstandardized regression coefficient to its standard error (a ratio analogous to the *z* test). The path coefficients presented are the coefficients for the standardized solution.

Results

Correlations for the study variables, along with the corresponding means, standard deviations, and alpha reliabilities are shown in Table 1. It can be seen from the zero-order correlations in Table 1 that the three self-concept traits are significantly correlated among one another, and each trait is significantly correlated with entrepreneurial orientation. Notable in this table of results is the non-significant relationship between achievement motive and firm performance.

Results of the path analysis indicated that our hypothesized model fit the data

Table 1. Descriptive Statistics, Scale Reliabilities, and Correlations of Study Variables

Variable	1	2	3	4	5	6	7
1. Achievement motive	(.61)						
2. Internal locus of control	.52***	(.61)					
3. Generalized self-efficacy	.55***	.51***	(.77)				
4. Entrepreneurial orientation	.25*	.30**	.43***	(.84)			
5. Firm performance	.15	.31**	.24*	.35**	(.86)		
6. Entrepreneurial experience†	.09	.05	-.01	.07	-.04	-	
7. Firm size†	.10	.11	.24*	.40***	.37***	.18	-
Mean	4.24	3.87	4.22	3.32	3.40	1.98	3.84
Standard deviation	0.37	0.45	0.44	0.79	0.60	0.77	1.37

Notes: Alpha reliabilities are shown in parentheses on the diagonal; † Natural logarithm; * $p < .05$, ** $p < .01$, *** $p < .001$.

quite well ($\chi^2 = 22.63$, d.f. = 10; CFI = .90; GFI = .94; NFI = .84). A proposed model is considered reasonable when the ratio of the chi-square to its degrees of freedom is 5 or lower, and it has estimates of CFI of .90 or higher, GFI of .90 or higher, and NFI greater than .80 (Kernan and Hanges, 2002; Tsai and Ghoshal, 1998). An examination of the standardized path coefficients (shown in Figure 2), however, indicated that not all the hypothesized relationships were supported.

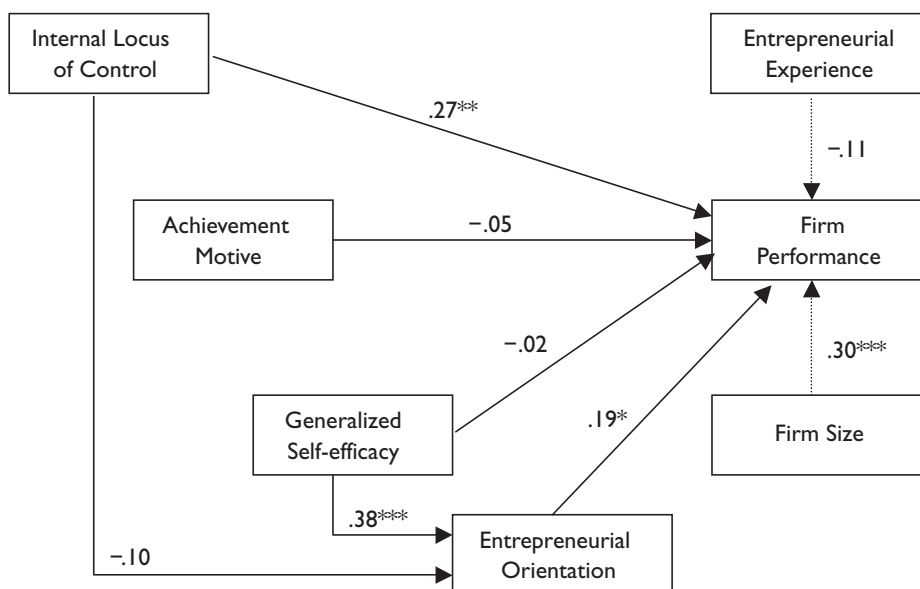


Figure 2. Standardized Path Estimates of the Hypothesized Model

Notes: To simplify the presentation, the correlations among the independent variables are not shown. The paths from the control variables are indicated by dotted arrows. * $p < .05$ (one-tailed), ** $p < .01$ (one-tailed), *** $p < .001$ (one-tailed).

Three of the six hypothesized paths were not significant. The Wald test also indicated that these paths should be dropped from the model.

Specifically, Hypothesis 1, which stated that achievement motive would be positively related to firm performance, was not supported. Hypothesis 2 stated that there would be a positive relationship between internal locus of control and firm performance. The path estimate between these two variables was significant and in the predicted direction ($b = .27, p < .05$), thus providing support for this hypothesis. Hypothesis 3, which predicted a direct positive relationship between generalized self-efficacy and firm performance, was also not supported.

Hypothesis 4, the mediation hypothesis, positively related internal locus of control to entrepreneurial orientation (4a), generalized self-efficacy to entrepreneurial orientation (4b), and entrepreneurial orientation to firm performance (4c). The path from internal locus of control to entrepreneurial orientation did not reach significance. The path from generalized self-efficacy to entrepreneurial orientation ($b = .38, p < .001$), along with the path from entrepreneurial orientation to firm performance ($b = .19, p < .05$, one-tailed), however, was significant. Thus, the results indicated support for Hypotheses 4b and 4c but failed to support Hypothesis 4a. That is, the hypothesis that entrepreneurial orientation would mediate the effects of entrepreneur traits on firm performance received only partial support. In sum, the overall pattern of results indicated that internal locus of control influenced firm performance directly, whereas generalized self-efficacy influenced firm performance through its effects on entrepreneurial orientation.

Discussion

Discussion of Findings

The study tested four hypotheses derived from a conceptual model of self-concept traits, entrepreneurial orientation, and firm performance. Contrary to expectations, self-attributed achievement motive was not significantly related to firm performance after other self-concept and external variables were taken into account. Perhaps, as McClelland et al. (1989) suggested, operant real-life outcomes (e.g. entrepreneurial success) are determined more by implicit motives, which require projective measures to assess, than by conscious motives as measured in this study.

As hypothesized and consistent with prior studies, internal locus of control and firm performance were significantly related; the higher an entrepreneur was on internal locus of control, the better the reported performance of the firm. The direct relationship between generalized self-efficacy and firm performance, however, did not reach significance. Perhaps, the effects of internal locus of control and generalized self-efficacy on firm performance are interactive and not additive (i.e. main effects) as assumed in this study. Or perhaps, in the case of entrepreneurs, only task-specific self-efficacy beliefs such as entrepreneurial self-efficacy – and not generalized ones – would have a direct effect on performance. Future studies are needed to address these issues.

There was only partial support for our mediation hypothesis because entrepreneurial orientation did not mediate the relationship between internal locus of

control and firm performance. It is not apparent why internal locus of control had no predictive effects on entrepreneurial orientation. It is possible that other intervening factors such as perceived control, job commitment, and job involvement may play a more important mediating role than entrepreneurial orientation in the case of internal locus of control.

We did, however, find generalized self-efficacy to have significant effects on firm performance through entrepreneurial orientation. Specifically, the greater the generalized self-efficacy of an entrepreneur, the greater the likelihood that the firm led by the entrepreneur would adopt an entrepreneurial orientation. This, in turn, resulted in higher reported firm performance. Theoretically, this finding implies that entrepreneurial orientation is a necessary mediator of the link between generalized self-efficacy and firm performance. That is, without a strong entrepreneurial orientation, generalized self-efficacy may have little or no effect on the performance of entrepreneur-led firms. Generalized self-efficacy is important only to the extent that it influences an entrepreneur to drive the firm to engage in innovative action, adopt a proactive stance, and take risks. Given that the relationship between generalized self-efficacy and firm performance is more complex than a simple direct one, it may be worthwhile for researchers to identify other potential mediators linking these two constructs and test more complex mediation models in the future.

To conclude, the findings from this study substantiate earlier findings regarding the effects of internal locus of control, generalized self-efficacy, and entrepreneurial orientation on the performance of entrepreneur-led firms. Self-concept traits matter both directly (in the case of internal locus of control) and indirectly through entrepreneurial orientation (in the case of generalized self-efficacy) in determining firm performance.

Managerial Implications

The ability to identify the individual characteristics that predispose a person to engage in entrepreneurial activities and succeed is of practical value everywhere, particularly in developing countries. Therefore, the main practical implication of our findings pertains to incorporating measures of self-concept traits, such as internal locus of control and generalized self-efficacy, in assessment and screening instruments for use by venture capitalists, bankers, public agencies, and other investors funding candidates for entrepreneurial projects. These investors need to identify entrepreneurs with the potential to create high-performing firms. On a national level, such firms help expand employment and contribute to the general prosperity of the economy. Therefore, in addition to other criteria used, investors may want to consider potential entrepreneurs who have high internal locus of control and generalized self-efficacy expectations. Before these traits can be used as a basis of selection, however, reliable and valid instruments for assessing these traits must be identified or developed. Otherwise, developmental efforts aimed at increasing the level of these two core traits among potential entrepreneurs might have to be considered instead.

Self-efficacy, for example, has been found to be malleable. It can be developed through self-assessment, self-persuasion, and self-regulation as well as the

cognitive processing of information from enactive (successful past performance), vicarious (modelling), social (verbal persuasion), and physiological (physiological responses such as jitters) sources (Bandura, 1986; Stajkovic and Sommer, 2000). As Gist and Mitchell (1992: 184) noted, self-efficacy is dynamic; it changes over time in response to new information and experience. A source of information and experience that has been shown to be effective in changing perceived self-efficacy is the information and experience one acquires through training (Saks, 1995). Indeed, past studies have found self-management training (e.g. Latham and Frayne, 1989), problem-solving training (e.g. Gist, 1989), military recruit training (e.g. Tannenbaum et al., 1991), and behavioural modelling workshops (e.g. Eden and Aviram, 1993) to increase self-efficacy. Efforts to provide potential entrepreneurs with appropriate training for enhancing self-efficacy might motivate them to take initiative in seeking out innovative business opportunities, accept risks and exploit such opportunities, and launch new ventures.

Finally, because the findings also showed entrepreneurial orientation to have positive effects on firm performance, ways to develop or motivate entrepreneurial orientation behaviours and promote the context that supports such behaviours need to be devised. Entrepreneurs are advised to create a work environment that is conducive for maintaining a continuous state of proactiveness, innovativeness, and risk taking. For example, entrepreneurs might consider putting in place formal structural and reward systems (e.g. establishing creativity training programmes, goal-setting programmes for new product development, financial incentive programmes for product line diversification, support systems for skunkworks, etc.) that encourage employees to adopt an entrepreneurial orientation stance. Only when employees are able and willing to take proactive action, be innovative, and assume risks will the firm achieve sustainable competitive advantage and superior performance.

Study Limitations and Suggestions for Future Research

The present study has a number of limitations that need to be addressed in future research. First, the sample size was not large enough to enable tests of both a measurement and a structural model; therefore, this study needs to be replicated with a larger sample of entrepreneurs. Second, our results may have been an artefact of the specific sample given that not all targeted entrepreneurs responded to our survey; therefore, the results need to be interpreted with this limitation in mind. Also, whether or not the results will generalize to other occupational groups or firms that are managed by professional managers remains to be answered. Therefore, it is worthwhile to investigate whether or not the observed relationships obtained in this study will replicate to other entrepreneurs, occupational groups, or firm settings. Third, the study was cross-sectional so causality could not be established from the data. Although the model offered here is plausible, other alternative models may operate (cf. Breckler, 1990). For example, although our theoretical model leads us to propose that self-efficacy precedes entrepreneurial actions and performance, performance may also influence self-efficacy beliefs. Longitudinal research in the future can help to establish the causal direction of the proposed relationships in our model. Fourth, it is

important to avoid relying solely on subjective, self-report measures that may give rise to response bias and common method variance problems. Therefore, the current cross-sectional analyses of self-report measures need to be extended to longitudinal analyses of objective indicators and to others' reports. Also, measures of financial performance may not be the only important indicators of firm performance (Lumpkin and Dess, 1996; Zahra, 1993). Therefore, researchers replicating this study may want to use alternative measures of performance including non-financial ones such as firm survival, innovation, reputation, and stakeholder satisfaction.

In this study, we examined only three dispositional traits. In the future, researchers may want to expand the traits examined (e.g. emotional intelligence) for a more complete understanding of the effects of dispositional variables. In addition, because this study investigated the role of only one mediating variable, future studies should explore other mediating mechanisms through which traits affect firm performance, such as networking behaviour. For example, entrepreneurs who feel efficacious about their ability to foster social networks are likely to make more attempts to develop and maintain relationships with others who have the potential to provide information, resources, and opportunities. Finally, future studies should also investigate the role of moderating variables (e.g. social capital) in the traits-entrepreneurial orientation-performance linkage. The contingency models of entrepreneurship found in the literature should be helpful in this regard (cf. Chrisman et al., 1998; Covin and Slevin, 1991; Lumpkin and Dess, 1996).

Despite its limitations, this study has contributed to the existing entrepreneurial literature in at least two respects. First, this study replicated and corroborated past research by showing that internal locus of control has positive effects on firm performance. Second, it expanded the traditional list of traits examined in dispositional research on entrepreneurship by including generalized self-efficacy and found this variable to have significant positive effects on firm performance through its positive effects on entrepreneurial orientation. As far as we know, this study is the first empirical attempt to examine the mediating role of entrepreneurial orientation for explaining the effects of self-concept traits on firm performance. By so doing, this study also achieved its objective of taking an expanded view of entrepreneurship by including in its analyses (1) individual-level, trait-based variables; (2) firm-level, behaviour-based variables; and (3) performance-based outcomes.

Acknowledgements

We gratefully acknowledge the helpful comments and useful suggestions for improving this article provided by two anonymous ISBJ referees during the review process. An earlier version of this article was presented at the British Academy of Management Annual Conference 2002 in London. This research was funded by Universiti Kebangsaan Malaysia (Grant # C/3/2000).

References

- Ahmed, S. U. (1985) 'n-Ach, Risk-taking Propensity, Locus of Control and Entrepreneurship', *Personality and Individual Differences* 6(6): 781–2.
- Bandura, A. (1977) *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1993) 'Perceived Self-efficacy in Cognitive Development and Functioning', *Educational Psychologist* 28(2): 117–48.
- Bandura, A. (1997) *Self-efficacy: The Exercise of Control*. New York: Freeman.
- Barling, J. and Beattie, R. (1983) 'Self-efficacy and Sales Performance', *Journal of Organizational Behavior Management* 5(1): 41–51.
- Baum, J. R. and Locke, E. A. (2004) 'The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth', *Journal of Applied Psychology* 89(4): 587–98.
- Baum, J. R., Locke, E. A. and Smith, K. J. (2001) 'A Multidimensional Model of Venture Growth', *Academy of Management Journal* 44(2): 292–303.
- Becherer, R. C. and Maurer, J. G. (1997) 'The Moderating Effect of Environmental Variables on the Entrepreneurial and Marketing Orientation of Entrepreneur-led Firms', *Entrepreneurship Theory and Practice* 22(1): 47–58.
- Becherer, R. C. and Maurer, J. G. (1999) 'The Proactive Personality Disposition and Entrepreneurial Behavior Among Small Company Presidents', *Journal of Small Business Management* 37(1): 28–36.
- Bentler, P. M. (1995) *EQS Structural Equations Program Manual*. Encino, CA: Multivariate Software.
- Boyd, N. G. and Vozikis, G. S. (1994) 'The Influence of Self-efficacy on the Development of Entrepreneurial Intentions and Actions', *Entrepreneurship Theory and Practice* 18(4): 63–77.
- Breckler, S. J. (1990) 'Applications of Covariance Structure Modeling in Psychology: Cause for Concern?', *Psychological Bulletin* 107(2): 260–73.
- Chandler, G. N. and Jansen, E. (1992) 'The Founder's Self-assessed Competence and Venture Performance', *Journal of Business Venturing* 7(3): 223–36.
- Chen, C. C., Greene, P. G. and Crick, A. (1998) 'Does Entrepreneurial Self-efficacy Distinguish Entrepreneurs and Managers?', *Journal of Business Venturing* 13(4): 295–316.
- Chrisman, J. J., Bauerschmidt, A. and Hofer, C. W. (1998) 'The Determinants of New Venture Performance: An Extended Model', *Entrepreneurship Theory and Practice* 23(1): 5–29.
- Covin, J. G. and Slevin, D. P. (1989) 'Strategic Management of Small Firms in Hostile and Benign Environments', *Strategic Management Journal* 10(1): 75–87.
- Covin, J. G. and Slevin, D. P. (1991) 'A Conceptual Model of Entrepreneurship as Firm Behavior', *Entrepreneurship Theory and Practice* 16(1): 7–25.
- Cromie, S. (2000) 'Assessing Entrepreneurial Inclinations: Some Approaches and Empirical Evidence', *European Journal of Work and Organizational Psychology* 9(1): 7–30.
- Davis-Blake, A. and Pfeffer, J. (1989) 'Just a Mirage: The Search for Dispositional Effects in Organizational Research', *Academy of Management Review* 14(3): 385–400.
- Dess, G. G. and Robinson, R. B., Jr (1984) 'Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately-held Firm and Conglomerate Business Unit', *Strategic Management Journal* 5(3): 265–73.
- Eden, D. and Aviram, A. (1993) 'Self-efficacy Training to Speed Reemployment: Helping People to Help Themselves', *Journal of Applied Psychology* 78(3): 352–60.

- Findley, M. J. and Cooper, H. M. (1983) 'Locus of Control and Academic Achievement: A Literature Review', *Journal of Personality and Social Psychology* 44(2): 419–27.
- Frese, M., Brantjes, A. and Hoorn, R. (2002) 'Psychological Success Factors of Small Scale Businesses in Namibia: The Roles of Strategy Process, Entrepreneurial Orientation and the Environment', *Journal of Developmental Entrepreneurship* 7(3): 259–82.
- Furnham, A. and Steele, H. (1993) 'Measuring Locus of Control: A Critique of General, Children's, Health- and Work-related Locus of Control Questionnaires', *British Journal of Psychology* 84(4): 443–79.
- Gist, M. E. (1989) 'The Influence of Training Method on Self-efficacy and Idea Generation Among Managers', *Personnel Psychology* 42(4): 787–805.
- Gist, M. E. and Mitchell, T. R. (1992) 'Self-efficacy: A Theoretical Analysis of its Determinants and Malleability', *Academy of Management Review* 17(2): 183–211.
- Gist, M. E., Schwoerer, C. and Rosen, B. (1989) 'Effects of Alternative Training Methods on Self-efficacy and Performance in Computer Software Training', *Journal of Applied Psychology* 74(6): 884–91.
- Gist, M. E., Stevens, C. K. and Bavetta, A. G. (1991) 'Effects of Self-efficacy and Post-training Intervention on the Acquisition and Maintenance of Complex Interpersonal Skills', *Personnel Psychology* 44(4): 837–57.
- Hirrich, R. D. (1990) 'Entrepreneurship/Intrapreneurship', *American Psychologist* 45(2): 209–22.
- Hodgkinson, G. P. (1992) 'Research Notes and Communications Development and Validation of the Strategic Locus of Control Scale', *Strategic Management Journal* 13(4): 311–17.
- House, R. J., Shane, S. A. and Herold, D. M. (1996) 'Rumors of the Death of Dispositional Research are Vastly Exaggerated', *Academy of Management Review* 21(1): 203–24.
- Hult, G. T. M., Hurley, R. F. and Knight, G. A. (2004) 'Innovativeness: Its Antecedents and Impact on Business Performance', *Industrial Marketing Management* 33(5): 429–38.
- Johnson, B. R. (1990) 'Toward a Multidimensional Model of Entrepreneurship: The Case of Achievement Motivation and the Entrepreneur', *Entrepreneurship Theory and Practice* 14(3): 39–54.
- Judge, T. A. and Bono, J. E. (2001) 'Relationship of Core Self-evaluations Traits – Self-esteem, Generalized Self-efficacy, Locus of Control, and Emotional Stability – with Job Satisfaction and Job Performance: A Meta-Analysis', *Journal of Applied Psychology* 86(1): 80–92.
- Judge, T. A., Thoresen, C. J., Pucik, V. and Welbourne, T. M. (1999) 'Managerial Coping with Organizational Change: A Dispositional Perspective', *Journal of Applied Psychology* 84(1): 107–22.
- Kernan, M. C. and Hanges, P. J. (2002) 'Survivor Reactions to Reorganization: Antecedents and Consequences of Procedural, Interpersonal, and Informational Justice', *Journal of Applied Psychology* 87(5): 916–28.
- Kirkpatrick, S. A. and Locke, E. A. (1991) 'Leadership: Do Traits Matter?', *Academy of Management Executive* 5(2): 48–60.
- Lafuente, A. and Salas, V. (1989) 'Types of Entrepreneurs and Firms: The Case of New Spanish Firms', *Strategic Management Journal* 10(1): 17–30.
- Latham, G. P. and Frayne, C. A. (1989) 'Self-management Training for Increasing Job Attendance: A Follow-Up and a Replication', *Journal of Applied Psychology* 74(3): 411–16.
- Lee, C., Lee, K. and Pennings, J. M. (2001) 'Internal Capabilities, External Networks, and Performance: A Study on Technology-based Ventures', *Strategic Management Journal* 22(6–7): 615–40.

- Lee, D. Y. and Tsang, E. W. K. (2001) 'The Effects of Entrepreneurial Personality, Background, and Network Activities on Venture Growth', *Journal of Management Studies* 38(4): 583–602.
- Lennings, C. J. (1994) 'An Evaluation of a Generalized Self-efficacy Scale', *Personality and Individual Differences* 16(5): 745–50.
- Locke, E. A., Frederick, E., Lee, C. and Bobko, P. (1984) 'Effect of Self-efficacy, Goals, and Task Strategies on Task Performance', *Journal of Applied Psychology* 69(2): 241–51.
- Locke, E. A. and Latham, G. P. (1990) *A Theory of Goal Setting & Task Performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Lumpkin, G. T. and Dess, G. G. (1996) 'Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance', *Academy of Management Review* 21(1): 135–72.
- Lyles, M. A. and Salk, J. E. (1996) 'Knowledge Acquisition from Foreign Parents in International Joint Ventures: An Empirical Examination in the Hungarian Context', *Journal of International Business Studies* 27(5): 877–903.
- McClelland, D. C. (1961) *The Achieving Society*. New York: Van Nostrand.
- McClelland, D. C. (1965) 'N Achievement and Entrepreneurship: A Longitudinal Study', *Journal of Personality and Social Psychology* 1(4): 389–92.
- McClelland, D. C., Koestner, R. and Weinberger, J. (1989) 'How Do Self-Attributed and Implicit Motives Differ?', *Psychological Review* 96(4): 690–702.
- Markman, G. D. and Baron, R. A. (2003) 'Person-entrepreneurship Fit: Why Some People are More Successful as Entrepreneurs Than Others', *Human Resource Management Review* 13(2): 281–301.
- Miller, D. and Friesen, P. H. (1982) 'Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum', *Strategic Management Journal* 3(1): 1–25.
- 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* 74(4): 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* 79(4): 627–30.
- Naffziger, D. W., Hornsby, J. S. and Kuratko, D. F. (1994) 'A Proposed Research Model of Entrepreneurial Motivation', *Entrepreneurship Theory and Practice* 18(3): 29–42.
- Naman, J. L. and Slevin, D. P. (1993) 'Entrepreneurship and the Concept of Fit: A Model and Empirical Tests', *Strategic Management Journal* 14(2): 137–53.
- Parker, L. E. (1993) 'When to Fix It and When to Leave: Relationships among Perceived Control, Self-efficacy, Dissent, and Exit', *Journal of Applied Psychology* 78(6): 949–59.
- Rotter, J. B. (1966) 'Generalized Expectancies for Internal versus External Control of Reinforcement', *Psychological Monographs: General and Applied* 80(1): 1–28.
- Saks, A. M. (1995) 'Longitudinal Field Investigation of the Moderating and Mediating Effects of Self-Efficacy on the Relationship between Training and Newcomer Adjustment', *Journal of Applied Psychology* 80(2): 211–25.
- Schaubrouek, J. and Merritt, D. E. (1997) 'Divergent Effects of Job Control on Coping with Work Stressors: The Key Role of Self-efficacy', *Academy of Management Journal* 40(3): 738–54.
- Schiller, B. R. and Crewson, P. E. (1997) 'Entrepreneurial Origins: A Longitudinal Inquiry', *Economic Inquiry* 35(3): 523–31.
- Shane, S., Locke, E. A. and Collins, C. J. (2003) 'Entrepreneurial Motivation', *Human Resource Management Review* 13(2): 257–79.
- Shane, S. and Venkataraman, S. (2000) 'The Promise of Entrepreneurship as a Field of Research', *Academy of Management Review* 25(1): 217–26.

- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B. and Rogers, R. W. (1982) 'The Self-efficacy Scale: Construction and Validation', *Psychological Reports* 51(2): 663–71.
- Silver, W. S., Mitchell, T. R. and Gist, M. E. (1995) 'Responses to Successful and Unsuccessful Performance: The Moderating Effect of Self-efficacy on the Relationship between Performance and Attributions', *Organizational Behavior and Human Decision Processes* 62(3): 286–99.
- Singh, S. (1978) 'Achievement Motivation and Entrepreneurial Success: A Follow-up Study', *Journal of Research in Personality* 12(4): 500–3.
- Smart, D. T. and Conant, J. S. (1994) 'Entrepreneurial Orientation, Distinctive Marketing Competencies and Organizational Performance', *Journal of Applied Business Research* 10(3): 28–38.
- Spangler, W. D. (1992) 'Validity of Questionnaire and TAT Measures of Need for Achievement: Two Meta-Analyses', *Psychological Bulletin* 112(1): 140–54.
- Spector, P. E. (1982) 'Behavior in Organizations as a Function of Employee's Locus of Control', *Psychological Bulletin* 91(3): 482–97.
- Stajkovic, A. D. and Sommer, S. M. (2000) 'Self-efficacy and Causal Attributions: Direct and Reciprocal Links', *Journal of Applied Social Psychology* 30(4): 707–37.
- Swierczek, F. W. and Thai, T. H. (2003) 'Motivation, Entrepreneurship and the Performance of SMEs in Vietnam', *Journal of Enterprising Culture* 11(1): 47–68.
- Tabachnick, B. G. and Fidell, L. S. (1989) *Using Multivariate Analysis*, 2nd edn. New York: HarperCollins.
- Tannenbaum, S. I., Mathieu, J. E., Salas, E. and Cannon-Bowers, J. A. (1991) 'Meeting Trainees' Expectations: The Influence of Training Fulfillment on the Development of Commitment, Self-efficacy, and Motivation', *Journal of Applied Psychology* 76(6): 759–69.
- Thomas, A. S. and Mueller, S. L. (2000) 'A Case for Comparative Entrepreneurship: Assessing the Relevance of Culture', *Journal of International Business Studies* 31(2): 287–301.
- Tsai, W. and Ghoshal, S. (1998) 'Social Capital and Value Creation: The Role of Intrafirm Networks', *Academy of Management Journal* 41(4): 464–76.
- Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W. and West, M. (2004) 'On the Validity of Subjective Measures of Company Performance', *Personnel Psychology* 57(1): 95–118.
- Wiklund, J. (1999) 'The Sustainability of the Entrepreneurial Orientation-Performance Relationship', *Entrepreneurship Theory and Practice* 24(1): 37–48.
- Wiklund, J. and Shepherd, D. (2005) 'Entrepreneurial Orientation and Small Business Performance: A Configurational Approach', *Journal of Business Venturing* 20(1): 71–91.
- Wood, R. E. and Bandura, A. (1989) 'Impact of Conceptions of Ability on Self-regulatory Mechanisms and Complex Decision Making', *Journal of Personality and Social Psychology* 56(3): 407–15.
- Yasin, M. (1996) 'Entrepreneurial Effectiveness and Achievement in Arab Culture: New Evidence to Rekindle Interest in an Old Predictor', *Journal of Business Research* 35(1): 69–77.
- Yusuf, A. (2002) 'Environmental Uncertainty, the Entrepreneurial Orientation of Business Ventures and Performance', *International Journal of Commerce & Management* 12(3–4): 83–103.
- Zahra, S. A. (1993) 'A Conceptual Model of Entrepreneurship as Firm Behavior: A Critique and Extension', *Entrepreneurship Theory and Practice* 17(4): 5–21.

International Small Business Journal 24(1)

JUNE M. L. POON, PhD, is an associate professor of management at the Faculty of Economics and Business at Universiti Kebangsaan Malaysia. She received her MBA from the University of Southern California and her PhD in human resource management from the University of Maryland at College Park. Her current research interests include job attitudes and motivation, organizational politics, interpersonal trust, and training transfer. Please address correspondence to: Faculty of Economics and Business, Universiti Kebangsaan Malaysia, 43600 Bangi, Malaysia. [email: jpoon@pkrisc.cc.ukm.my]

RAJA AZIMAH AINUDDIN, PhD, is an associate professor of management at the Faculty of Economics and Business at Universiti Kebangsaan Malaysia. She received her MBA from the University of Rhode Island and her PhD from the University of Western Ontario. Her research interest is in the area of strategic management and international business. Please address correspondence to: Faculty of Economics and Business, Universiti Kebangsaan Malaysia, 43600 Bangi, Malaysia. [email: r_azimah@pkrisc.cc.ukm.my]

SA'ODAH HAJI JUNIT, MBA, is an administrative officer at the Economic Analysis and International Division of the Ministry of Finance, Malaysia. She received her MBA from Universiti Kebangsaan Malaysia. Please address correspondence to: Ministry of Finance, Malaysia, Economic Analysis and International Division, Kompleks Kementerian Kewangan, 62592 Putrajaya, Malaysia. [email: saodah@treasury.gov.my]

Les conséquences des traits de l'autovalorisation et de l'orientation entrepreneuriale sur la performance de l'entreprise

June M. L. Poon, Raja Azimah Ainuddin

Université de Kebangsaan Malaisie

Sa'odah Haji Junit

Ministre des Finances, Malaisie

Cette étude – qui examine les rapports existant entre trois traits d'autovalorisation, l'orientation entrepreneuriale et la performance de l'entreprise en s'appuyant sur les informations provenant d'un sondage réalisé auprès de 96 entreprises – fait appel à l'analyse causale pour vérifier les effets directs et indirects que peuvent avoir les variables des traits sur les mesures perceptuelles de la performance de l'entreprise. L'orientation entrepreneuriale – définie par une structure opérationnelle pour refléter les dimensions de la créativité, de la proactivité et de la tendance à prendre des risques – a servi de variable médiatrice pour expliquer les rapports existant entre les traits d'autovalorisation et la performance de l'entreprise. Les résultats obtenus ont indiqué que le lieu interne de contrôle était définitivement lié à la performance de l'entreprise, et que l'orientation entrepreneuriale n'avait en fait joué aucun rôle médiateur en ce qui concerne lesdits rapports. En revanche, même si l'auto-efficacité généralisée n'a pas eu d'effet direct sur la performance de l'entreprise, elle l'a toutefois influencée en raison de son impact sur l'orientation entrepreneuriale. L'article se termine en expliquant que le mobile de réussite auto-attribuable n'a pas grand-chose à voir avec l'orientation entrepreneuriale ou la performance de l'entreprise. Sont également énoncées les implications des constats et des suggestions aux fins d'éventuelles études ultérieures.

Mots clés: mobile de réussite; orientation entrepreneuriale; performance de l'entreprise; auto-efficacité généralisée; lieu de contrôle; traits d'autovalorisation

Los efectos de las características de autovaloración y la orientación empresarial en la actuación de la firma

June M. L. Poon, Raja Azimah Ainuddin

Universidad de Kebangsaan Malaysia

Sa'odah Haji Junit

Ministerio de Hacienda, Malaysia

Este estudio examina las relaciones entre tres características de autovaloración, la orientación empresarial y la actuación de la firma empleando los datos obtenidos de una encuesta de 96 empresarios. Se empleó el análisis de trayectoria para comprobar los efectos directos e indirectos de las características variables en las medidas de percepción de la actuación de la firma. La orientación empresarial, definida por una estructura operativa para reflejar las dimensiones de la capacidad innovadora, actuación dinámica y propensión a tomar riesgos, se empleó como la variable mediadora para explicar las relaciones entre las características de autovaloración y la actuación de la firma. Los resultados indican que el lugar interno de control está relacionado categóricamente con la actuación de la firma, y que la orientación empresarial no actúa de mediadora en dichas relaciones. Por contraste, la autoeficacia generalizada ejerce una influencia positiva sobre la actuación de la firma por medio de su efecto en la orientación empresarial. Por último, el motivo de logro autoincentivado no tiene una relación significativa con la orientación

empresarial ni con la actuación de la firma. Se exponen las inferencias de las conclusiones y sugerencias para la investigación futura.

Palabras clave: motivo de logro; orientación empresarial; actuación de la firma; autoeficacia generalizada; lugar de control; características de autovaloración

Die Auswirkungen von Selbstkonzepteigenschaften und unternehmerischer Orientierung auf die Unternehmensleistung

June M. L. Poon, Raja Azimah Ainuddin
Universität von Kebangsaan, Malaysia

Sa'odah Haji Junit
Finanzministerium, Malaysia

Diese Studie untersuchte die Beziehungen zwischen drei Selbstkonzepteigenschaften, unternehmerischer Orientierung und der Unternehmensleistung anhand von Umfragedaten von 96 Unternehmern. Wir nutzten die Pfadanalyse, um direkte und indirekte Auswirkungen der Eigenschaftsvariablen auf die Wahrnehmungsmaßstäbe der Unternehmensleistung zu prüfen. Unternehmerische Orientierung – operationalisiert, um die Ausmaße von Innovationsfähigkeit, proaktivem Verhalten und Risikofreudigkeit darzustellen – wurde als Mittel zur Erläuterung des Verhältnisses zwischen Selbstkonzepteigenschaften und Unternehmensleistung eingesetzt. Die Ergebnisse zeigten, dass der interne Steuerungsschwerpunkt eine positive Beziehung zur Unternehmensleistung hatte und dass unternehmerische Orientierung keine vermittelnde Rolle in dieser Beziehung spielt. Im Gegensatz dazu hatte eine verallgemeinerte Eigenwirksamkeit keine direkten Auswirkungen auf die Unternehmensleistung. Sie hatte jedoch durch ihre Auswirkungen auf die unternehmerische Orientierung einen positiven Einfluss auf die Unternehmensleistung. Zuletzt ließ sich zwischen dem sich selbst zugeschriebenen Leistungsmotiv und der unternehmerischen Orientierung bzw. der Unternehmensleistung keine wesentliche Beziehung feststellen. Es werden die Implikationen der Ergebnisse und Vorschläge für zukünftige Forschungsarbeiten besprochen.

Schlagwörter: Leistungsmotiv; unternehmerische Orientierung; Unternehmensleistung; generelle Eigenwirksamkeit; Steuerungsschwerpunkt; Selbstkonzepteigenschaften