
Non-local intuition and the performance of serial entrepreneurs

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Abstract: Understanding how and why entrepreneurs decide to pursue one venture as opposed to another has managed to elude entrepreneurship researchers. Of late, there has been a renewed interest in the role and importance of intuition to the entrepreneur.

Two recent publications concerning electrophysiological evidence of intuition (McCraty *et al.*, 2004a–b) and the relationship of motivations with spiritual intelligence (Zohar and Marshall, 2000) suggest the need to evaluate how we access our deepest meanings, values, purposes and highest motivations in recognising opportunities. This has shed some light on how we interpret meaning in the world around us and its impact on decision-making.

This paper argues that entrepreneurs use all three levels of intelligence: namely intellectual, emotional and spiritual intelligence. Using intuition and value driven motivations, the serial entrepreneur can change a business-as-usual paradigm to a creative business of high growth and spiritual worth. It will be shown that the heart autonomic nervous system is involved in the processing and decoding of intuitive information.

Keywords: intuition; spiritual intelligence; motivation; serial entrepreneurs.

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1 Introduction

The twentieth century Jewish mystic Rabbi Abraham Heschel wrote: “A person who knows God will see without eyes, hear without ears, perceive things which his senses cannot perceive and comprehend without reasoning”.

Do successful entrepreneurs respond to and assimilate information differently, and does this contribute to how they make decisions? Shane and Venkataraman (2000) proffer that two factors influence the probability that particular people and not others are able to discover and exploit opportunities: the possession of the information necessary to identify an opportunity and the cognitive style necessary to exploit it (Shane and Venkataraman, 2000). We propose that a third option must be considered, that of non-local intuition. We propose that non-local intuition is “...the daily effort that comes from no deliberate intention or programme but straight from the heart” (Quoted in Keller, 1983). A recent study has found that the heart appears to receive intuitive information before the brain and that intuition is not confined to cognitive-based perception but involves the entire electrophysiological system, manifesting through a wide range of emotional feelings and physiological changes (McCraty *et al.*, 2004a)

The reason this approach was taken in understanding entrepreneurial behaviour is because particular styles of knowing are more appropriate than others for the conduct of entrepreneurial activities (Allinson and Hayes, 1996). Consider why some entrepreneurs just seem to be at the right place at the right time whilst others just never seem to get it right.

Unlike scientists, entrepreneurs do not enjoy the luxury of making decisions on the basis of orderly time consuming rational analysis (Simon, 1987).

In rational decision-making, goals and alternatives are made explicit, the consequences of pursuing different alternatives are calculated and these consequences are evaluated in terms of how close they are to the goals (Barnard, 1938). In today’s business world, for the entrepreneur to succeed, the response to the need for a decision is usually rapid, too rapid to allow for an orderly sequential analysis of the situation. The amount of information available also provides a significant hindrance to a thorough analysis that in itself is very time consuming.

Whilst there has been a significant focus of attention on entrepreneurial behaviour, understanding how entrepreneurs make decisions has been less researched and, therefore, understood. Most scholars agree that what differentiates an entrepreneur from the rest is their behaviour. Nevertheless, attempting to differentiate the behaviour of an entrepreneur from others has, thus far, been proven difficult (Keh *et al.*, 2002; Mitchell *et al.*, 2002).

Even though there has been a failure to uncover some homogenous traits, practitioners, scholars, venture capitalists and financiers consider the entrepreneur to be critical to the success of the firm (Mitchell *et al.*, 2002). Whilst there has been little substance to the entrepreneurial personality, it seems counterintuitive to ignore individual differences (Krueger, 2003). For this reason, an alternative approach of how entrepreneurs make decisions was chosen so as to determine whether this avenue of investigation can provide some clarity in differentiating the behaviour of serial entrepreneurs.

Although this paper argues that understanding intuitive processes maybe critical in understanding entrepreneurial behaviour, there is scant research on the topic. Apart from many popularised treatments of intuition in the literature, there are only a handful of serious scholarly works on the subject. Consequently, field research... is virtually non-existent (Khatri and Alvin, 2004).

Allinson *et al.* (2000) argue that the nature of entrepreneurship and the style of the successful entrepreneur will, by necessity, be more intuitive. They argue that entrepreneurs tend to bypass rigorous analysis because they are decisive and appreciate the time value of money and the competitive nature of most markets and industries.

2 Intuition – what is it?

Over the years, there has been much work on understanding intuition; it has contributed very little to our understanding of how it is affected in business. The aim of this research is to understand intuition and to determine if there is an association between successful entrepreneurial behaviour and the propensity to use intuition in decision-making.

So, what is intuition and why is it important? One argument is that intuition is the ability of an individual to access their subconscious mind. Whilst the subconscious mind is able to synthesise up to 50 million bits of information per second, the conscious mind is only able to process about 50 bits of information over the same time (Nørretranders, 1999).

Bargh in Myers (2002,p.29) argues that intuitive behaviour reflects the personal history that has been stored in the subconscious. Some (Barnard, 1938; Simon, 1987; Myers, 2002) argue that intuition is just pattern recognition whilst others suggest that intuition is forgotten information stored in the subconscious mind (McCraty *et al.*, 2004a).

Barnard (1938) does not regard the non-logical processes of decision-making as magical in any sense; he argues that they are grounded in knowledge and experience:

“The sources of these non-logical processes lie in physiological conditions or factors, or in the physical and social environment, mostly impressed upon us unconsciously or without conscious effort on our part. They... are a mass of facts patterns, concepts, techniques, abstractions and generally what we call formal knowledge or beliefs. These mental processes are greatly increased with directed experience study and education.”

Various models of pattern recognition have been devised by cognitive psychologists. For rationalists, opportunity recognition exists in the external world as complex patterns of observable stimuli (Baron, 2004). We recognise objects or patterns through a number of inter-related processes. One such process is the *feature-analysis model* (Baron, 2004). This model suggests that patterns are identified by their distinctive features. In opportunity recognition, this may be economic value and newness of a product or service. The drawback with this model is that it is primarily applicable to simple patterns.

In contrast, *prototype models* apply to more complex patterns. Through experience, we construct prototype models that is, what a particular model should look like. Prototypes are the most commonly experienced object or patterns of a prototype. For opportunity recognition, an entrepreneur may seek central characteristics such as the

likelihood of competition, economic value, desirability and other characteristics critical to their prototype. The likelihood of a match would enable an entrepreneur to conclude whether the opportunity is worth pursuing (Craig and Lindsay, 2001 in Baron).

The final model of pattern recognition emphasises the importance of specific knowledge. It is known as an *exemplar model* (Hahn and Chater, 1997 in Baron). Hahn and Chater (1997) would argue that an individual would compare existing opportunities with exemplar models of excellent and poor business opportunities. This fits well with the argument that entrepreneurs' "just know a good opportunity when they see one".

Simon's (1987) intuition is merely the application of one's professional judgment to the situation. It could use any of the aforementioned pattern recognition models. Simon's makes his point on a Grand Chess Master's ability to make strong moves quickly. He argues that his skill is in his knowledge, acquired by long experience of the kinds of patterns and clusters of pieces that occur on chessboards. For a Chess Master a chess board is not an arrangement of 25 pieces but an arrangement of a half a dozen familiar patterns that previous experience recognises. The skills of the manager depend on the same kind of intuitive skills of chess masters (Simon 1987).

Whilst a significant amount of argument originates from the belief that intuition extrapolations are based on information stored in the subconscious from forgotten memories (Sarbin *et al.*, 1960), we believe that there is another type of intuition. The Briggs-Myers and McCaulley (1985) defines intuition as the "meanings, relationships and possibilities that go beyond information from the five senses". We have coined this type of intuition as Non-local Intuition.

3 Non-local intuition

The concept of non-locality was established in the field of quantum physics to provide a relatively intelligible and intuitively graspable account of how the quantum process may be described. Bohm and Peat (2000) uses the term 'active information' to emphasise that although an electron moves under its own energy, the information in the form of its quantum wave or field directs the energy of the electron. This is similar to Bohr's approach in its emphasis on undivided wholeness; but different from it, for this wholeness now becomes analysable in thought.

Bohm and Peat (2000) state:

"When several particles are treated in the causal interpretation then, in addition to the conventional classical potential that acts between them, there is a quantum potential which now depends upon all the particles. Most importantly, this potential does not fall off with the distance between particles, so that even distant particles can be strongly connected. This feature, in which very distant events can have a strong influence, is what is meant by a non-local interaction and is strongly at variance with the whole spirit of classical mechanics."

Bell (1964) established a theorem that provides strong evidence for a non-local form of interaction. This result follows in a natural way, within the above Bohm statement as a result of the non-local quantum potential that directly connects distant particles. This is the essence of interconnectedness in the universe and the transfer of information across space.

Intuition, as currently defined, is based upon very linear understandings of cognition in processing information already existent in the data banks of the brain. However, using the example of physics, and the fact that humans are also composed of energy fields and potentials, it follows that these fields can interact with others in the universe. In other words, the human is interconnected to the environment.

Non-local intuition can then be examined as that active information available from the surrounding quantum field (that is 'outside' the body) and its interaction with the energy particles of the human body.

Some groundbreaking work being conducted at the HeartMath Research Centre, Institute of HeartMath in California by McCraty, Atkinson and Bradley has found that there are instances when 'intuitive insights' are unrelated to information and experiences stored in the subconscious. Intuition is not confined to cognitive-based perception, but involves the entire psycho-physiological system often associated with emotional and or physiological responses (McCraty *et al.*, 2004a; Bierman, 2000; Radin, 1997a; Spottiswoode and May, 2003). It is a process by which information normally outside of the conscious processes is sensed and perceived in the body and mind as certainty of knowledge or feeling about an occurrence that is yet to happen. We believe that such intuition (non-local) involves the body's connection to a field of energy beyond normal consciousness (Spottiswoode and May, 2003; Loye, 1983). This has been referred to as interconnectedness or collective consciousness.

This type of sensing is not unique to humans. Throughout recorded history, accurate premonitions of impending natural disasters by birds and animals have been recorded. A comprehensive study of animal's premonition concluded that pets can sense the return of their owners long before they can see or hear them (Sheldrake, 1999; McCraty *et al.*, 2004b).

There are many instances where we, as humans, have sensed that some action we are about to take, despite the supporting evidence, was not the most appropriate course of action. Alternatively, some course of action, despite all the evidence to the contrary, seemed 'the right thing to do'. As one of the respondents commented on his experience, 'looking back, it was almost reckless to believe that a small firm such as ours could compete against Intel and win. But there was no doubt in my mind that we were going to do it'.

Other studies have challenged the perception that intuition is merely accessing forgotten information stored in the unconscious. Studies conducted by Bierman (2000) Radin (1997a; Spottiswoode and May (2003) have all confirmed that the body can and does respond to pre-stimulus (McCraty *et al.*, 2004a; McCraty *et al.*, 2004b).

McCraty *et al.* (2004a) found that the heart and the brain both appear to receive information about a future emotional stimulus prior to actually experiencing that stimulus. Therefore, intuitive perception is not a discrete function produced by the brain. It may be a system-wide process involving at least the heart and the brain, which might explain a very common statement by serial entrepreneurs interviewed that a particular course of action seemed 'the right thing to do'.

However, we do not argue that decision-making skills are an either or approach being analytical or intuitive. Adopting a dichotomous approach to decision-making is an oversimplification of the decision-making strategies that entrepreneurs adopt. It is unlikely to find entrepreneurs who rely exclusively on non-local intuition, pattern recognition or analysis. Evidence suggests that individuals do not always process

information consistently across all situations (Hayes and Allinson, 1994). Allinson *et al.*, (2000), in their findings, suggested that there are particular situations where intuitive decision-making was more likely to occur. This occurred in situations where the information was limited; there were time constraints, or a great deal of complexity (La Pira and Gillin, 2004). This research proposes that entrepreneurs use both cognitive and non-local intuitive decision-making as an adjunct to their analytical decision-making.

Where does this decision making process emanate from? What is it that gives an entrepreneur the insight that guides this decision-making?

4 SQ the basis of non-local intuition

Our intellectual or rational intelligence is what we use to solve logical problems. In the early part of the 20th century, psychologists devised the intelligence test known as the IQ test. The theory goes that the higher a person's IQ, the greater their propensity to solve complex logic problems. IQ is useful for solving problems that are deterministic and linear. If A occurs, B will happen every time. This type of thinking does not tolerate ambiguity or nuances (Zohar and Marshall, 2000). Goleman (1999) argued that the rules for work were changing and a new 'yardstick' was required. It was not enough to be smart enough, the new measure focuses on personal qualities such as, initiative, empathy, persuasiveness and adaptability – and is referred to as Emotional Intelligence (EQ) (Goleman, 1999). Zohar and Marshall (2000) describe this as associative thinking. At its simplest form, it is the link between our emotions and bodily feelings. For instance, if we are tired, our body responds by seeking relaxation. EQ also enables us to recognise patterns and learn skills.

However, the vastness and richness of the human soul and imagination cannot be explained by IQ or EQ or a combination of both (Zohar and Marshall, 2000). Spiritual intelligence enables us to ask why, to reflect over the righteousness of our decisions and to envision our possibilities, our dreams, aspirations and to raise ourselves out of the materialistic existence in which we wallow. So in the 21st century, our focus has shifted once again towards a search for meaning through spirituality.

Religion and spirituality – normally subjects that are unmentionable, are suddenly on the agenda as employees search for more meaning, as business leaders seek more socially responsible approaches to business and new ways to motivate and inspire workers (Garcia and Claude, 2003). The corporate greed of the 1980s, 11 September 2001 and the subsequent military responses, have all contributed to a re-examination of the nature and meaning of work and life by many and to the emergence of both a more personal and widespread understanding of our spirituality.

In a recent study of spirituality in the workplace that was published in the Sloan Management Review by Mitroff and Denton (1999), they defined spirituality as “the basic feeling of being connected with one's complete self, others and the entire universe”. If a single word best captures the meaning of spirituality and the vital role that it plays in people's lives, that word is interconnectedness. As one interviewee replied, “I think that the spiritual side of what we do [running our business] is the wholeness, inspiration and willingness to share and contribute”.

According to Turner (1999), spirituality comes from within, beyond the survival instincts of the mind:

“It means engaging the world from a foundation of meaning and values. It pertains to our hopes and dreams, our patterns of thought, our emotions, feelings and behaviours. As with love, spirituality is multidimensional and some of its meaning is inevitably lost when attempts are made to capture it in a few words.”

Spiritual Intelligence (SQ) is the intelligence that rests in the deep part of the self that is connected to wisdom from beyond the ego, or conscious mind, it is the intelligence with which we creatively discover new values. SQ lights our way through what mystics call the ‘eye of the heart’ (Zohar and Marshall, 2000). For Jews and Christians, the ‘eye of the heart’ is a metaphor for intuition. It is that inner voice that guides us in our everyday life. It is essentially about ‘doing what feels right’ and that emanates from our interconnectedness and, we argue, is the basis of non-local intuition.

A person high in spiritual intelligence has an understanding of who they are and what things mean to them and how they fit in the world around them. He/she is inspirational and is more likely to be a servant leader who has higher vision and values (Zohar and Marshall, 2000).

So what qualities are essential to someone who is high in spiritual intelligence? Zohar and Marshall (2000) argue that a person who is high in spiritual intelligence is one who is: flexible and adaptive, they have a high degree of self-awareness and understand their skills and limitations. They have a capacity to face and use suffering and pain whilst avoid causing unnecessary pain to others. They are inspired by a higher purpose and therefore, have appropriate visions and values and therefore, take a holistic view in everything they do. Seeking fundamental answers is an occupation for them and in their search they know that they cannot find these solutions doing what everybody around them is doing. Therefore, they are unconventional in their ways and are most likely to push the boundaries.

In order to understand how we used this information in this research paper, the following section outlines our research methodology followed by our findings.

5 Methodology

Twenty-one serial entrepreneurs were selected from two regional centres to assess the propensity for non-local intuition, the unit of analysis being non-local intuition. These were Ballarat in Victoria Australia and Cambridge in the UK. Both regions are prosperous regional centres for very different reasons.

Ballarat was chosen for practical reasons as it happens to be one of the most prosperous regional centres in Australia. It is situated approximately 100 km West of Melbourne. It is the 34th fastest growing regional centre in Australia with a population of 84 000. Ballarat has a university, the Australian Tax Office’s revenue collection centre. IBM has a large data centre situated nearby. Ballarat also has some large organisations such as Mars Confectionary, Bendix Mintex, McCains foods and the Rural Ambulance Service head office.

According to Herriot (2003) at St. John’s Innovation Centre, “twenty years ago Cambridge was a market town with a world class university, a population of 100 000 and a business infrastructure that was immature”. Herriot claims there were only 25 knowledge-based (high tech) businesses in the city employing about 2000 people and no ‘independent’ stock market listed companies.

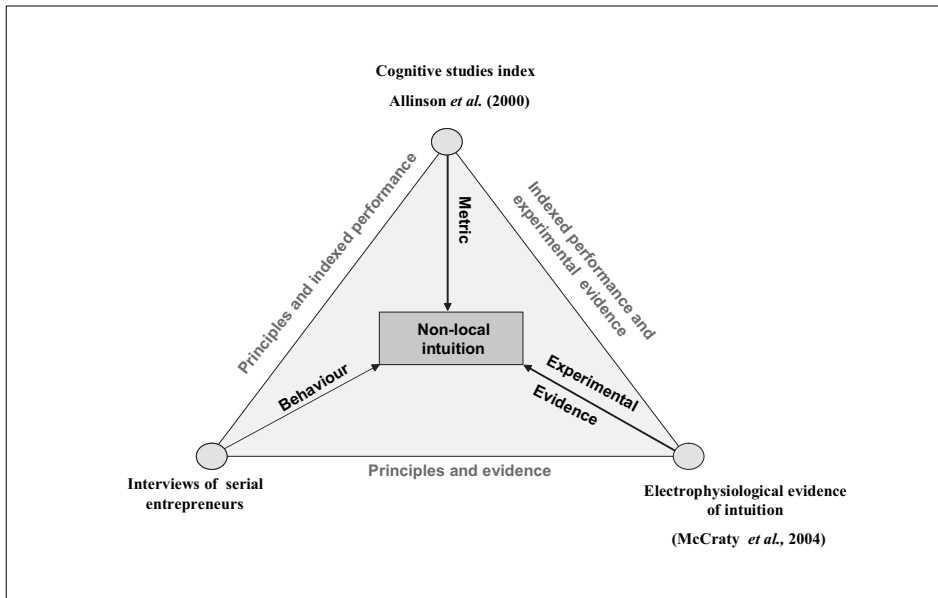
Today, the Greater Cambridge Partnership is reported to identify some 3500 high-tech businesses in the Cambridge area, employing 50 000 staff and making a contribution of £7.6 billion to the UK economy. Newsweek have commented that “in European terms, the growth of the cluster has been spectacular and Cambridge has been identified as one of the seven in the world which could rival Silicon Valley over the next 20 years should it wish to do so”. (Myin *et al.*, 2004) Another interesting aspect of Cambridge is the significant number of serial entrepreneurs in this region (Gillin and Moignard, 2005).

Serial entrepreneurs were chosen for this research because it is hypothesised that they are most likely to demonstrate the characteristics sought. Uncovering opportunities for a new venture is a pre-occupation for them. Shapero (1975) argues that we all have ‘antennae’ and that serial entrepreneurs have theirs tuned to certain frequencies – opportunity recognition frequencies.

In this research, serial entrepreneurs are classified as those entrepreneurs that have/had two or more successful businesses. For the purpose of maintaining some consistency in the selection of respondents for this research, only owners of firms with less than 199 employees were chosen. We used the criteria set down by the Australian Bureau of Statistics (ABS, 1998) definition of a Small to Medium Enterprise, (SME).

Figure 1 illustrates the empirical approach used to assess the propensity of non-local intuition in the decision-making characteristics of 21 serial entrepreneurs. Using the concept of ‘Triangulation’, three assessments were made. These included: Cognitive Style Index, In-depth Interviews and Experimental Evidence.

Figure 1 Research methodology non-local intuition



5.1 Cognitive Style Index

Allinson, Chell and Hayes (2000) proposed that one could discern whether a person was more inclined to rational or intuitive behaviour based on their cognitive style and this was done through the Cognitive Style Index (CSI).¹

The Cognitive Style Index (CSI) is a self-report questionnaire, which consists of 38 questions whose aim is to ascertain whether a respondent's cognitive style is either analytical or intuitive. The instrument is designed so that a person who is analytical is most likely to achieve a high score – maximum of 76. A low score would indicate that the respondent is more intuitive - the lower the score the more intuitive the respondent.

More than 1000 adults participated in the development of the CSI. The principal objective was to develop a new measure which is psychometrically sound and convenient to administer. The CSI was developed because of the paucity of available instruments for large scale studies and because of the lack of independent evaluation of the few easy-to-use self-report measures of cognitive style (Allinson and Hayes, 1996).

Evidence of the construct validity was provided by support for hypothesised relationships with selected instruments. Five instruments were used to validate the CSI; 16 PF (Catell, 1973), MBTI (Myers, 1962), WEPS (Gordon, 1973), Learning Styles questionnaire (Honey and Mumford, 1982) and finally, the Watson-Glaser Critical Thinking Analysis (Watson and Glaser, 1991). Results indicated a distribution of scores closely approximating theoretical expectations, excellent reliability in terms of internal consistency and temporal stability and good initial evidence of construct and concurrent validity (Watson and Glaser, 1991).

5.2 Qualitative analysis of interviews

As well as completing the CSI instrument, each respondent was interviewed using a semi-structured in-depth interviewing process. Using an agreed interview protocol, each interviewee identified and recollected their experience in identifying opportunities and building new firms whilst dealing with difficult business decisions. Spiritual and religious beliefs, as well as philanthropic activities were also important aspects of the interview protocol. The interviews were subsequently transcribed and the content was analysed using a qualitative software programme known as NVivo™. The content analysis protocol advocated by Krippendorff (1980) was used.

The qualitative case study approach was employed because it enabled the researchers to investigate the phenomenon within its contextual environment. This approach assisted the researchers to adopt an exploratory approach that was refined with each interview. The interviews were conducted in a semi-structured manner allowing some freedom of expression.

Neither polar cases nor random selection of respondents was employed because Eisenhardt (1989) argues that neither polar cases nor random selection was necessary or preferable because, cases should be selected so they could replicate or extend the emergent theory. Nevertheless, a significant number of respondents have completed the CSI and their scores are discussed in the results section.

From the CSI and SQ, 25 key terms were identified that were the basis of non-local intuition. Not all of the terms achieved significance in the qualitative analysis of the transcripts. The work of Zohar and Marshall (2000) was used to identify spiritual intelligence and Allinson *et al.* (2000) Cognitive Style Indicators was used to define intuitive behaviour.

5.3 Electrophysiological experiments

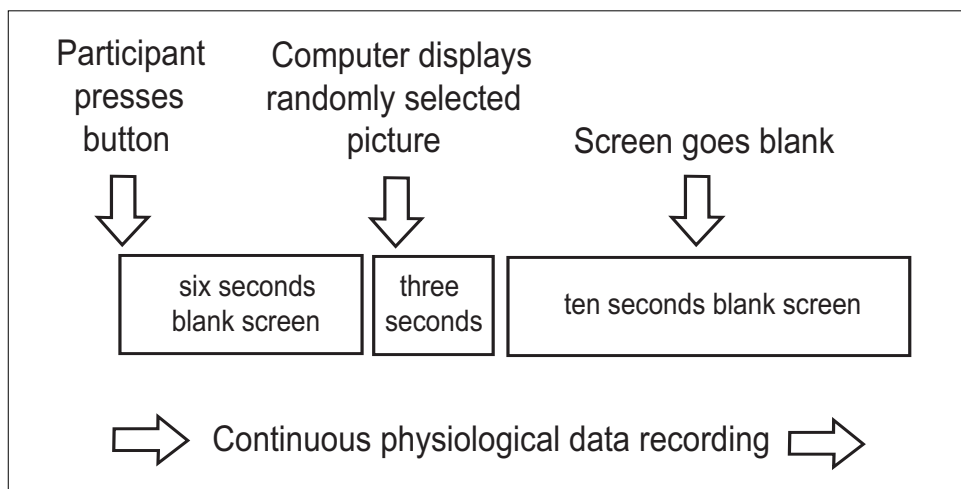
A number of researchers have explored physiologic predictors of future events by investigating whether the human autonomic nervous systems can unconsciously respond to randomly selected future emotional stimuli. Using rigorous experimental protocols, it was found that the body responds to a future emotionally arousing stimulus four to seven seconds prior to experiencing the stimulus (Bierman, 2000; Radin, 1997b; 2003; Spottiswoode and May, 2003) in McCraty *et al.* (2004b).

McCraty *et al.* (2004b) has also found compelling evidence that the body's psycho physiologic systems receive and process information about a future event before the event actually happens. Radin's (1997b) basic experimental protocol was used to determine where and when in the brain and body information about the future event was registered and processed.

Twenty-six participants took part in McCraty's experiment. Each participant had demonstrated a capacity to induce a physiological coherence mode (an analogue for a serial entrepreneur) by combining intentional heart focus with the self-generation of a genuine positive emotion such as opportunity recognition. (McCraty and Childre, 2004)

An electrocardiogram (ECG) was used for measurement of heart rate variability and a 19 channel encephalogram (EEG) for cortical and heartbeat evoked potentials. These measures have all been used to index specific aspects of sensory information processing and can be interpreted according to well-established operational criteria. Each participant viewed 45 pictures in each of two experimental sessions; each session consisted of 30 calm pictures and 15 emotional pictures selected from the International Affective Picture System (IAPS). Both sensory or statistical cueing and participant anticipation effects were controlled for.

Figure 2 Experimental protocol



Participants viewed a computer monitor and were instructed to press a button when ready to begin each trial. Following the button press, the monitor remained blank for six seconds, after which, the computer presented a randomly selected image from one of the two picture sets (calm or emotional) and displayed it for three seconds as in Figure 2. A blank screen followed for ten seconds. After a cool down period, a message appeared to repress the button.

6 Results and analysis

6.1 Interviews and CSI relationships

In this section, we will discuss the findings considering both the outcome of the CSI and the content analysis of the transcribed interviews. But first, it is important to discuss the similarity between the CSI and the SQ analysis.

A person high in spiritual intelligence is adaptable because they are willing to listen to their gut feelings. They go wherever their heart takes them. The same is the case for a person high in intuition. Making decisions based on emotions is an important characteristic of a person high in intuition and spiritual intelligence. Individuals high in spiritual intelligence see the big picture. They usually have a vision, a desire to make a difference and it's not about money. For many, this seems as though they are working against convention, when in fact they are seeking self-actualisation. An example of one such entrepreneur who said, "my aim was to make a difference and I've managed to have done this by working three days a week in my businesses and two days a week giving back to my community". Whilst another said, "I have all the money I need, and now that I've sold off all my companies for \$36 m, I'm going to give it all away".

From our interpretation and research findings, we propose that non-local intuition has the following characteristics that are analogous to spiritual intelligence (see Table 1).

Table 1 Comparing Spiritual Intelligence and Non-Local Intuition

<i>Spiritual intelligence</i>	<i>Non-local intuition</i>
Adaptability	Enjoys change
Making a difference	
Vision	
Self-actualisation	Intuitive – sees the big picture
Money's not a motivator	
Works against convention	
See things in a holistic way	
Faith	Belief in self and decision
Passion	Outcome focused and action orientated
Commitment	
Honesty and integrity	
Reluctance to cause harm	Doing the right thing (emotive decision maker)
Likes people	
Seeks fundamental answers	Listens to the heart

Whilst the experiences, backgrounds and enterprises of the entrepreneurs varied widely, the desire to make a difference was clear and unambiguous. Firstly, we will consider the CSI results.

As can be seen from Figure 3, the majority of respondents scored less than 32, the median CSI score being 28 (dashed line) with a standard deviation of 7.3. The entrepreneurs scored significantly lower when compared with the 1200 managers that were tested in previous studies (Allinson *et al.* 2000). Their mean score was 41 with a standard deviation of 11.

Figure 3 CSI scores

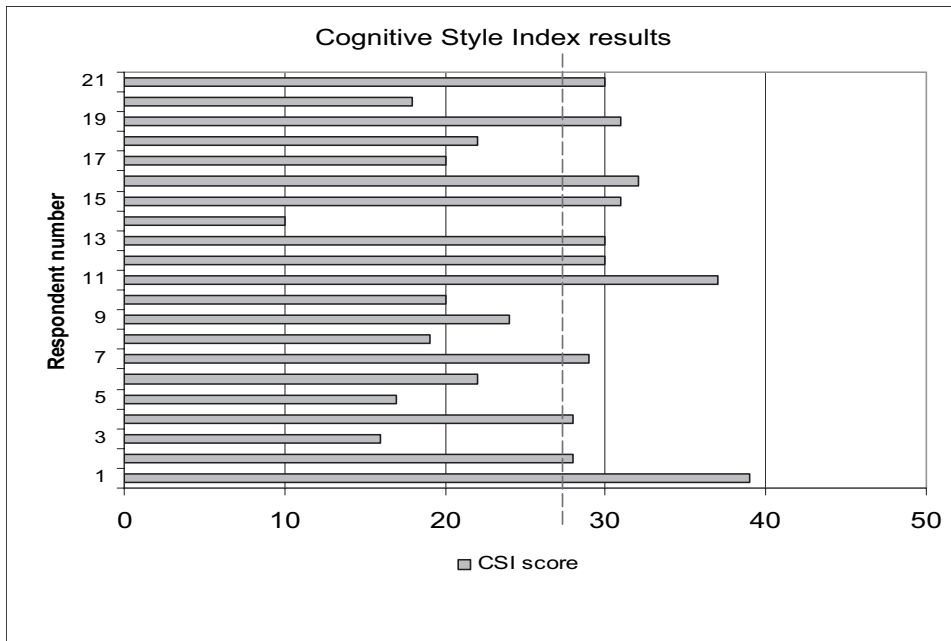


Table 2 Content analysis

<i>Tree node intuition</i>	
<i>Child nodes</i>	<i>Number of passages</i>
Enjoys change	9
Rapid decision-making	7
Emotive decision	6
Detail orientated	6
Rule follower	1
Analytical	6
Safer than sorry	14
Rational	22
Intuitive	36
Risktaker	25

A number of interviewees argued that there had been occasions when they had made a decision that seemed the logical answer, but did not turn out right. The most successful of the entrepreneurs said, "I would not be here today if I had analysed everything I have gotten into, gut instinct tells me the right thing to do and everything else is justification". In the content analysis intuition, risk-taking and rational decision-making scored highly. Table 2 provides an outline of the characteristics and the number of passages.

6.2 *Content analysis results for intuition*

The high score for rational decision-making and a safer than sorry attitude can best be summed up by the one entrepreneur who said, "I think part of being an entrepreneur is to take risks but always mitigating the downside". Mitigating the downside was significantly important as rational decision-making appeared as an important element in the content analysis.

This was demonstrated in one entrepreneur's view of her business success. She said, "I am a procedures freak. That is what has made a significant contribution to the success of this business". Another contributed "you need to be dispassionate to take a business forward. There is no doubt that you have to choose the best route and go for it". But it is not only about choosing the path to take because "some sorts of businesses might succeed and [some] sorts of businesses will not succeed".

Responses to why they chose to pursue a particular new venture were "It just felt right" and "I knew that it would work" or "It never occurred to me that I might fail". It also indicates that entrepreneurs are risk-takers which is an important element of intuition.

Taking risk is part and parcel of entrepreneurial behaviour because "you would never embark upon some [ventures] unless you had unrealistic expectations that you could resolve the problems", said an entrepreneur who built a new plant through bringing together new unproven technologies from around the world. It was very common for serial entrepreneurs to pursue opportunities in industries they knew nothing about as one said, "Success in business partly comes down to taking risks". That is not to suggest that you have to continue at all costs. It is obvious that you must know when to exit because "when ... it is wrong, you reverse out of it quick smart", added the same respondent.

As can be seen in Table 3, the most significant finding in the content analysis of spiritual intelligence is the 'desire to serve'. Almost all of the entrepreneurs pursued opportunities with the intention of making a difference to a group community or their own industry. Out of all the respondents interviewed, only three considered themselves to be religious. Most avoided discussing their spiritual belief, yet acknowledged the importance of leading a spiritual life, a life of doing 'what is right' and contribution.

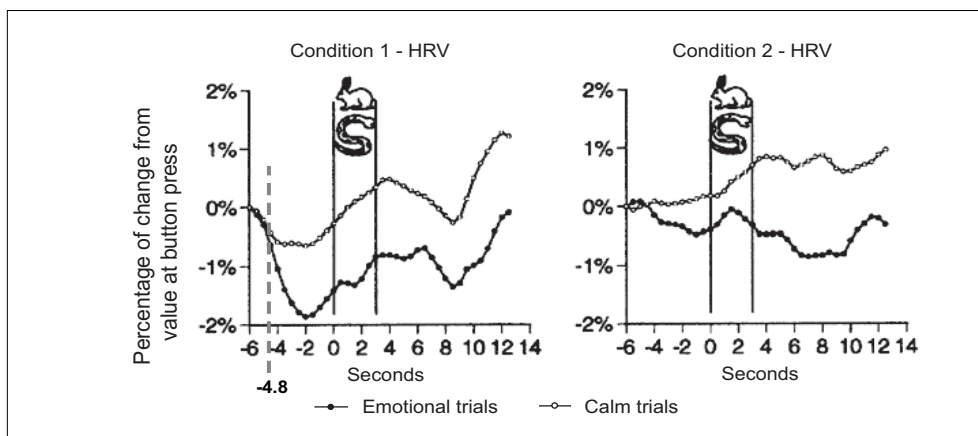
A majority of the Cambridge entrepreneurs were on committees of charities. Several donated a considerable amount of time mentoring young entrepreneurs. Some of the mentors said they got excited by the "wholeness, inspiration and willingness to share and contribute to the development of young entrepreneurs". He continued:

"We need to do this because I think it will be for the common good, for the good of the next generation. It is the excitement and the buzz you feel when you know you are contributing without counting the cost. That is what matters."

We propose the desire to serve has provided serial entrepreneurs with an acute sense of doing what is right.

Table 3 Content analysis of spiritual intelligence

<i>Tree node spiritual intelligence</i>	
<i>Child nodes</i>	<i>Number of passages</i>
Likes people	4
Adaptability	30
Making a difference	47
Vision	18
Faith	13
Passion	16
Commitment	27
Reluctance to cause harm	13
See things in a holistic way	17
Works against convention	16
Honesty and integrity	25
Money's not a motivator	11
Self-actualisation	4
Seeks fundamental answers	13

Figure 4 Heart rate variability

Source: McCraty *et al.* (2004a)

6.3 Electrophysiological experiments and the interviews

The following graph represents the Heart rate variation of the participants during their testing. Condition 1 is the (baseline psycho-physiologic mode). Condition 2 is the post-physiologic coherence. The '0' time point denotes the stimulus onset time. It can be seen from the figures that there is a pre-stimulus time of approximately 4.75 seconds before the pictures (stimulus) were presented. The observed deceleration in the heart, indicates a shift in informational content (McCraty *et al.*, 2004a).

If an individual's heart reacts pre-stimulus to external influences, then we cannot ignore statements from the serial entrepreneur interviews that state they can sense when a decision is appropriate. As one entrepreneur said, "we felt a certain degree of responsibility of doing the right thing", and "I started to feel uncomfortable with what I was doing and it was almost like there was an element of conscience".

We propose that non-local intuition facilitates sensing outside of conscious awareness. Therefore, the psycho-physiologic tests clearly demonstrate that some people are capable of tuning into a virtually instantaneous communication of information between particles separated by space in which particles have 'knowledge' of events before they actually happen (McCraty *et al.*, 2004a).

This provides a powerful support for interconnectedness and explains that making decisions on what 'feels right' or is the 'right thing to do' may indeed originate from the heart. This suggests that it cannot be localised to the brain alone and that the acquisition of information pertaining to a future event may be a system-wide process involving the brain, heart and maybe the whole body (McCraty *et al.*, 2004b).

This supports the argument that some entrepreneurs put forward that even though they had sufficient evidence to support a particular decision, it did not feel right. Subsequently, they discovered that their feelings were correct.

6.4 CSI and electrophysiological experiments

Whilst the CSI provided an indication of the entrepreneur's cognitive decision-making style, the electrophysiological experiments clearly demonstrated that an individual can sense a situation before it occurs.

The CSI results demonstrate that serial entrepreneurs are more likely to make decisions based on intuition. And as such, they make decisions based on gut feelings. In order to feel confident to make decisions ad hoc, one must have a high level of faith in the outcome. The electrophysiological experiment indicates that the heart does react pre-stimulus to a situation. If one consistently makes the right choices when they listen to their heart, then it is highly likely that they will develop a high degree of faith in their decision-making. They, therefore, are more likely to make more decisions with reference to what feels right. Doing so means that serial entrepreneurs may be making decisions to some influence outside of themselves. As one entrepreneur explained, "sometimes you just have to sit quietly and listen".

As can be seen from the results of the CSI (Table 4), this group of serial entrepreneurs are on the look out for new experiences and enjoy unpredictability. Therefore, they are continuously searching for new opportunities. They are listening.

What do the findings thus far tell us about serial entrepreneurs' decision making, are they more closely aligned with pattern recognition or non-local intuition? We are confident that there is an element of both in their decision-making. It is obviously still too early to tell, if however we consider, the importance of doing 'what is right' and the pre-eminence of the desire make a difference. It is highly probable that serial entrepreneurs are making decisions from 'the heart' using non-local intuition.

Table 4 CSI findings

<i>CSI statement</i>	<i>Hits</i>
I am inclined to scan through reports rather than read them in detail.	15
To solve a problem, I have to study each part of it in detail.	14 (False)
I make most progress when I take calculated risks.	13
I am constantly on the look out for new experiences.	13
I make decisions and get on with things rather than analyse every last detail.	12
I prefer chaotic action to orderly inaction.	11
I make many of my decisions on the basis of intuition.	11
I would rather that my life was unpredictable.	11
My gut feeling is just as good a basis for decision making as careful analysis.	11

7 Discussion

The CSI has validated the prevalence of intuitive decision-making amongst serial entrepreneurs interviewed. Whether it is pattern recognition or non-local intuition is a moot point. However, if we take into consideration the characteristics prevalent to a person high in SQ, a different result is forthcoming.

A person who is high in spiritual intelligence is a person who has a high level of honesty and integrity, not just towards others but also to him or herself. This is about being true to one's self. A person who is true to himself does what comes from the heart. What comes from the heart is what is important. It is looking at the bigger picture, seeking fundamental answers. Fundamental answers cannot be resolved in self-aggrandisement. The importance lies in looking at the world around us and the impact we have on it.

Making a difference was the most significant characteristic of the serial entrepreneurs interviewed here and in the UK. The majority of entrepreneurs interviewed saw this aspect of their role as critical. This was evidenced by the number of entrepreneurs that were philanthropists.

The second most important characteristic found in the interview and confirmed by the CSI was the importance of intuition to the serial entrepreneurs' decision-making. As one respondent said, "gut feel is what gives you the direction, everything else is justification".

We believe that we can no longer ignore that the communication of information is the result of the inherently interconnected nature of the quantum world (McCarty *et al.*, 2004b).

There is a high level of consistency in the results between the serial entrepreneurs in Australia and those in the UK despite the significant different backgrounds. The majority of the Australian entrepreneurs did not attend a university and were predominantly in service-related businesses. Most, if not all of the Cambridge entrepreneurs had attended a university. One or two had completed PhDs and were predominantly in technology based businesses.

We believe that this research has provided some interesting considerations for businesses. However, further analysis of the transcripts needs to take place. The content analysis requires further development of meaning values of the characteristics of non-local intuition and the interviews need to be re-analysed. The non-local intuition construct requires some further refinement whilst further consideration needs to be given to the idea of introducing a control group. We believe that in our next iteration of this research, there will emerge a theory to further develop the characteristics of the non-local intuition construct.

8 Conclusion

Our research suggests serial entrepreneurs have unique characteristics. But they realise that their uniqueness does not entitle them to follow a self-serving path. What was most pleasing was their desire to serve. Those that did not have the financial means donated their time whilst those that could, contributed financial resources.

The second most important aspect was the prominence of intuitive decision-making. As one entrepreneur highlighted, “gut instinct tells you the right thing to do and everything else is justification”. Doing the right thing requires honesty and integrity and it “is crucial on almost everything you do if you want to be there for the long haul”. Together with honesty and integrity, commitment and adaptability all seem to be important characteristics of serial entrepreneurs. All these attributes are essential to someone who is high in spiritual intelligence and therefore may sense, rather than rationalise, what is important. McCraty *et al.* (2004b) and others have provided experimental evidence that we can and do sense events outside our conscious awareness.

The psycho-physiologic tests clearly demonstrate that some people are capable of tuning into a virtually instantaneous communication of information between particles separated by space in which particles have ‘knowledge’ of events before they actually happen (McCraty *et al.*, 2004b).

This provides a powerful support for interconnectedness and explains that making decisions on what ‘feels right’ or is the ‘right thing to do’ may indeed originate from the heart. Therefore, the acquisition of information pertaining to a future event cannot be localised to the brain alone.

Whilst this research is still in its infancy, it appears promising that entrepreneurs see their role so important that they take it on with the aim of making a difference not just for self-gratification or self-aggrandisement.

On a recent discussion about the findings of this work with a very successful entrepreneur, not part of this research, commented:

“Businessmen and women have a responsibility to do the ‘right thing,’ we cannot rely on governments and legislation for that to happen and we certainly cannot rely on the established religions. Governments have a high degree of self-serving interests whilst the established religions are struggling to keep or attract new members. The way of the future is for businessmen and women to set the standards and only then can we start to make a real difference in the world.”

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Note

- 1 In the literature associated with the CSI there is no discussion regarding the difference between pattern recognition and non-local intuition. The characteristics associated with the meaning values of the CSI can be considered to align with the characteristics of non-local intuition, refer to Table 1.