



SITUATIONAL FACTORS AND ENTREPRENEURIAL INTENTIONS

*An Paper for the Small Enterprise Association of Australia and New Zealand 16th Annual
Conference, Ballarat, 28 Sept-1 Oct, 2003.*

Jessica Kennedy
Faculty Business and Law,
Central Queensland University,
Bruce Highway, Rockhampton 4700
Queensland Australia
j.kennedy@cqu.edu.au

Dr Judy Drennan
Faculty Business and Law,
Central Queensland University,
Bruce Highway, Rockhampton 4700
Queensland Australia,
j.drennan@business.uq.edu.au

Dr Patty Renfrow
Faculty Business and Law,
Central Queensland University,
Bruce Highway, Rockhampton 4700
Queensland Australia
p.renfrow@business.uq.edu.au

Dr Bernadette Watson
Faculty Business and Law,
Central Queensland University,
Bruce Highway, Rockhampton 4700
Queensland Australia,
b.watson@business.uq.edu.au



SITUATIONAL FACTORS AND ENTREPRENEURIAL INTENTIONS

Introduction

Entrepreneurship can provide a satisfying and rewarding working life, providing a flexible lifestyle and considerable business autonomy. It is becoming an increasingly important career option for school and university graduates. At a national level, entrepreneurial activity contributes to prosperity and economic growth {Hindle, 2000 #316}. Economies are more robust if there are people who can combine technical knowledge with business acumen, and thereby also compete in a world market. Understanding the factors that influence and shape individuals' intentions of starting a business is critical if programs and policies are to be developed to encourage entrepreneurial behaviour.

Significant progress has been made in understanding the impact of personal background factors such as prior experience, and family background on the development of perceptions of entrepreneurship and intentions of starting a business {Krueger, 1993 #27;Davidsson, 1995 #99;Autio, 1997 #101}. However, it is recognised that situational variables are very important in the decision to start a business; it is the convergence of attitudes and situational factors that leads to business start-ups {Shapero, 1982 #103}. These situational factors have received relatively little attention in intentions models, although unemployment is considered a major factor leading to self-employment {Lawrence, 1997 #353}, and family commitments have a major impact on the self-employment of women {Hisrich, 1984 #89}. To better understand the path to entrepreneurship and business start-ups, this paper explores the relationships between perceptions of entrepreneurship and entrepreneurial intentions which take into account potential employment availability and family commitments.

Literature review and hypothesis development

Several conceptual models of entrepreneurial intentions have been developed to assist our understanding of the factors and influences that shape individuals' intentions of starting a business {Shapero, 1982 #103;Shapero, 1985 #197;Bird, 1988 #25;Davidsson, 1995 #99;Autio, 1997 #101}. There is little variation among the different approaches taken in these models {Krueger, 2000 #28}. In prior studies of intentions, subjective norm has not been found to be a major variable directly influencing intentions (eg {Krueger, 2000 #28}), and has in some studies been incorporated in other measures {Davidsson, 1995 #99}. In this study, intentions are hypothesized to be a function of perceptions of the feasibility and desirability of starting a business. In addition, subjective norm is incorporated as some previous research has suggested that it is an important moderating or mediating variable {Reitan, 1997 #356} difficult to separate from perceptions of feasibility but supposedly incorporated in perceptions of desirability {Krueger, 2000 #28}.

In entrepreneurial intentions models, situational variables interact with perceptions or attitudes to influence intentions to start a business {Shapero, 1982 #103;Bird, 1988 #25;Greenberger, 1988 #48;Learned, 1992 #12}. {Shapero, 1982 #103} describe such situational variables as life path changes and categorise them into negative

displacements (such as forcefully emigrated, fired), between things (eg out of school, out of army) and positive pull (eg from partner or customer). They suggest that it is mainly negative displacements that lead to business formation. The interaction of situational and attitudinal variables is also emphasized by {Bird, 1988 #25} who examines how the alignment of career, work, risk, rewards and family can distinguish entrepreneurs from potential entrepreneurs who never act to set up a business. The decision to start a business can be triggered by a particular situation, but it can also be the result of cumulative events over time {Learned, 1992 #12}. Figure 1 presents the entrepreneurial intentions model incorporating situational variables.

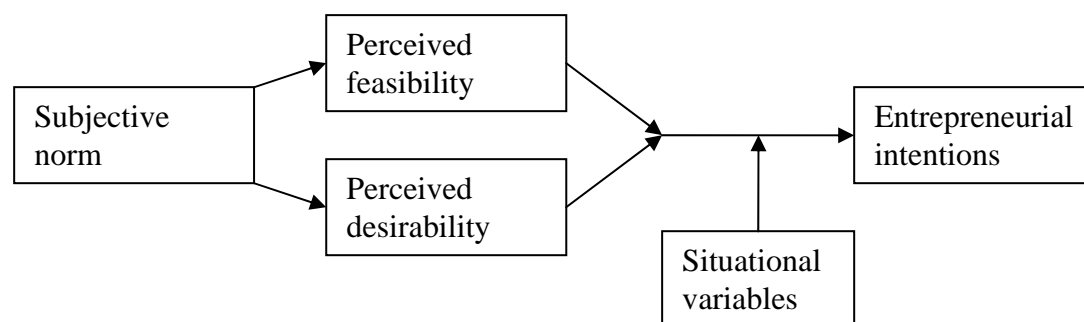


Figure 1: Intentions model

Two situational variables that have received significant attention in the literature on business start-ups are unemployment and family commitments.

Unemployment: The general effects of unemployment on new firm formation are not conclusive {Storey, 1991 #352}. There are two sets of factors involved: opportunity or pull factors and necessity or push factors {Storey, 1991 #352}; {Hannu, 1994 #368}; {Watson, 1998 #354}. In times of favourable market conditions and high demand, individuals (employed or unemployed) are attracted (or pulled) towards starting a business because they can identify business and market opportunities {Storey, 1991 #352}. Conversely, at times of high unemployment and depressed market conditions, individuals may be pushed into starting a business because it offers higher utility than unemployment or trying to find a job {Storey, 1991 #352}. As a result, the impact of unemployment on starting a business is not clear from analyses of general employment conditions and new firm formations.

It appears that the *proportion* of people setting up a business is higher among the unemployed, but the total *number* of new businesses being started is higher among the employed or self-employed. In a large-scale study of American men, unemployed and lower-paid wage workers were found to be more likely to become self-employed than other workers {Evans, 1989 #43}, and while many factors may contribute to entrepreneurship, the threat of unemployment is becoming an increasingly important factor leading to self-employment {Lawrence, 1997 #353}. However {Reynolds, 1995 #111} found that the majority of nascent entrepreneurs are employed or are self-employed.



The results of attempts to incorporate employment status in entrepreneurial intentions models have not been conclusive. {Davidsson, 1995 #99} conducted a study using a large sample of 35-40 year old Swedish subjects, and found that those with permanent employment were less convinced that starting a business was suitable than those who were unemployed, temporarily employed, or students. However, the relationship between employment status and entrepreneurial intention was relatively weak. {Autio, 1997 #101} also included current employment status in their intentions model to test the effects of employment status on entrepreneurial intentions. In their study of University students across four countries, they found no significant relationship between current employment status and entrepreneurial intentions.

Home and family commitments: The difficulties of balancing the demands of home and family have been examined in relation to the careers of women. Women executives have been found to start their own business, move to part-time work, or stay at home in order to cope with the competing demands of family and work {Hisrich, 1984 #89}. Being married is related to self-employment of women {Connelly, 1992 #66}; {Robinson, 1994 #105}, and women with young children are more likely to seek self-employment {Macpherson, 1988 #100}; {Connelly, 1992 #66}; {Robinson, 1994 #105}; {Caputo, 1998 #64}. The major reason given by women for starting a business is the greater flexibility afforded to combine domestic demands and employment opportunities {Birley, 1989 #52}; {Brush, 1992 #59}; {Brush, 1990 #119}; {Scott, 1986 #113}; {Carr, 1996 #323; Boden Jr, 1999 #317}. Men's reasons for becoming self-employed have not been related to their parental status {Boden Jr, 1999 #317}, although the changing roles of men in family life may lead to changes in their reasons for self-employment. To date, family commitments have not been tested in entrepreneurial intentions models.

Development of research questions

In this study we focus on undergraduate students in their first-year of University studies. We expected that the entrepreneurial intentions model as previously tested by Krueger et al. (2000) would be applicable to this sample, with perceived feasibility and perceived desirability of starting a business, directly related to their entrepreneurial intentions and subjective norm indirectly related through perceived feasibility and perceived desirability (Figure 1). The first stage of analysis tests this model without the inclusion of situational variables.

Unemployment: Prior studies suggest that starting a business is related to unemployment. Students who expect to have difficulty in finding employment after graduation may consider starting a business. It would be expected that the students who in general show some interest in starting a business would be most likely to do so if faced with unemployment. It is also expected that some students may never consider self-employment as an option. The research question being explored therefore is: when the intention to set up a business is in response to unemployment, what is the relationship between perceived feasibility, perceived desirability, subjective norm, and entrepreneurial intentions?



To explore this issue, students responded to the statement, “I expect I’ll have to start up a business because there won’t be jobs available” (strongly agree...strongly disagree). This question was to determine whether those who expect to be ‘forced’ into starting a business by poor employment opportunities are students who would be interested in starting a business in other circumstances ie who perceive starting a business as feasible and desirable, and have high subjective norm. To test the issue in extreme circumstances, students were asked if they agreed with the statement “I’ll only set up own business if I’m unemployed”. If they will only set up a business in these circumstances, then they are likely to be low in either perceived feasibility or perceived desirability.

Home and family commitments: Future home and family commitments may also impact on the intentions of starting a business, at least for female students. The literature suggests that home and family commitments are a significant factor leading women, but not men, to self-employment {Boden Jr, 1999 #317}. The research question being investigated is: when the intention to start a business is related to family commitments, what is the relationship among perceived feasibility, perceived desirability, subjective norm and entrepreneurial intentions, and does gender matter?

Not all females with home and family commitments will start a business as an alternative to working for others. However, it is expected that those who do so will see business as desirable and feasible. The literature {Caputo, 1998 #64} suggests that family support in the form of assistance with childcare is important, so they would also be expected to have high subjective norm. To test this issue, students were asked to indicate the extent to which they agreed with the following statements: “Future family commitments may make it difficult for me to start my own business” and “I may set up a business to work from home in order to meet family commitments”.

Research methodology

Students attending major first-year classes from six out of seven Faculties at the university in the first and second semesters, 2002 completed the questionnaires. With the approval and cooperation of lecturers, the experimenters distributed the questionnaire during class sessions. Most students completed and returned them during the sessions. Participation was voluntary and 1075 students completed and submitted the questionnaire, resulting in a response rate of over 60%.

	Female	Male	Total
Arts	83	23	106
BEL	190	166	356
Social Science	60	21	81
Engineering	18	70	88
Science	167	80	247
Health Science	93	27	120
IT	12	24	36



TOTAL	623	411	1034
--------------	------------	------------	-------------

The survey consisted of a six-page, structured questionnaire. Students answered items that addressed their entrepreneurial intentions, perceived feasibility of starting a business, perceived desirability of starting a business, and perceived expectations from others to start a business. They also responded to questions about whether they would start a business in situations of unemployment and when balancing work and family responsibilities. Response options included five-point Likert scales and appropriate categorical and dichotomous scales. The items used in the questionnaire are listed in Table 1.



Table 1 – Questionnaire items for current study

<p><u>Entrepreneurial intentions</u> Have you ever thought about starting your own business? (Never thought about it at all ... Seriously thought about it) Estimate the likelihood that you'll start your own business in the next 5 years (Very unlikely ... very likely) Estimate the likelihood that you'll start your own business in the next 10 years (Very unlikely ... very likely)</p>
<p><u>Perceived desirability</u> How attractive is it for you to start your own business? (very unattractive ... very attractive) If you started your own business, how would you feel about doing it? (I'd hate doing it ..I'd love doing it) If you started your own business, how tense would you be? (very tense ... very relaxed) If you started your own business, how enthusiastic would you be? (very unenthusiastic ... very enthusiastic)</p>
<p><u>Perceived feasibility</u> How practical is it for you to start your own business? (not very practical ... very practical) How hard do you think it would be to start your own business? (very hard .. very easy) If you started your own business, what do you think your workload would be? (very high...low) If you started your own business, how certain of success are you? (very certain of failing...very certain of success) Do you know enough to start your own business? (know absolutely nothing....know everything)</p>
<p><u>Subjective norm</u> I care what my closest family think about my employment decision (Strongly disagree...strongly agree) I care what my closest friends think about my employment decision (Strongly disagree...strongly agree) I care what people who are important to me think about my employment decision (Strongly disagree...strongly agree) I believe that my closest family think I should be self-employed. (Strongly disagree...strongly agree) I believe that my closest friends think I should be self-employed. (Strongly disagree...strongly agree) I believe that people who are important to me think I should be self-employed. (Strongly disagree...strongly agree)</p>
<p><u>Future unemployment</u> I expect I'll have to start up a business because there won't be jobs available. (Strongly disagree...strongly agree) I'll only set up own business if I'm unemployed. (Strongly disagree...strongly agree)</p>
<p><u>Future family commitments</u> Future family commitments may make it difficult for me to start my own business. (Strongly disagree...strongly agree) I may set up a business to work from home in order to meet family commitments. (Strongly disagree...strongly agree)</p>
<p><u>Additional variables</u> Age (Specify) Sex (M/F) Degree program (Specify)</p>

Entrepreneurial Intentions: The measure of entrepreneurial intentions consisted of three questions {Davidsson, 1995 #99}. The Cronbach alpha reliability for this scale was 0.80.

Perceived Feasibility: Five questions adapted from {Krueger, 1993 #27} and {Krueger, 2000 #28} comprised the measure of perceived feasibility. The Cronbach Alpha reliability for this scale was 0.67.

Perceived Desirability: Four questions adapted from {Krueger, 1993 #27} and {Krueger, 2000 #28} comprised the measure of perceived desirability. The Cronbach alpha reliability for this scale was 0.69.



Subjective norm: For each of the three groups (closest family, closest friends, people who are important to me), the level of care about what they thought of the employment decision was multiplied by the level of belief that they thought the person should start a business {Kolvereid, 1996 #44}. The three figures were then added.

Results

Table 2 provides the regression analysis results. First the intentions model was used without situational variables to test whether intentions was related to perceived feasibility, perceived desirability and subjective norm. A standard multiple regression analysis was conducted between students' intentions to start up their own business as the dependent variable and their perceptions of perceived feasibility, perceived desirability and subjective norm as the independent variables. Analysis was carried out using SPSSx REGRESSION. A standard multiple regression revealed that all three variables contributed significantly to predicting the intention to start up a business. In total 53 percent of the variance was explained by perceived desirability, perceived feasibility and subjective norm. This analysis confirmed the usefulness of the model in explaining intentions in this group of young students.

After establishing the applicability of the model for first-year students, the situational variables of unemployment were included in regressions. A standard multiple regression was conducted between students expectations of starting up their own business because of job scarcity as the dependent variable, and perceived feasibility, perceived desirability, and subjective norm as the independent variables. Only subjective norm was related to expectation of starting a business because there won't be jobs available. The analysis was repeated with the level of agreement with the statement "I'll only set up own business if I'm unemployed" as the dependent variable. The results indicated a negative relationship with perceptions of the desirability and feasibility of starting a business, and a positive relationship with subjective norm.

The situation variable of family commitments was then examined. A multiple regression analysis was conducted with expectations of setting up a business to work from home in order to meet future family commitments as the dependent variable. The independent variables were as above with the inclusion of gender. Results showed a positive relationship with perceptions of the desirability of starting a business and subjective norm, and that gender was also a significant variable. Finally a multiple regression was conducted as above but with the negative statement "Future family commitments may make it difficult for me to start my own business". Expectations that family commitments may make it difficult to start a business were related to low levels of perceived feasibility and desirability but high levels of subjective norm, and there were no gender differences.



Regression results

Dependent variable	Independent variable (Bvalue, T, Signif)	Overall F (significance)	Adj. R-Square
Intentions	Perceived feasibility (.345, 14.071, .000) Perceived desirability (.454, 18.407, .000) Subjective norm (.124, 5.545, .000)	380.037 (signif. at <.001)	.528
I expect I'll have to start up a business because there won't be jobs available.	Perceived feasibility (.000, .008, .994) Perceived desirability (-.016, -.466, .641) Subjective norm (.239, 7.603, .000)	20.208 (signif. at <.001)	.053
I'll only set up own business if I'm unemployed	Perceived feasibility (-.073, -2.119, .034) Perceived desirability (-.210, -6.068, .000) Subjective norm (.107, 3.405, .001)	22.362 (signif. at <.001)	.058
I may set up a business to work from home in order to meet future family commitments.	Perceived feasibility (.026, .745, .456) Perceived desirability (.087, 2.450, .014) Subjective norm (.137, 4.287, .000) Gender (-.067, -2.132, .033)	13.905 (signif. at <.001)	.036
Future family commitments may make it difficult for me to start my own business	Perceived feasibility (-.091, -2.532, .011) Perceived desirability (-.068, -1.910, .056) Subjective norm (.086, 2.654, .008) Gender (-.002, -.057, .955)	5.209 (signif. at <.001)	.016

Discussion

This study confirms that using perceived feasibility, perceived desirability and subjective norm to explain entrepreneurial intentions is valid for first-year University students across multiple campuses. It then demonstrates that under circumstances that young people commonly encounter of unemployment and family commitments, perceptions of feasibility and desirability and subjective norm vary in importance.

With regard to unemployment, the students who most agreed with the statement; “I expect I'll have to start up a business because there won't be jobs available”, were under most pressure from family, friends and significant others to start a business. They were not consistently high in either perceived feasibility or perceived desirability, so they would not necessarily consider it highly likely that they would start a business in other circumstances. These results indicate that unemployment might cause students with both high and low levels of perceived feasibility and desirability to start a business. Some of these students would presumably start businesses even if they could find employment. What distinguishes this group is that there is a perceived pressure from others to start a business if unemployed

In contrast to the above situation, there was a negative relationship between perceptions of the desirability and feasibility of starting a business and agreement with the statement “I'll only set up own business if I'm unemployed.” There was also a positive relationship between level of agreement with this statement and subjective norm. This suggests that there is a group of students who are not interested in setting up a business because they perceived it as neither feasible nor desirable. However, they may be pressured by unemployment to do so, but wouldn't under any other circumstances.



In looking at the results of the effects of unemployment on entrepreneurship intentions, it is clear that subjective norm is a critical variable. Expectations of family, friends and significant others are key variables influencing student's responses to unemployment. One issue that requires further study is whether the impact of subjective norm is also felt when students are older and more mature. This study is focused on students in first-year courses and they may be more influenced by others at that age.

Expectations of starting a business to meet family commitments was related to perceived desirability, subjective norm and gender. This suggests that women in particular who see self-employment as desirable and have support in that decision will consider starting a business when they have family commitments. Feasibility is not important at this stage. In contrast, both males and females who consider self-employment to be infeasible and undesirable appear to see family commitments as an excuse to overcome expectations that they will start a business. There are no gender differences relating to family commitments making starting a business difficult which would be consistent with family being used as an excuse not to start a business.

The results of this analysis do not explain a high proportion of the variation in expectations in situations with unemployment and family commitments. Nor were they expected to, as the model related to more general entrepreneurial intentions. What the research does is to explore how perceptions of feasibility and desirability of starting and business and subjective norm vary in their impact in different situations.

The single most important finding is the importance of subjective norm in all of the situations examined. In conditions where employment is not a feasible alternative, it appears that subjective norm becomes an important influence on intentions. This suggests that although this variable has not been found to have a significant direct influence on intentions in prior research, further research is required on its impact under adverse employment conditions.



References

- Autio, E., R. H. Keeley, et al. (1997). "Entrepreneurial intent among students: Testing and intent model in Asia, Scandinavia, and USA." Frontiers of Entrepreneurship Research, Wellesley MA, Babson College: 133-147.
- Bird, B. (1988). "Implementing entrepreneurial ideas: The case for intention." Academy of Management Review **13**(3): 442-453.
- Birley, S. (1989). "Female entrepreneurs: are they really any different?" Journal of Small Business Management **27**(1): 32 -37.
- Boden Jr, R. (1999). "Flexible working hours, family responsibilities, and female self-employment." American Journal of Economics and Sociology **58**(1): 71-83.
- Brush, C. G. (1990). Women and enterprise creation: Barriers and opportunities. Enterprising Women: local initiatives for job creation. S. Gould and J. Parzen. Paris, OECD: 37-58.
- Brush, C. G. (1992). "Research on women business owners: Past trends, a new perspective and future directions." Entrepreneurship: Theory and Practice.
- Caputo, R. K. and A. Dolinsky (1998). "Women's choice to pursue self employment: The role of financial and human capital of household members." Journal of Small Business Management **36**(3): 8-17.
- Carr, D. (1996). "Two paths to self-employment? Women's and Men's self-employment in the United States, 1980." Work and Occupations **23**: 26-53.
- Connelly, R. (1992). "Self-employment and providing child care." Demography **29**(1): 17-29.
- Davidsson, P. (1995). Determinants of entrepreneurial intentions. RENT IX Workshop, Piacenza, Italy.
- Evans, D. S. and L. S. Leighton (1989). "Some empirical aspects of entrepreneurship." American Economic Review(June): 519-535.
- Greenberger, D. B. and D. L. Sexton (1988). "An interactive model of new venture initiation." Journal of Small Business Management(July): 1-7.
- Hannu, T. and N. Hannu (1994). "The impact of unemployment of small business formation in Finland." International Small Business Journal **13**(1): 38-53.
- Hindle, K. and S. Rushworth (2000). Global Entrepreneurship Monitor: Australia 2000. Hawthorne, Victoria, Swinburne University of Technology.
- Hisrich, R. D. and C. G. Brush (1984). "The woman entrepreneur: Management skills and business problems." Journal of Small Business Management **22**(1): 30-38.
- Kolvereid, L. (1996). "Prediction of employment status choice intentions." Entrepreneurship: Theory and Practice **21**(1): 47-57.
- Krueger, N. (1993). "The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability." Entrepreneurship: Theory and Practice **18**(31): 5-21.
- Krueger, N., M. D. Reilly, et al. (2000). "Competing models of entrepreneurial intentions." Journal of Business Venturing **15**: 411-432.
- Lawrence, L. and R. T. Hamilton (1997). "Unemployment and new business formation." International Small Business Journal **15**(3): 78-82.
- Learned, K. E. (1992). "What happened before the organization? A model of organization formation." Entrepreneurship Theory and Practice(Fall): 39-47.
- Macpherson, D. A. (1988). "Self employment and married women." Economic Letters **28**: 281-284.



- Reitan, B. (1997). Where do we learn that entrepreneurship is feasible, desirable and/or profitable? ICSB World Conference, San Francisco, California.
- Reynolds, P. D. (1995). "Who starts new firms? Linear additive versus interaction based models." Frontiers of Entrepreneurship Research, Wellesley MA, Babson College.
- Robinson, P. and E. A. Sexton (1994). "The effect of education and experience on self-employment success." Journal of Business Venturing **9**(2): 141-157.
- Scott, C. E. (1986). "Why more women are becoming entrepreneurs." Journal of Small Business Management **24**(4): 37-44.
- Shapiro, A. (1985). "The entrepreneurial event." Enterprise **February**: 5-9.
- Shapiro, A. and L. Sokol (1982). The social dimensions of entrepreneurship. Encyclopedia of Entrepreneurship. C. A. Kent, D. L. Sexton and K. H. Vesper. Englewood Cliffs, N J, Prentice Hall: 72-90.
- Storey, D. (1991). "The birth rate of new firms - does unemployment matter? A review of the evidence." Small Business Economics **3**: 167-178.
- Watson, K., S. Hogarth-Scott, et al. (1998). "Small business start-ups: success factors and support implications." International Journal of Entrepreneurial Behaviour and Research **4**(3): 217-238.