

THE ENTREPRENEUR, RISK-PERCEPTION AND CHANGE OVER TIME: A TYPOLOGY APPROACH

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Studies on entrepreneurship

The predominant perspective in the literature on entrepreneurs and SMEs has been the personality trait theory (Wilken, 1979; Brockhaus, 1980; Sexton and Bowman, 1985; Begley and Boyd, 1986; McGrath *et al.* 1992). The point generally made by trait researchers is that entrepreneurs often depart from established norms of behaviour, they are different and therefore worthy of particular interest. For instance, Wilken (1979, p. 58) has advocated that entrepreneurship is a psychological property of individuals which can be described in terms such as creativity, daring, aggressiveness, and the like. Many studies have portrayed the entrepreneur as a risk-taker with expectations of receiving profit as a reward for this risk-bearing (Knight, 1921; Palmer, 1971). Inherent in much of the literature is the assumption that traits are a relatively enduring, or static property of the personality that is forged by nature and/or nurture at a very early stage in a person's life (Deakins, 1996). Although trait theory has a large following (see Cromie and Callahan, 1997); it has been suggested that the emphasis on traits, the 'cult of the individual', (Stevenson and Jarillo, 1990, p. 20) may have hindered the development of entrepreneurship theory.

It is widely thought that entrepreneurs are extreme types – driven, independent, rebellious risk-takers (Collins, Moore and Unwalla, 1964; Kets de Vries, 1990). Hobbs (1991, p. 107) remarked that up until recently, entrepreneurship was perceived to be the 'province of exceptional, often obsessive individuals... doomed romantics...', who 'obtained great wealth in a style that was rather dashing and rather eccentric.' The discourse of entrepreneurship has succumbed easily to rhetoric, platitudes and catchphrases which have served as a simple way for describing entrepreneurs in today's world. A problem with the trait approach is that it has encouraged the use of an over-simple stereotype, the 'bold risk-taking hero' (Mintzberg and Waters, 1982) of organisational life, and has failed to acknowledge clearly that many successful companies are set up by very ordinary men and women. Trait theory, with all its emotional overtones of 'good', 'bad' and even 'heroic' entrepreneurs, is a source of controversy in the literature. Attributing organisational performance to the particular traits of individuals is seen as reductionist in nature (Sarason, 1972; Sandberg and Hofer, 1987).

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The growing disillusionment with personality trait theory has led to the growth of the process school of thought – which looks at entrepreneurial behaviour, with how entrepreneurs act (Gartner, 1985). As Drucker (1985) has pointed out, entrepreneurship is a practice, a ‘doing’ that ultimately depends on performance. The work on funding factors, chosen strategy, strategic posture, environmental variables and networking (Roure and Maidique, 1986; Macmillan and Day, 1987; Sandberg and Hofer, 1987; Covin and Slevin, 1990; Birley, 1987) illustrates that there are other variables other than just the personalities of the entrepreneurs, that affect outcomes. It is implicit in the studies by Gibb and Scott (1985) and Hanlon and Scott (1995) that founders are skilled at building strong networks and gaining support for the new venture idea. Sandberg and Hofer (1987) found that company success depended, not only on the characteristics of the entrepreneur, but also on industry structure and the strategy of the venture involved. Stevenson and Jarillo (1990) argued that the two very different approaches to the study of entrepreneurship: why entrepreneurs act they do and how they act have been fruitful. It serves as a reminder that:

- it is individuals who carry out entrepreneurial activities,
- their characteristics matter, and,
- that other variables are also important.

However, there has been relatively little research to date which studies entrepreneurship as a process (e.g. entrepreneurs in action). This shortcoming is addressed in this study and the following section outlines the research agenda.

The Study

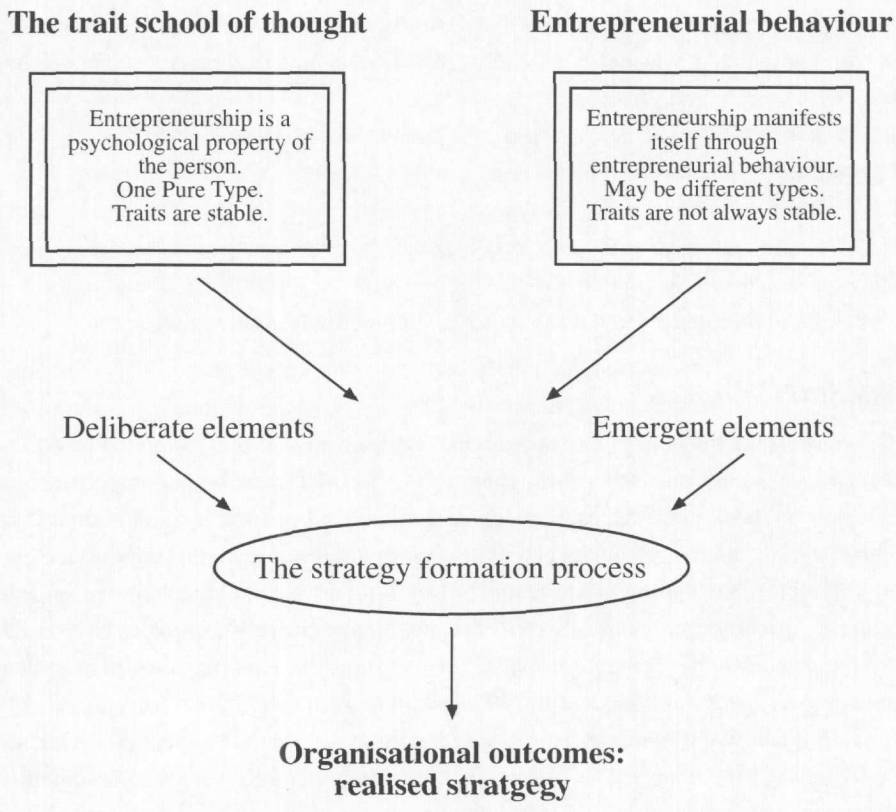
The purpose of this study was to examine the influence of the entrepreneur on the formation of strategy over time. Mintzberg and Waters (1982) make a careful distinction between intended and realised strategy. Intentions and plans may exist, but can be changed as the entrepreneur reacts to new opportunities or threats in the environment. An important contribution of Mintzberg (1978) is that strategy may not derive from an intentional process at all, but may reflect an emergent process. The bulk of the research linking strategy to performance has relied on measures that capture realised rather than intended strategy (Smith and Kofron, 1996); this bias in the literature is present probably because it is easier to observe the result of decisions – to see the pattern in the stream of decisions (Mintzberg 1978) – than to measure the intentions, values and motives of managers.

A comparative, longitudinal case study approach was adopted by the author, and strategy formation was used as the process through which we see entrepreneurship expressed in SMEs. The main empirical questions were as follows:

- (1) Is the entrepreneur a pure type or is there more than one type of entrepreneur; if there are other types then what are the main features of the different types?
- (2) Is the propensity for risk-taking a stable personality trait or is it a capacity which can vary in the same individual with time and experience?

The information base for the descriptions of the strategy process was derived from nine cases and over thirty interviews with entrepreneurs and other company personnel. The firms ranged between seven and twenty years old, with 2 to 120 staff and were drawn from different industry sectors. Due to the limited amount of research on strategy formation processes in SMEs, the inductive case method (Glaser and Strauss, 1967; Bower, 1970; Mintzberg *et al.*, 1976; Burgelman, 1983) for discovering theory from data was adopted. Figure 1.1 summarises the research framework adopted for the purposes of this study.

Figure 1.1. Conceptual framework: influence of the entrepreneur on the strategy formation process.



Results and discussion

The research pointed strongly to the existence of two distinct types of entrepreneurs, the charismatic and the pragmatic entrepreneurs. The dominant attributes of both types are shown in Table 1.1.

TABLE 1.1: Dominant attributes of the charismatic and the pragmatic entrepreneur

Type 1	Type 2
The charismatic entrepreneur	The pragmatic entrepreneur
Dominant attributes	Dominant attributes
Approach to strategy formation: visionary, idealistic, romantic, intuitive.	Approach to strategy formation: 'common-sense', down-to-earth, planned, rational.
A 'bullish' approach to the management of risk.	A 'bearish' approach to the management of risk.
Abiding commitment; obsessive; success against the odds; achievement of goals an 'end in itself.'	'Calculated' commitment, success obtainable, dream within reach; instrumental aims; achievement of goals a 'means to an end.'

(1) *The charismatic type*

The approach of the charismatic entrepreneurs to strategy formation was visionary, idealistic, romantic and intuitive. The founder of one technologically based venture started the company in the emergent phase of industry life cycle. The founder remarked that industry conditions were not favourable at that time since the personal computer was not yet developed. He was reliant on the relatively primitive Commodore PET computer. However, the founder had developed an interest in technology and had a 'gut feeling' that there was great potential in the particular market/technology he had targeted. One employee remarked that the market research that justified the need for the product tended to come from the founder: 'from his hunches, his experiences of talking to people, of using existing products which he reckoned were hard to use'.

The approach of the charismatic type to strategy formation was emotion-rich and underpinned by humanistic as well as commercial values. One founder decided to address the needs of the users of EPOS (electronic point of sale systems), who comprised the low end of the market. The founder realised that a phobia about computers existed among the uneducated and they tended to be marginalised by the computer industry as a whole. His stated objective was to make it easier for the uneducated to use the power of the personal computer. Another founder was driven by the ambition to be a 'world class software developer'. The founder of a manufacturing firm was said to be driven by a search for excellence and set his sights high: he intended to quickly capture a large share of the Irish market in spite of intense competition.

The charismatic types were characterised by a 'bullish' risk-taking approach. They took action based mainly on 'gut feel' for the market rather than on hard data, proven facts or plans. They were more risk-prone than the pragmatists, and due to their obsessive belief in the venture, they sought to aggressively exploit opportunities. One founder left a successful career to pursue his interest in starting a technologically based venture. He declared that managers were very disciplined, analytical people; they were 'careful people' who can look at things and weigh them up very carefully. As an entrepreneur he was not a careful person. He declared that his approach to business start-up was 'all seats of the pants stuff' at that time. Employees declared that he supported the organisation at great personal and financial cost to himself and his family.

The charismatic types were committed to the business to the point of being obsessive. The tenacity of the charismatic type in the face of difficulties eventually led to success, often success against the odds. For instance, the founder of a toothpaste company was said to have built the company from nothing. The conventional wisdom was that a small Irish toothpaste firm would not succeed in an industry dominated by multi-nationals. However, the founder overcame many obstacles, including his lack of industry experience, lack of finance and crises, and succeeded in capturing 10% of the home market.

(2) The pragmatic type

The approach of the pragmatic entrepreneurs to strategy formation was calculated, down-to-earth, planned and rational. The pragmatic entrepreneurs made an assessment of both themselves and the market; their aim was to set up a business that had a good chance of succeeding. The founders of a graphic design firm decided to set up their own design firm after accumulating several years experience in the design field. They employed a consultant and spent a great deal of time on the original business plan in order to avoid problems. The founders remarked that: 'we go through decisions, like employing another person, very, very carefully.' They decided to set up a professionally-run, well organised organisation that was not always characteristic of start-up firms in the design industry. Previous employment skills, knowledge, pragmatism and desire to contain risk, were key factors in getting the business off the ground.

The pragmatists were characterised by a 'bearish' approach to risk-taking. One founder remarked that he would never 'wish to become huge' and that the company would have to 'remain relatively small in a niche market if we are to succeed'. The pragmatists were well aware of the constraints to action and adopted a planned approach to strategy formation. Strategy formation was characterised by conservative thinking, by mainly economic concerns; business start-up was driven more by the planning, skill and knowledge of the pragmatists, rather than by idealism, grand vision or instinctive gut feel for the market. The pragmatist was driven by tangible goals such as the desire to make a living, earn financial reward or sell the business at a profit. Unlike the

charismatic entrepreneurs who tended to be more emotionally attached to the venture, the pragmatic entrepreneurs were not as umbilically tied to their organisations. On account of their more down-to-earth approach to strategy formation, they found that ceding control of the venture was not overly difficult.

The contrast between the two types of entrepreneurs was clearly revealed by two case studies: two individuals started up similar businesses around the same time but adopted different strategies. The founder of an Irish soap company sought to minimise risk by undertaking a feasibility study, deciding to subcontract production, developing a business plan, having clear goals and by working from her home. When faced with a personal dilemma of selling the company or exploiting the company's export potential, she succumbed to an attractive takeover offer. In contrast, the founder of toothpaste firm adopted a very different approach. He decided to adopt a high-risk branding strategy which entailed financial investment of £500,000 in capital equipment. No grant aid was received for this project. Shortly afterwards, the company lost its main market and was drawn into a crisis situation. The founder was left with no option but to sell a majority shareholding; this was the most difficult decision he ever faced on a personal level.

Entrepreneurial risk-taking: a personality trait and a dynamic capacity

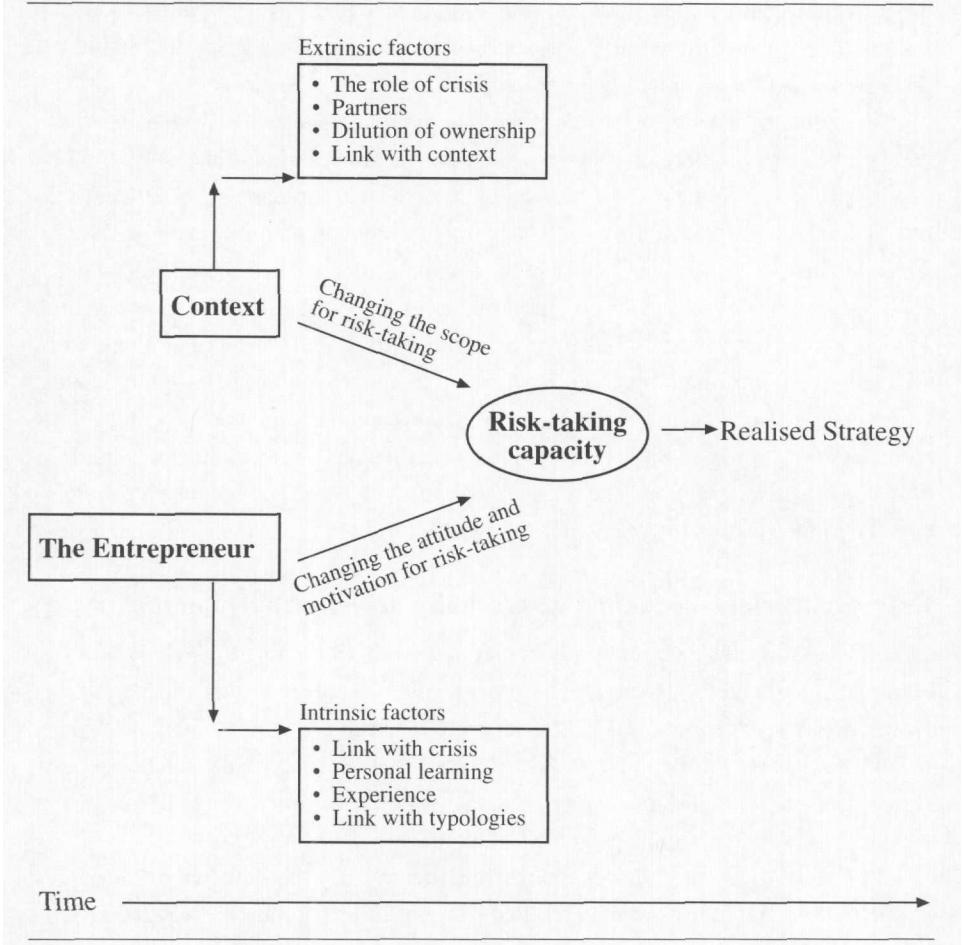
This study illustrates that entrepreneurs are not similar in nature and the charismatic entrepreneurs seemed to have a greater propensity to assume risks than the pragmatists. However risk-taking propensity was influenced by learning and experience and changed over time, even within the same personality. By adopting a processual perspective, this study gave rise to some interesting findings on the nature of risk. A framework of changes in risk perception is presented in Figure 1.2.

This study extends the personality trait literature by showing that risk is not just a function of personality but it also reflects organisational context and organisational history. Furthermore, risk is a capacity that changes over time with learning and personal experience. In overview, the framework conceptualises risk as composing of two main variables (1) context and (2) the entrepreneur. The capacity of the entrepreneur to assume risk is influenced by extrinsic factors such as crisis, partners, the dilution of ownership and organisational context. In addition, the entrepreneur's attitude and motivation for risk taking is influenced by intrinsic factors such as personal crisis, personal learning and experience. Attitude to risk is also influenced by the entrepreneur's distinct type of personality.

Extrinsic Factors

The role of crisis

One of the most striking themes to emerge from the study was the presence of crisis or 'defining episodes' in the early histories of the companies under study. A company in the food sector developed a natural wholefood biscuit product and achieved rapid

Figure 1.2: Changes in risk perception over time

growth. Sales peaked in the mid 1980s and dropped sharply soon after. For various reasons, the company entered a crisis situation and was taken over. One manager remarked that they had learned a great deal from that episode and that it had its ramifications: 'We are prepared to take a risk if the opportunity comes up. It is a conservative risk. The negative aspects of going through a critical period is that you hesitate to bring in new products unless you are 100% sure.' Crisis had important ramifications for both the entrepreneur on a personal level and for strategy formation and change processes. A company in the software sector also underwent a critical period at start-up when it exhausted its funds. A very real threat to the company's survival was posed but the founding team managed to resolve their cash flow problems. A new manager remarked that operating on a tight budget made the founder reluctant to commit resources to new product development and that efforts should have been taken to

diversify at an earlier stage. It seemed that the early proactive and risk-taking posture of the company was moderated as a result of crisis.

Partners and dilution of ownership

The presence of partners and new owners may also bring new competing views to bear on the company, demanding that the vision of the founder is shared rather than internalised, which may alter perceptions. For instance, a marketing manager in one firm claimed that his role was to assess the founder's ideas in a strategic manner. In another company, one partner had an accountancy background which seemed to counteract the risk tendencies of the entrepreneur. The founder remarked that he was an ideas man, had a great interest in technology, and as a result, could easily lead the company into different market segments. The founder remarked that the core competence of the firm could be easily diluted if it were not for his partner. He realised that what he was trying to do had to be 'harnessed'. His partner was a 'controlling influence' and was not as 'as free with cash' as the founder would like. This suggests that the founder still has the propensity to assume risk but it is curtailed involuntarily.

Organisational context

The nature of the industry had an impact on how risk was assessed and managed by entrepreneurs. Many founders in the software industry talked about the huge costs associated with software development and the high rate of technological change. One entrepreneur found that the early years of business start-up were a 'real struggle' and that the experience of software development in the Irish context had 'broken the spirits of many.' He was very receptive to a licensing arrangement with a Japanese multi-national as a result of the financial struggle endured. His perception of risk increased over time. Another founder of a software firm claimed that most Irish software companies are not properly capitalised from the outset. He did not have the resources to develop a new software product and was obliged to seek a strategic partner and venture capital which reduced financial risk. The founders of knowledge-based companies endured early years of struggle which made them receptive to the idea of licensing, of collaboration with competitors, partnership arrangements, all of which were an alternative to the high-risk go-it-alone strategy.

Intrinsic factors

Link with crisis, personal learning and experience

In addition, the entrepreneur, in interaction with organisational history and context, begins to perceive risk in somewhat different terms. The psychological ramifications of crisis cannot be overestimated; it provided a valuable lessons of experience for the founder. Problems and crisis, which were generally not foreseeable at start-up, arose

which increased the entrepreneur's perception of risk. Since the entrepreneur is likely to have devoted himself to the venture at a personal level, business crisis becomes the crisis of the individual and a greater awareness of the consequences of one's actions was developed. For instance, one founder of a software firm described himself as a 'risk-taker' in the early days and at a later stage described himself as a 'risk planner', reflecting the lessons gained from the early years of struggle. Another founder of a toothpaste firm became aware that risk-taking combined with the lack of proper credit control procedures contributed to the crisis. Not only did crisis result in changes in risk perception, it also resulted in substantial learning for the entrepreneurs. In a software services firm, management became 'more contemplative' and 'more prudent' about how money was spent, after a period of rapid growth ended in crisis. Valuable lessons were learned in terms of managing product development, marketing and financial planning and control. Most entrepreneurs became aware of their areas of weaknesses, the need for new complementary skills, and the need for change within the organisation.

Link with typologies

As previously discussed, entrepreneurs are not similar in nature: some, like the charismatic entrepreneurs have a strong propensity to assume risk, while the pragmatists are more cautious. Being in a position to take risk is not the same as actually taking risk. Therefore risk-taking is a function of the individual's personality, but also reflects personal learning, previous experience with risk situations (such as crisis) and organisational context.

Discussion

In the following section, the significance of the study's findings are discussed in relation to the literature.

Typology research

The single, dominant image of the entrepreneur is that of the 'heroic' risk-taker. There is a minor, but growing literature that differentiates between types of entrepreneurs.

Typology theory itself was set forth by Smith (1967) who focused on the types of firms set up by two types of entrepreneurs: the craftsman and the opportunist. The craftsman was motivated by the desire to do the type of work that he enjoyed whereas the opportunist was motivated by the desire to build an organisation. A similar study by Birch (1987) posited two types: the 'income substitutor' and the 'builder' which reflected their attitudes to a growth strategy. More recently, a study by Miner, Smith and Bracker (1992) provided convincing evidence that the inventor-entrepreneur (suggested earlier by Smith) did indeed exist. The major concern of this type was to develop an organisation, not as an end in itself but rather as a vehicle to allow the invention and production of various products. These typologies suffer from the drawback of attempting

to embrace all types of entrepreneurs under one dimension attitude to growth.

More recent typologies capture some, but not all, of the traits displayed by the charismatic and pragmatic types profiled in this study. The charismatic entrepreneur shares some of the characteristics of the visionary (Bennis and Naunus, 1994) or charismatic leader (Bryman, 1993), and even the prototypical entrepreneur (Chell and Haworth, 1992) – described as being proactive, highly innovative, intuitive, adventurous and blessed with the ability to promote the company.

The pragmatist displays some of the traits of the ‘quasi-entrepreneur’ (Chell and Haworth, 1992); this type carefully considers an idea before pursuing it with the result that growth may be constrained. Hornaday’s (1990) ‘promoter’ type is also relevant since this type shows more loyalty to career rather than to the company. ‘Promoters’ are interested in personal gain and drain cash out of their firms without regret; they found, grow and sell the businesses as a normal way of doing business. Drucker’s (1974) description of the managerial type captures something of the spirit of the pragmatist. Likewise, Sexton and Bowman (1985) describe the entrepreneur as a ‘capable executive’ which seems to question the flamboyant, larger-than-life image of the entrepreneur in the popular press.

While existing typologies come close to capturing some of the differences between the charismatic and pragmatic types described here, terms such as ‘income substituter’, ‘promoter’ or ‘quasi entrepreneur’ do not quite capture the essential contrast that the pragmatic entrepreneurs presented from the more ‘heroic’ type in this study. The distinction offered here offers further insight. Here, the difference is not just in growth-orientation but it seems to be in more fundamental personal world views. The charismatic type is a romantic who seems to be driven by transcendent aims; the pragmatic type is a rationalist who seems to have a more calculating and instrumental outlook in terms of business and personal goals. This study proposes a more in-depth profile of entrepreneurial types based on their fundamental values, motivations, attitudes and approaches to strategy formation.

The charismatic entrepreneurs are driven by emotion-rich values (e.g. to be a world class supplier) whose reward comes from turning a dream into a reality. The pragmatist, on the other hand, relies more on analytical reasoning and hard facts rather than on the non-rational, visionary, intuitive approach of the charismatic entrepreneur. The distinction drawn here between the charismatic and pragmatic type reflects a similar distinction between ‘romanticism’ and ‘rationalism’ in western philosophy (Ebers, 1985). Ebers (1985) noted that the belief in the supremacy of reason was inherent to rationalists. The rationalist approach dominated organisational studies until recently with its tendency to view organisations as goal-oriented, efficiency-seeking entities. Ebers (1985, p. 53) noted that the symbolist perspective ‘originated in dissatisfaction with the exclusively analytical-quantitative approaches dominating organisational analyses until recently’. Romanticists, on the other hand, recognise that not all areas of human experience can be known through reason and hard facts, and that some areas are

accessible only to non-rational faculties and may lie with intangibles such as imagination. Culture and symbolism consider intangibles and highlight the limitations of prevailing 'objective' research efforts.

This study differs from others in that it acknowledges the positive aspects of the charismatic and pragmatic types of entrepreneurs. While the pragmatists did not share the same passion as the charismatic entrepreneurs, their companies enjoyed success. In the literature, however, it is taken for granted that value-rich leadership is a source of superior performance (Leavy, 1996). One study by Collins and Porras (1995) found that, contrary to conventional wisdom, the success of some of the world's most well known companies was neither due to great ideas nor great and charismatic entrepreneurs. This study on SMEs found some support for this view. However, it must be recognised that the research design of this study did not incorporate robust measures of company performance.

The literature on risk

The topic of risk has, been, and still remains a source of controversy in the literature. For instance, there has been considerable debate as to whether entrepreneurs are high, low or moderate risk takers (Brockhaus, 1987). Theorists (Knight, 1921; Liles, 1981; Begley and Boyd, 1987) generally define risk in terms of personal attributes. Furthermore they tend to use static terms of reference in relation to traits since attributes are measured at a particular point in time. This view of risk can be contrasted with more recent thinking on the subject which sees risk more as a strategy and contextual variable (Ray, 1993; Ray 1994; Deakins, 1996). Perry (1990) made the insightful distinction between the perception of risk and propensity to take risk. He argued that the perception of risk is what distinguishes the entrepreneur from the rest of population; it is not a personality trait, an approach or reaction to the world but a perception of the world. A logical conclusion is that both perceptions and traits are open to change, which is not fully acknowledged by the trait perspective.

In this study, personal learning was shown to play an important part in altering the founder's perception of risk. Learning theorists states that learning is constructed in relation to the context of the individual's life, prior knowledge and experience (Perkins, 1994). In other words, learning is context-dependent and socially-constructed (Krueger and Hamilton, 1995). Isabella (1990) found that it is external events that appear to trigger a shift in thinking and moves individuals from one interpretative stage to another. Isabella (1990, p. 33) pointed out that cognition and emotion were intertwined and that 'personalization of trigger events appears to bring an affective dimension into play'.

Since crisis is a highly charged, emotive event, then it would be expected that crisis would lead to a change in the entrepreneur's views. In this study, early crises and years of struggle helped break certain ways of thinking and acting. Van de Ven (1980) suggested that personal crisis initiates change in cognition. Both Hedberg (1981) and

Pitts (1989) argued that it may take trauma or the experience of crisis to help management alter culture and so unlearn deeply held beliefs.

Conclusion

It can be argued that the research on traits is extremely important, and cannot be forgotten in any serious attempt to understand entrepreneurship. It was shown that different types of founder exist which challenges the single, stereotypical image of the entrepreneur in the literature. The literature rarely accommodates the pragmatic type of entrepreneur, mainly because the notion of entrepreneurship is a popular and potent one. Given the prevalence of the pragmatist, the universality of the traditional model is called into question.

The research on 'how' entrepreneurs behave is also appropriate since it provides a clue as to how a strategy is formed over time. While there are good reasons for believing in the primacy of the founder and in the influence of entrepreneurial traits on the strategy formation process, the findings suggest that other variables such as the ability to learn from experience, adapt to change, deal with crisis is also important. This study, by looking at the influence of the entrepreneur on the strategy formation process, showed that the risk taking propensity of the entrepreneur varies with time and tenure. The study highlighted the dynamic nature of entrepreneurship. Personality trait theory can be taken to task for adopting static terms of reference and ignoring the individual's potential to learn from experience and adapt accordingly. In this study entrepreneurship was seen as a process as well as a psychological property of the individual.

Implications for policy makers and future research avenues

Until quite recently, it was perceived that entrepreneurship was the province of the rare and exceptional individual. This led to scepticism on the part of many as to the ability of policy makers to influence the supply of entrepreneurs. However, this study proposed another type, the pragmatist, whose distinguishing characteristics may be more widely distributed throughout the general population. This type may be more responsive to state incentives and state training schemes.

The research found that learning and change was a significant aspect of the founder's development. This suggests that personal appraisal is neglected by founders in SMEs and receives attention only after the experience of crisis. The entrepreneur's willingness to listen to, and accommodate, the views held by other organisational stakeholders may help the entrepreneur avoid the problems that arise due to poor management. This suggests that soft support such as education, training, advice, mentoring support, management development programmes, etc. may be useful.

Finally, this was an exploratory study and should be followed by more systematic studies that evaluate change in risk-taking behaviour, and that test the two main types of founders against a wider sample. It may be likely that variations in company culture,

company structure, company performance or approach to strategy formation, may be linked to these distinct types of entrepreneurs.

References

- Bennis, W and Nanus, B. 1985. *Leaders: The strategies for taking charge*. New York: Harper and Row.
- Birch, D. 1987. 'Job Creation in America: How our Smaller Companies Put the Most People to Work', *Task Force on Small Business*, Dublin: Stationary Office, 41.
- Birley, S., (1987). 'The Role of Networks in the Entrepreneurial Process', *Journal of Business Venturing*, Vol. 2, pp. 155–165.
- Bower, J. (1970). *Managing the Resource Allocation Process*. Cambridge, Mass. Harvard University Press.
- Burgelman, R. (1983). 'A Process Model of Internal Corporate Venturing in the Diversified Major Firm', *Administrative Science Quarterly*, Vol. 28, pp. 223–244.
- Brockhaus, R. (1980). 'Risk-Taking Propensity of Entrepreneurs', *Academy of Management Journal*, Vol. 23, 3, pp. 509–520.
- Brockhaus, R. (1987). 'Entrepreneurial Folklore', *Journal of Small Business Management*, Vol. 25, pp. 1–6.
- Bryman, A. 1993. 'Charismatic Leadership in Business Organisations: Some Neglected Issues'. *Leadership Quarterly*, Vol. 4, 3/4, pp. 289–304.
- Chell, E. and Haworth, J. 1992. 'A Typology of Business Owners and Their Orientations towards Growth', in Caley, K. *et al.* (Eds.) *Small Enterprise Development Policy and Practice in Action*. London: Paul Chapman.
- Collins, J and Porras, J. 1995. *Built to Last*. London: Century Ltd.
- Covin, J. and Slevin, D. 1990. 'New Venture Strategic Posture, Structure and Performance: An Industry Life Cycle Analysis', *Journal of Business Venturing*, Vol. 5, pp. 123–135.
- Cromie, S. and Callaghan, I. (1997) 'Assessing Enterprising Attributes – The Usefulness of Caird's General Enterprising Tendency (GET) Test', *Small Business and Enterprise Development*, 4, pp. 65–71.
- Deakins, D. (1996). *Entrepreneurship and Small Firms*. Great Britain: McGraw Hill.
- Drucker, P.F. 1974. *Management: Tasks, Responsibilities, Practices*. New York: Harper and Row.
- Drucker, P.F. 1985. *Entrepreneurship and Innovation: Practice and Principles*. New York: Harper Business.
- Ebers, M. 1985. 'Understanding Organisations: The Poetic Mode', *Journal of Management*, Vol. 11, 2, pp. 51–62.
- Gartner, W. 1985. 'A Conceptual Framework for Describing the Phenomenon of New Venture Creation', *Academy of Management Review*, Vol. 10, 4, October, pp. 696–706.
- Glaser, B.G. and Strauss, A.L. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Adline.
- Gibb, A. and Scott, M. (1985). 'Strategic Awareness, Personal Commitment and the Process of Planning in the Small Business', *Journal of Management Studies*, Vol. 22, 6, pp. 597–631.
- Gilder, G. 1984. *The Spirit of Enterprise*. New York: Simon and Schuster.
- Hanlon, D. and Scott, M. 1995. 'Strategy Formulation in the Entrepreneurial Small Firm', in S. Birley and I. MacMillan (Eds) *International Entrepreneurship*. London and New York: Routledge, pp. 17–38.

- Hedberg, B. 1981. 'How Organisations Learn and Unlearn.' in P. Nystrom and W. Stabuck (eds.) *Handbook of Organisational Design*. New York: Oxford University Press, Vol. 1, pp. 3–27.
- Hobbs, D. 1991. 'Business as a Master Metaphor: Working Class Entrepreneurship and Business-like Policing', in R. Burrows (ed.) *Deciphering the Enterprise Culture*, London: Routledge.
- Hornaday, J. 1990. 'Dropping the E Words From Small Business Research: An Alternative Typology', *Journal of Small Business Management*, Vol. 28, 4, pp. 23–33.
- Isabella, L.A. 1990. 'Evolving Interpretations as a Change Unfolds: How Managers Construct Key Organisational Events', *Academy of Management Journal*, Vol. 33, 1, pp. 7–41.
- Kets de Vries, M. 1990. 'The Anatomy of the Entrepreneur: Clinical Observations', *Human Relations*, Vol. 49, 1.
- Knight, F. 1921. *Risk, Uncertainty and Profit*. New York: Houghton Mifflin.
- Krueger, N. and Hamilton, D. (1995), 'Constructivism and entrepreneurship education', in T. Monroy, J. Reichert and F. Hoy (eds) *The Art and Science of Entrepreneurship Education*, Vol. 3, Berea, OH, MES Inc, pp. 11–21.
- Leavy, B. 1996. *Key Processes in Strategy: Themes and Theories*. London: International Thomson Business Press.
- Liles, P.R. 1981. 'Who Are The Entrepreneurs'? in Gorb, P, Dowell, P and Wilson, P. *Small Business Perspectives* (pp. 33–50) Armstrong Publishing. London: London Business School.
- McGrath, R., MacMillan, I. and Scheinberg, S. (1992), 'Elitists, Risk-takers and Rugged Individualists? An Exploratory Analysis of Cultural Differences Between Entrepreneurs and Non Entrepreneurs', *Journal of Business Venturing*, Vol. 7, pp. 115–135.
- MacMillan, I., and Day, D. 1987. 'Corporate ventures into industrial markets: dynamics of aggressive entry', *Journal of Business Venturing*, Vol. 2, 1, Winter, pp. 29–39.
- Miner, J., Smith, N. and Bracker, J. (1992). 'Defining the Inventor-Entrepreneur in the Context of Established Typologies', *Journal of Business Venturing*, Vol. 7, pp. 103–113.
- Mintzberg, H., Raisinghani, D., and Theoret, A. 1976. 'The Structure of 'Unstructured' Decision Processes', *Administrative Science Quarterly*, Vol. 21, 246–275.
- Mintzberg, H., and Waters, J. 1982. 'Tracking Strategy in an Entrepreneurial Firm', *Academy of Management Journal*, Vol. 25, 465–499.
- Mintzberg, H. (1978). 'Pattern in strategy formation', *Management Science*, Vol. 24, pp. 934–948.
- Palmer, M. (1971). 'The Application of Psychological Testing to Entrepreneurial Potential', *California Management Review*, Vol. 13, 3.
- Perkins, D. (1994). *Smart Schools: from training memories to educating minds*. New York: Free Press.
- Perry, C. 1990. 'After Further Sightings of the HefflaLump', *Journal of Managerial Psychology*, Vol. 5, 2, pp. 22–31.
- Pitt, M. 1989. 'Crisis Modes of Strategic Transformation; A New Metaphor for Managing Technological Innovation', in *The Strategic Management of Technological Innovation*. University of Bath: John Wiley & Sons.
- Ray, D. 1993. 'Understanding the Entrepreneur: entrepreneurial attributes, experience and skills', *Entrepreneurship and Regional Development*, Vol. 5, 4, pp. 345–357.
- Ray, D. (1994) 'The Role of Risk Taking in Singapore', *Journal of Business Venturing*, Vol. 9, pp. 157–177.
- Roure, J., and Maidique, M. 1986. 'Linking Pre-funding factors and high-technology venture success: An exploratory study', *Journal of Business Venturing*, Vol. 1, 3, pp. 295–306.

- Sandberg, W., and Hofer, C. (1987), 'Improving New Venture Performance: the role of strategy, industry structure, and the entrepreneur', *Journal of Business Venturing*, Vol. 2, 1, pp. 5–28.
- Sarason, S. 1972. *The Creation of Settings and Future Societies*. San Francisco: Jossey-Bass.
- Sexton, D. and Bowman 1985. 'The Entrepreneur: A Capable Executive and More.' *Journal of Business Venturing*, Vol. 1, pp. 129–140.
- Smith, N. 1967. *The Entrepreneur and His Firm: The Relationship Between Type of Man and Type of Company*. East Lansing, Michigan: Michigan State University Press.
- Smith, K. and Kofron, E. (1996), 'Towards a Research Agenda on Top Management Teams and Strategy Implementation', *IBAR*, Vol. 17,1, pp. 135–152.
- Stevenson, H. and Jarillo, J. (1990), 'A Paradigm of Entrepreneurship: Entrepreneurial Management', *Strategic Management Journal*, Vol. 11, pp. 17–27.
- Van de Ven, A. 1980. 'Problem Solving, Planning and Innovation: Part Two – Speculation for Theory and Practice', *Human Relations*, Vol. 33, pp. 757–779.
- Wilken, P. 1979. *Entrepreneurship, A Comparative and Historical Study*. Ablex, Norwood. New York.