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**AN EMPIRICAL MODEL OF SMALL BUSINESS
SUCCESS**

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Abstract

This study examines the extent to which locus of control, decision-making style, and small business strategy predict small business success. Self-administered questionnaires were distributed to 578 small business owners in Victoria, Australia. The data were examined using structural equation modelling techniques (LISREL 7.20). The results suggest that to achieve business success beyond survival requires entrepreneurs to develop specific strategies to enhance business growth. Implications for entrepreneurial performance and further research are discussed.

AN EMPIRICAL MODEL OF SMALL BUSINESS SUCCESS

BACKGROUND

The entrepreneurial sector plays a vital role in the design of strategies for economic recovery and growth in many nations. According to Hornaday (1992:12) "... the desperate desire for economic growth among developing countries has placed the spotlight squarely on entrepreneurship as a major factor in the success of capitalist economies." Further, it is well recognized that small business development provides one of the few opportunities for employment growth to counter high rates of unemployment (Lumpkin and Ireland, 1988). In Australia, economic dependence on small business has increased in recent years as a result of retrenchments in the public sector and by large organizations (Kotey and Meredith, 1997). However, growth in the number of new businesses will not alter significantly the employment rates, particularly when the failure rate for new enterprises is considered to be as high as 60 per cent in the first three years of operation (Williams, 1987, cited in Reynolds, Savage, and Williams, 1989:23). Therefore, a major hope for employment growth is that successful small businesses will expand and generate extra jobs.

Extensive research has been conducted to delineate the characteristics, behaviors, and managerial skills which may identify potentially successful small businesses. Studies of entrepreneurial personality characteristics have not yielded a clear picture (Boshoff, Bennett, and Owusu, 1992). In addition, personality traits are not reliable predictors of future behavior (Gartner, 1989). Thus, attempts to develop a personality profile of a typical entrepreneur have been largely unsuccessful (Low and MacMillan, 1988).

Research has attempted to identify key success factors that enhance the chances of survival in business (Huck and McEwen, 1991; Vesper, 1990). Some of the conditions that affect business success include level of education, previous work experience, availability of venture capital, the economic environment, role models, and access to support services (Birley, 1989a). Entrepreneurial competencies identified for success include management, planning, and budgeting skills (Huck and McEwen, 1991). However, previous studies have not examined the combination of perceptual factors which may explain how some entrepreneurs utilize resources to build successful businesses.

Locus of Control

Locus of control (Rotter, 1966) is a perceptual variable which holds promise in predicting small business success (Brockhaus, 1986a; Gilad, 1982; Nwachukwu, 1995). Kuypers (1971) claimed that those who experience an internal locus of control believe that they can affect the outcomes of events in their lives and score higher on measures of coping. Phares (1976) noted that in contrast to externals, internals exert greater efforts to control their environment, exhibit better learning, and make better use of information in complex decision-making situations. A more recent study by Howell and Avolio (1993) of 78 managers in a large Canadian financial institution found that internal locus of control significantly and positively predicted business-unit performance. The current study examined this trend in the context of small business performance (success).

Decision-Making Style

Several researchers have examined the decision-making characteristics of managers in large organizations (Buttner and Gyskiewicz, 1993; Mosley, O'Brien, and Pietri, 1991). However, the use of various business and economic principles that assist in explaining corporate manoeuvres may be of little assistance in understanding the successes and failures of small business. Although the importance of decision-making in emerging ventures has been recognized (Hambrick and Crozier, 1985; Mosley, O'Brien, and Pietri, 1991), little attention has been paid to styles of decision-making and their relationships to success in small business. The current study attempts to redress this deficiency through the development of a new instrument to measure small business decision-making style, namely The Entrepreneurial Decision-Making Style Inventory.

Small Business Strategy

Small business strategy has been defined as the “methods, practices, and decision-making styles managers use to act entrepreneurially” (Lumpkin and Dess, 1996:136). Research in business has acknowledged the critical role of strategy for organizational survival and success. Canon (cited in Higgins and Vincze, 1989:2), in discussing organizational strategy, stated that “of all the contrasts between the successful and unsuccessful business, or between the leader and follower, the single most important differentiating factor is strategy.” Many researchers have investigated organizational business strategy (e.g., Miles and Snow, 1978; Porter, 1985; Shirley, 1989). In contrast, information concerning small business strategy is limited (Olson and Bokor, 1995). The current study addresses this deficiency and examines the impact of small business strategy on business success. A new instrument, namely The Small Business Strategy Typology, designed specifically to measure small business strategy was developed during the study.

Conceptual Framework

The current study conceptualized the entrepreneur as the initiator of a new, small business in Australia (with fewer than 100 employees), who was responsible primarily for making critical decisions, selecting strategies, and determining the objectives of the business. The resulting business performance was evaluated according to three measures: business status (survival), employment of others, and net profit. Figure 1 provides a conceptual model for the study and illustrates the linkages among the research variables. (See Figure 1 at the end of the paper).

METHOD

Data Collection

A self-administered questionnaire was distributed to 578 New Enterprise Incentive Scheme (NEIS) graduates who had completed business training and established businesses before 1994 in metropolitan or rural Victoria, Australia. A total of 255 useable responses were received (45 per cent response rate).

Measures

Several instruments were used in the study to examine perceptual variables. Locus of control was measured using 13 items from the Rotter (1966) Internal-External Locus of Control Scale (a shortened version). The scale consisted of two sub-scales, namely *Internal* locus of control, the belief that rewards come from one's own behavior, and *External* locus of control, the belief that rewards come from external sources (Rotter, 1971). The Cronbach alpha reliability coefficient for *Internal* locus of control was .76, and for *External* locus of control, .72.

A new instrument, The Entrepreneurial Decision-Making Style Inventory was developed in the current study to examine the habitual patterns individuals use in decision-making. Respondents rated how frequently they used the decision-making style described in each item using a five-point Likert scale where 0=*never* and 4=*most of the time*. The inventory consisted of three sub-scales: *Convergent* decision-making style which focuses on practical results, *Divergent* decision-making style which approaches problems from a new angle, and *Inventive* decision-making style which involves the generation of new ideas. The Cronbach alpha reliability coefficient for *Convergent* decision-making style was .64, for *Divergent* decision-making style, .70, and for *Inventive* decision-making style, .68.

A new instrument, The Small Business Strategy Typology was developed in the current study and consisted of two sub-scales: *Proactive* small business strategy which is forward-looking and where individuals take the initiative, and *Reactive* small business strategy which is cautious and where individuals takes a “wait-and-see” approach. Respondents rated how frequently they used the business strategies described on a five-point Likert scale where 0=*never* and 4=*most of the time*. The Cronbach alpha reliability coefficient for *Proactive* small business strategy was .75, and for *Reactive* small business strategy, .65. The Cronbach alpha coefficients for the instruments exceeded the Cronbach alpha of .63 for a new instrument developed

by Niehoff, Enz, and Grover (1990:343) who stated that the result was "reasonable, considering the newness of the scale."

To measure small business success, data concerning business status (whether the business continued to operate, had been sold, or had ceased trading), number of employees (part-time/full-time), and income (net profit) were gathered.

Analysis of Data

Exploratory statistical techniques were used to investigate the relationships between and among variables, and included correlation analysis, cross-tabulation analysis, *t*-tests, analysis of variance, exploratory factor analysis, and multiple regression. Confirmatory factor analysis and structural equation modelling were used to examine complex interrelationships among variables using the generally weighted least squares method of LISREL (7.20). A non-recursive model was used in the structural equation measurement model which treated all variables as endogenous. In other words, all variables could be predicted by one or more other variable. Details of the exploratory and confirmatory factor analyses which led to the development of the two new instruments have been omitted in this paper. Instead, the paper focuses on the structural equation measurement model.

RESULTS AND DISCUSSION

Nature of the Sample

The majority of respondents (80 per cent) had businesses that continued to operate at least a year after completing the NEIS course. Only 14 per cent of respondents had ceased trading (the criterion for business failure in the current study). Around one-third of respondents (36 per cent) employed others. Almost half the respondents (49 per cent) stated that the net business profit (excluding other sources of income) for the previous financial year was less than \$10,000. A further 25 per cent claimed that their net profit was between \$10,000 and \$19,999 and only 19 per cent had net profits in excess of \$20,000. However, the results need to be considered with caution as net profit has been shown to be an unreliable indicator of business success (Gome, 1994).

Based on a review of the literature, it was envisaged that selected background variables would be included in the model. However, the sample size ($N=211$), restricted the total number of variables that could be utilized in the structural equation model and therefore background variables were omitted. However, delineating personal and professional demographic characteristics for respondents in the current study provided evidence that the sample represented the general population of new business founders in Australia.

The Exploratory Model of Small Business Success

Figure 2 presents the structural equation model for small business success. The current study used a range of measures to determine the degree to which the measurement model predicted the observed covariance matrix. The measurement model produced a chi-square of 21.72, $df=29$, $p=.831$, with a Goodness-of-Fit Index of .985 (Adjusted Goodness-of-Fit: .971), and a Root Mean Square Residual of .029. The significance level of greater than .1 or .2 confirms non-significance (Fornell, 1983) and indicates that the actual and predicted input matrices are not statistically different. The Goodness-of-Fit for the measurement model was greater than the threshold for acceptance of .90 (Hair, Anderson, Tatham, and Black, 1992), and the Root Mean Square Residual was less than .05, the critical value suggested by Sörbom and Jöreskog (1982). Thus, a range of measures indicated that overall, the measurement model had an acceptable level of fit to the data. (See Figure 2 at the end of the paper).

Figure 2 illustrates the direct and indirect effects for the structural equation model. A number of significant direct relationships was evident between sub-scales of the same constructs. *External* locus of control had a negative direct effect on *Internal* locus of control (-.301). In other words, the higher the score for *External* locus of control, the lower the score for *Internal* locus of control. Thus, where respondents attributed

control to outside forces, it diminished their belief in having control over their own affairs. Similarly, *Convergent* decision-making style had a negative direct effect on *Inventive* decision-making style (-.366). In other words, high scores for *Convergent* decision-making style reduced the score on *Inventive* decision-making style. In contrast, *Divergent* decision-making style had a positive direct effect on *Inventive* decision-making style (.672). Also, *Reactive* strategy had a positive direct effect on *Proactive* strategy (.499).

All the hypothesized paths as suggested by theory in the structural equation model were statistically significant. The significant positive and negative direct and indirect effects for variables in the structural equation model were examined. The findings suggested that *External* locus of control and *Convergent* decision-making style were the only variables examined which impacted negatively on other variables. *External* locus of control, *Inventive* decision-making style, *Reactive*, and *Proactive* strategy had direct effects on measures of business success.

Locus of Control and Business Success

The structural equation model indicated that *External* locus of control had a significant, negative, direct impact on survival (-.174). In other words, respondents with high scores for *External* locus of control would have reduced chances of survival in business. Although there were no direct effects evident between *Internal* locus of control and any of the measures of business success, *Internal* locus of control had a positive, indirect effect on survival, employment growth, and subsequently income through *Divergent*, *Inventive* decision-making style, and *Proactive* strategy.

Decision-Making Style and Business Success

The structural equation model indicated that *Inventive* decision-making style had a significant, positive, direct effect on small business survival (.254). The results are consistent with earlier quantitative analysis in the current study which indicated that respondents who had survived in business used *Inventive* decision-making style more frequently than respondents who were no longer in business ($t=2.82$ ($n=239$), $p<.001$). Further, the early results suggested that respondents employing others used *Divergent* and *Inventive* decision-making styles more frequently than respondents who did not employ others. For *Divergent* decision-making style the mean difference was -.23 ($t=2.74$ ($n=249$), $p<.001$), and for *Inventive* decision-making style the mean difference was -.33 ($t=3.93$ ($n=249$), $P<.001$). The structural equation model clarified further the relationships among variables. *Divergent* decision-making style had a significant, positive, direct effect on *Inventive* decision-making style (.672) which had a significant positive, indirect effect on employment growth through *Proactive* strategy. The results confirmed previous research which demonstrated that entrepreneurial cognitive processes (including decision-making) affect goals to create innovation, to provide employment, and sales growth (Bagby, Palich, and Stetz, 1996). Thus, the model suggests that *Inventive* decision making style may indirectly improve chances of business success in the form of employment growth by having a direct positive effect on *Proactive* strategy.

Business Strategy and Business Success

The structural equation model indicated that *Proactive* strategy had a significant positive direct effect on employment (.241). This relationship was consistent with the results from previous studies which suggested that there was a significant positive relationship between strategies equivalent to *Proactive* strategies in the current study and business growth (Baum, 1995; Merz, Weber, and Laetz, 1994). Also, *Reactive* strategy had a small but significant positive, direct effect on employment growth (.030). In other words, the model suggested that for small businesses to develop to the point of employing others, *Reactive* strategies as well as *Proactive* strategies may be necessary. These results contradicted previous research which suggested that conservative or focused business strategies (similar to *Reactive* strategies) have a negative impact on business success (Kotey and Meredith, 1997; West 1992). However the results are consistent with recent research which has suggested that businesses using a combination of strategies outperformed businesses which adopted a single strategy (Carter, Williams, and Reynolds, 1997).

The current study used a non-recursive model where all variables could be predicted by one or more other constructs (Diamantopoulos, 1994) to investigate the relationships among variables. This method elucidated the unexpected impact of survival on strategy. The model indicated that survival had a significant, negative direct effect (-270) on *Proactive* strategy. This relationship is consistent with previous research which has demonstrated that personal goals of the founder affect the business goals and the subsequent selection of strategies (Bhide, 1996; Birley, 1989b). For example, where lifestyle goals are set that do not include expansion of the business, the personal goal becomes one of survival. Thus, deliberately curtailing the growth of a business could account for the significant, negative direct effect of survival on *Proactive* strategy in the current measurement model. The results suggest that business owners who want to restrict the growth of businesses would be unlikely to select expansionary (*Proactive*) strategies. In contrast, *Proactive* strategies may be viewed as deliberate choices to pursue new venture growth.

Relationships among Success Measures

The measurement model indicated that survival had a significant, positive, direct effect on employment (.287), and employment had a significant positive, direct effect on income (.434). The model suggested that in order to generate additional income, employment of others was a necessary pre-condition. Therefore, employment generation would appear to precede income growth.

CONCLUSION

This study examined the relationships among locus of control, decision-making style, small business strategy, and business success as measured by survival, employment growth, and income. Previous research has examined the relationship between each variable and business success separately without examining the combination of variables. Thus, the structural equation model provided a comprehensive means for examining the integration of perceptual variables that impact on small business success.

Nwachukwu (1995) suggested that locus of control could hold promise for distinguishing successful from unsuccessful entrepreneurs. However, the results from the current study demonstrated that only *External* locus of control had a direct (negative) impact on business success (survival). The measurement model indicated that the effects of *Internal* locus of control are transmitted through decision-making style and business strategy to business success.

The results elucidate theory which suggests that the reasoning process of entrepreneurs is a potentially powerful area of influence on new venture success (Pate, Driver, Gatewood, Goodman and Coombs, 1990). Decision-making style appeared to play a pivotal role in the model. *Inventive* decision-making style had a direct impact on *Proactive* strategy and business survival. In addition, *Inventive* decision-making style had an effect on employment through *Proactive* strategy. Overall the results suggest that *Inventive* decision-making style may differentiate between growth (in terms of employment) and non-growth businesses.

The results of the current study supported the premise that the strategic approach of a new venture has a crucial impact on its performance (Carter, Williams, and Reynolds, 1997). However, the study highlighted the importance of using a combination of strategies for small business growth. *Reactive* strategy had a significant, direct effect on employment which suggested that for small businesses to develop to the point of employing others, *Reactive* strategies as well as *Proactive* strategies should be considered. The model indicated that *Proactive* strategy predicted employment of others. Thus, the frequency of use of *Proactive* strategy may differentiate between growth (in terms of employment) and non-growth businesses. Overall, the results suggest that to achieve business success beyond survival requires entrepreneurs to develop specific strategies to enhance success. Further research is required to identify the specific strategies that enhance business growth.

The current study demonstrated by the use of a non-recursive model that success (survival) has a direct effect on business strategy which appears to be related to the goals of the business owner. Further research is required to investigate the impact of various forms of business success on strategy and decision-making.

In conclusion, the study provides a foundation for the development of an inventory to be used to select potential entrepreneurs. Such an instrument should allow government funding of small business development programs to be better targeted, by selecting and supporting entrepreneurs who are likely to develop growth businesses which in turn will provide employment opportunities. Such an inventory could assist prospective entrepreneurs to assess more accurately the probabilities of success. Finally, the study highlighted the need to conduct further research into the interactive nature of variables which sustain the entrepreneurial process.

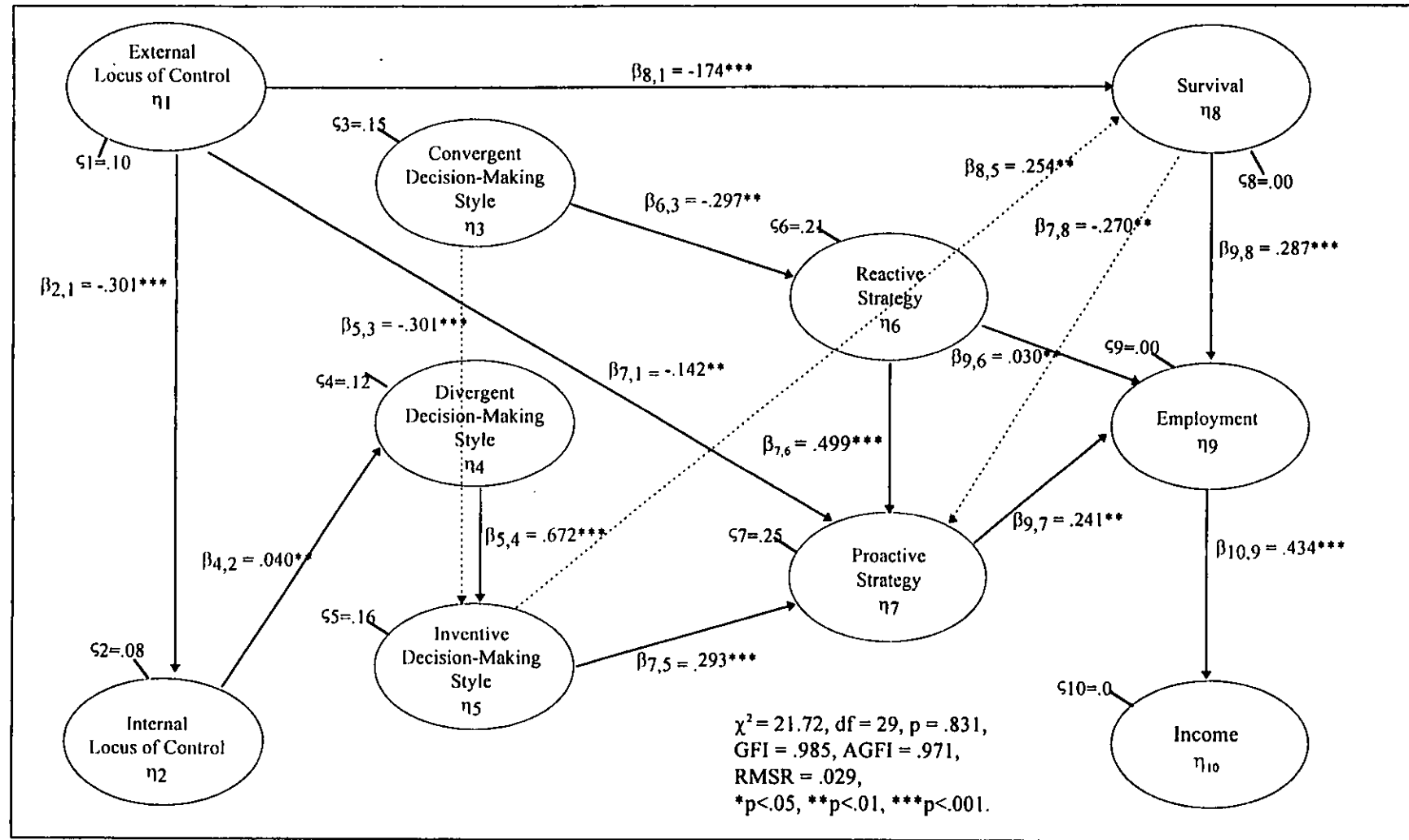


Figure 2: Structural Equation Model for Small Business Success

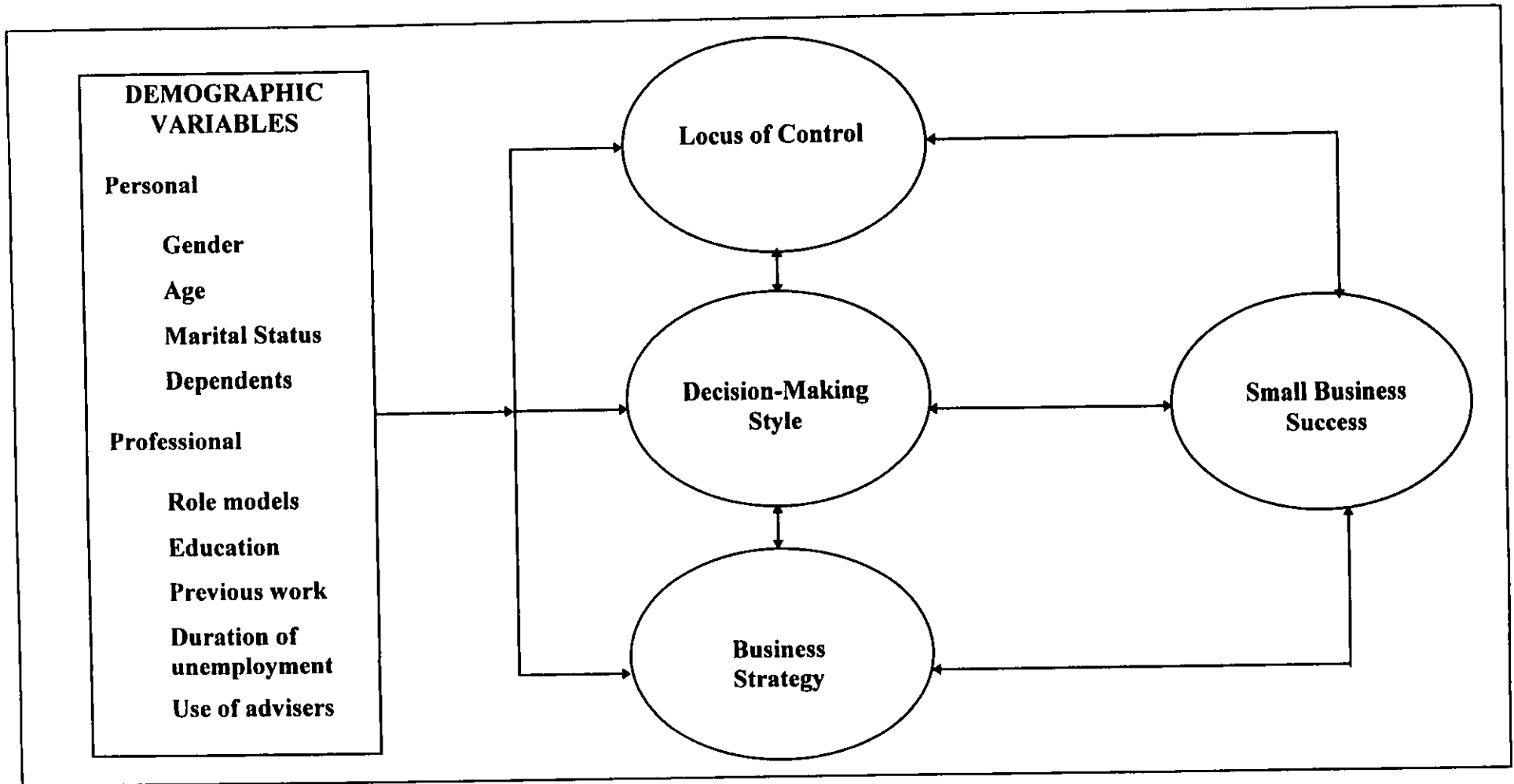


Figure 1: Conceptual Model for the Study

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