

The Factors Contributing to Entrepreneurial Alertness

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Abstract : *Given the growth and role of entrepreneurship today, it is becoming increasingly important to understand how new entrepreneurial opportunities get developed. Entrepreneurs play a critically important role in the economy. By spotting opportunities and taking action to exploit them, they drive the process of market production and the fulfillment of social and economic needs. Discussions of the emergence of new entrepreneurial opportunities often include “eureka” moments, but we currently lack a deep understanding of why some individuals are able to spot the opportunities that most people cannot see. We attribute the difference to a loosely defined quality that Kirzner called “entrepreneurial alertness”. While this has been a useful basis for a considerable body of entrepreneurship research to-date, it is still unsatisfactory in several ways. To achieve this goal we distribute questionnaires between 115 M.A. student’s from Economics and Management college of University of Sistan&Baluchestan for the years 2012 and 2013. Analysis was done by correlation test. Results showed that there is significant relationship between creativity, self-efficacy, locus of control, social networks, prior knowledge, educational issues, environment and student’s entrepreneurial alertness. This survey can be used to develop potential entrepreneurs in different fields in determining of key elements of opportunity recognition, training and improving of that.*

Keywords: *Entrepreneurial alertness, Social Networks, Prior Knowledge, Education, Environment*

1. Introduction

The emergence of new ideas and how they can lead to commercializable opportunities are central to the field of entrepreneurship (Baron, 2006; Shane and Venkataraman, 2000; Short et al., 2010). Explanations for how new opportunities emerge include prior experiences, personal disposition, changes in the broader environment, gaining specific information, and being a frustrated user (Gaglio and Katz, 2001; Shane, 2000; Shepherd et al., 2007; Tripsas, 2008). Furthermore, discovering new opportunities has been linked to personal awareness, skills, and insights (Kirzner, 1999; Kaish and Gilad, 1991). Alertness is a process and perspective that helps some individuals to be more aware of changes, shifts, opportunities, and overlooked possibilities (Kirzner, 1973, 1979, 1985). Alertness and the development of schemata enable persons to organize and interpret information in various domains of knowledge related to the development of new opportunities (Gaglio and Katz, 2001). Thus, alertness is a concept that has the potential to add substantially to our understanding of how new ideas get initiated and pursued. Despite its potential, alertness remains understudied because we do not have adequate tools to rigorously investigate it. Entrepreneurship research is dominated by the fundamental questions of why it is that only some people see new business opportunities and only some people take actions to exploit the opportunities they do see (Shane and Venkataraman, 2000; Venkataraman, 1997). Empirical observation suggests that individual people can differ widely in their ability to see new business opportunities within a given situation. Some see nothing but constraint

and status quo, while others see attractive new opportunities lurking everywhere. The social and economic impact of these differences is enormous, as the economic actions taken by entrepreneurs can have wide-ranging effects on the provision of valued products and services, on the creation and smooth operation of new markets, and on regional socio-economic development. These effects can be observed both for simple imitative entrepreneurship that exploits a temporary arbitrage opportunity in a localized market as well as for disruptive and innovative entrepreneurship that creates entire new industries by destroying that which existed before. Entrepreneurial actions matter in the commercialization of the fruit of R&D efforts, the satisfaction of marketplace needs, and the creation of high-value jobs.

The possibility of realizing these many benefits is contingent upon an individual entrepreneur noticing some change in the world, whether the external environment or the internal sense they make of it, and then discerning within that change an opportunity for value creation. This ability to spot opportunity is the critical first step in the entrepreneurial process. Once spotted, the opportunity may be recognized as essentially complete in itself or requiring additional development and creative acts by the entrepreneur to become an opportunity worth exploiting. Much recent research has been devoted to better understand the diverse range of opportunity types and the corresponding entrepreneurial actions (e.g., Eckhardt and Shane, 2003; Sarasvathy et al., 2005). But these are ex post distinctions that only arise once the entrepreneur has already perceived or enacted the initial market need or underutilized resources,

recognized a fit between market need and underemployed resources, and created a new fit (Ardichvili et al., 2003). The critical question of the initial discernment and its precursors remains. Our current best understanding of this phenomenon is Israel Kirzner's conception of "entrepreneurial alertness" (Kirzner, 1979). While arguing persuasively that this entrepreneurial alertness is the critical economic driver of a dynamic and competitive entrepreneurial process, Kirzner did not attempt to explore the determinants of alertness. And in later work, he explicitly indicates that the antecedents of entrepreneurial alertness remain unclear (Kirzner, 2008) — although the prospect of profits or other value creation is assumed to be the underlying motivation for alertness (Hitt and Ireland, 2000). Early investigations into possible determinants of entrepreneurial alertness have suggested individual cognitive or psychological aspects of the entrepreneur, such as locus of control (Harper, 1998), psychological disposition (Minniti, 2004), personality traits and social networks (Ardichvili et al., 2003), and self-efficacy (Tang, 2008). But the aspects which influence the alertness of entrepreneurs still remains relatively under-explored (Yu, 2001).

Our study survey some factors contributing to entrepreneurial alertness. First, we study What opportunities are. second, we expound entrepreneurial alertness. And finally we survey some factors contribute to student's entrepreneurial alertness.

2. Literature review

2.1. Opportunities

Opportunity is a core concept to the definition of the field of entrepreneurship (Shane and Venkataraman, 2000). Opportunities are central to the creation of new ventures and the social and economic benefits that flow from entrepreneurial activities, whether those are the incremental actions of Kirzner's equilibrium-seeking entrepreneur or the acts of creative destruction of Schumpeter's equilibrium-destroying entrepreneur. It is understandable then that considerable research attention has been devoted to the study of opportunities. Short et al. have outlined how this research has led to an evolving conception of opportunity over the past twenty years that draws from a broad theoretical base (Short et al., 2010). Their review includes description of a changing view of the nature of opportunities (whether discovered or created, existing in a dynamic temporal process, more finely distinguished from neighboring concepts), their antecedents (innate individual differences, observable behaviors), their outcomes (equilibrium-seeking or creative destruction, radical subjectivism), and the moderators of their effects (social structuration, contextual influences, risk and uncertainty).

There has recently been increasing recognition that the initial view of purely exogenous opportunities

waiting to be discovered by an entrepreneur may have been overly simple in its assumptions, and that there may be important dimensions to opportunity spotting that involve the development of latent opportunities or even their endogenous creation from nothing (Sarasvathy et al., 2005). The "discovery" theory of opportunities assumes that they arise exogenously from shocks to existing industries and that entrepreneurs differ from others in their ability to notice the resulting objective changes. In contrast, the "creation" theory assumes that they arise endogenously from the enacting actions of individuals and that entrepreneurs are not perforce differently from others in their ability to enact these new subjective realities (Alvarez and Barney, 2007). It may be that these two perspectives are simply complementary modalities of entrepreneurs rather than competing theories, as has been suggested by previous research based on social structuration (e.g., Chiasson and Saunders, 2005). Entrepreneurs may be able to dynamically switch between algorithmic and heuristic modes of thought to both discover and enact new opportunities (Vaghely and Julien, 2010). In both cases entrepreneurs must be alert to conditions, whether exogenous or endogenous, that support the emergence of opportunities— although the common conception of "alertness" seems to take themore critical realist epistemological stance and therefore may have greater relevance and impact for opportunities that are discovered than those that are created (Alvarez and Barney, 2010).

In the discovery theory of opportunities, alertness provides the entrepreneur with necessary information about objective conditions. This information may pertain to simple arbitrage conditions that present profits for those moving to re-establish economic equilibrium. Or the information may be about technological or market developments that present opportunities to destroy the current equilibrium and to create greater value by establishing a new one. In either case, objective conditions are discovered to have the potential to create value. In the creation theory of opportunities, alertness still provides the entrepreneur with essential information, but now it is information of a more subjective or constructivist slant. The information may allow the entrepreneur to reconceptualize some aspect of the world or to impute new meaning to existing objective features and, in so doing, to enact an opportunity where none was seen to exist before. As Kirzner remarked, "alertness, in this essentially uncertain, open-ended, multi-period world must unavoidably express itself in the qualities of boldness, self-confidence, creativity and innovative ability" (Kirzner, 1999, p. 12). It gives the entrepreneur the subjective insight needed "to ignore conventional wisdom (and) to dismiss the jeers of those deriding what they see as the self-deluded visionary" (Kirzner, 1999, p.13). It appears that, regardless of the theory of opportunity that one supports, entrepreneurial alertness is an important

dimension of opportunity spotting. So, a review the literature of the entrepreneurial alertness construct will be needed.

2.2. Entrepreneurial alertness

Alertness has been central in the context of the recently developing area of “opportunity” in entrepreneurship research. Some of this research argues that either opportunities are discovered or they are created (Short et al., 2010). Another approach parcels it into the three areas of opportunity recognition, opportunity discovery, and opportunity creation (Sarasvathy et al., 2003). Research on entrepreneurial alertness was initially developed by Kirzner (1973, 1979), who characterized individuals who were more alert as having an “antenna” that permits recognition of gaps with limited clues.

According to Kirzner, entrepreneurial alertness refers to “the ability to notice without search opportunities that have hitherto been overlooked” (Kirzner, 1979, p. 48), “a motivated propensity of man to formulate an image of the future” (Kirzner, 1985, p.56), “an attitude of receptiveness to available, but hitherto overlooked, opportunities” (Kirzner, 1997, p.72), or “a sense of what might be ‘around the corner’, i.e., the sense to notice that which has hitherto not been suspected of existing at all” (Kirzner, 2008, p.12). Building on Kirzner's work, Kaish and Gilad (1991) saw alert individuals as having a “unique preparedness” in consistently scanning the environment ready to discover opportunities. Later Kirzner argued that alertness includes creative and imaginative action and may “impact the type of transactions that will be entered into future market periods” (1999, p.10).

These various definitions, while intuitively illustrative, lack an explicit theoretical underpinning. Clearly, though, entrepreneurial alertness is presented as conceptually distinct from the subsequent development of the opportunity, and from the activities undertaken to subsequently exploit the opportunity. And, while entrepreneurial alertness may work in conjunction with explicit environmental information search behaviors, it is more generally a state of mind that is open to opportunities at all times (Busenitz, 1996, p.43).

An entrepreneur must be highly sensitive to the key characteristics of schemas, so that he can quickly and accurately activate schemas in an ambiguous scenario to notice the emergence of opportunities. The alertness is reflected by the efforts spent to gather information, or the abstraction from such information of clues indicating commercial opportunities. It is also a kind of “sharp evaluation” that enables entrepreneurs to capture the flash of insight when facing opportunities to perceive the potential opportunities quickly.

Baron (2006) makes the case that this alertness to new opportunities is based on pattern recognition. He argues that what makes an entrepreneur alert is some

cognitive capacity to support the recognition that one situation is similar to another in a meaningful way, that at some abstract level the two situations both resemble some common template or cognitive framework. From this recognition of a common pattern, the entrepreneur can make reasonable predictions of the future and can use these to plan new business moves. But Baron's argument leaves open the questions of what these frameworks are and how they are developed and used.

Entrepreneurial alertness is not solely the domain of the equilibrium-seeking arbitrageur entrepreneur ascribed to Kirzner, but applies equally to the equilibrium-destroying creative-destruction entrepreneur of Schumpeter (1942). Both types of entrepreneur need to be alert to opportunities, whether in the conditions of the present or in the conditions of the hypothesized future (Kirzner, 2008).

2.3. Personality traits

2.3.1. Creativity

Creativity and high intelligence may contribute to alertness (Shane, 2003). A study of engineering students found that the participant's self-perception of creativity and a supportive family environment that promotes creative thinking has predictive value for entrepreneurial intention (Zampetakis and Moustakis, 2006). Recent experimental research has shown that emotional ambivalence is an enabler of being able to make unusual/creative connections among events and that it is possible to induce emotional ambivalence using technique of short duration. It is interesting to note that the impact of the induced emotional ambivalence was moderated by the extent to which the participants perceived the induced state as unusual (Fong, 2006). This leads to hypothesis 1:

H1: There is a significant relationship between creativity and student's entrepreneurial alertness.

2.3.2. Self-Efficacy

Two sets of researchers have made the link between optimism, where optimism is related to self-efficacy beliefs, and success in recognizing entrepreneurial opportunities.

An experimental study found that subjects are led to believe that they are very competent at decision making see more opportunities and take more risks (Krueger and Brazeal, 1994; Krueger and Dickson, 1994). Self-efficacy results from mastery of the activity through creating instances of the desired behavior and from observing models in which the entrepreneur can see themselves engaging in the activity. It is enhanced through the provision of believable information about the activity and emotional support for performance (Bandura, 1977, 1986, 1995; Zimmerman, 1995). This leads to hypothesis 2:

H2: There is a significant relationship between self-efficacy and student's entrepreneurial alertness.

2.4. Locus of Control

Harper draws on Gilad (1982) to argue that a person's "locus of control" (LOC) influences his degree of alertness. A person with an "internal" locus of control tends to believe that events are "contingent upon his own behavior or his own relatively permanent characteristics" (Rotter, 1966, p. 1; Harper, 1998, p. 248). People with "external" locus of control tend to see their actions as less effective in producing outcomes. They see events "as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding" them (Rotter, 1966, p. 1; Harper, 1998, p. 249). Harper cites evidence that entrepreneurs tend to have internal locus of control.

In Harper's theory, an internal locus of control increases entrepreneurial alertness. This increased alertness leads to more incidental learning and, therefore, to more entrepreneurship. On this view of things, it is important to know what, if any, social conditions promote alertness. Following Gilad, Harper argues that the nature of our political and economic institutions influences alertness. Those institutions and policies that increase the objective link between action and outcome tend to increase the subjective perception of such a link.

They increase, therefore, the number of persons who have an internal locus of control. Harper's "central hypothesis" is that "an environment of freedom is more likely than other environments to generate internal LOC beliefs and acute entrepreneurial alertness" (1998, p. 253). This leads to hypothesis 3:

H3: There is a significant relationship between locus of control and student's entrepreneurial alertness.

2.5. Social Networks

Solo entrepreneurs develop business ideas on their own and network entrepreneurs obtain their ideas from their social networks. Three groups of opportunity recognition behaviors have been categorized: solo-special alertness, opportunistic, very creative, seeing new opportunities comes naturally, the idea was theirs alone; network-opportunities in the long term are largely unrelated to each other, ideas came from an accidental process; informal-ideas come when relaxed, gut feel is most important in judging potential, opportunities are easier to see after entry (Hills et al., 1997). The information search practices of 1176 entrepreneurs were studied and six sources of information widely used: accountants, friends or relatives, other business owners, bankers, lawyers, and generally available books and manuals. When entering unfamiliar fields both experienced and inexperienced entrepreneurs searched less intensively. This implies that the

entrepreneur will have to go beyond their established information networks (Cooper et al., 1995). In a more recent study, three forms of social networking (mentors, informal industry networks, participation in professional forums) showed a direct, positive effect on opportunity recognition by entrepreneurs. The effects of mentors and professional forums were mediated by the strength of the mental schema employed by the entrepreneur. Informal industry networks were mediated by self-efficacy.

Alertness to entrepreneurial opportunities can be enhanced by assisting nascent entrepreneurs to obtain mentors and to participate in professional forums (conferences, seminars, workshops) can contribute to their success in identifying potentially valuable opportunities for new ventures by providing information and building social networks (Ozgen and Baron, 2007). This leads to hypothesis 4:

H4: There is a significant relationship between social networks and student's entrepreneurial alertness.

2.6. Prior Knowledge

Two domains of prior knowledge are relevant to the identification process. The first domain contains knowledge that is of special interest to the entrepreneur – it is fascinating and fun. The second domain is accumulated over the years and reflects familiarity with customer problems and issues. (Ardichvili et al., 2003).

It is the special interest/resonance of the first domain that drives the entrepreneur to deepen their competence resulting in a profound knowledge about the topic (Shane, 2003; Sigrist, 1999). Some entrepreneurs are able to discover a given opportunity because they are in possession of the necessary prior knowledge as well as the cognitive ability to value it (Shane, 2000, p. 375). Idiosyncratic information corridors influence the ability of an entrepreneur to recognize a specific opportunity where the prior information is complementary with the new information, which triggers an entrepreneurial conjecture (Kaish and Gilad, 1991).

Prior knowledge and prior experience are the primary source for searching for opportunities. In a study employing in depth interviews with 15 repeat entrepreneurs (who had collectively founded 65 ventures) it was found that these entrepreneurs narrowed their search to areas where they had specific prior knowledge (Fiet et al., 2004). The idiosyncratic nature of prior knowledge suggests that not all people possess the same information at the same time and as a result any given opportunity is not obvious to all potential entrepreneurs (Ardichvili et al., 2003). This leads to hypothesis 5:

H5: There is a significant relationship between prior knowledge and student's entrepreneurial alertness.

2.7. Educational Issues

In traditional classrooms students are taught a causal approach in the face of known practice – where causal logic starts with a pre-determined goal, a given set of means and seeks to identify the optimal strategy to achieve the stated goal. It is Sarasvathy's assertion that while causal thinking may or may not involve creative thinking effectual thinking is inherently creative (Sarasvathy, 2001; Sarasvathy et al., 2003). This problem was echoed in a study of two groups of master's students, one in engineering and one in business. The study identified the dissonance between the need for entrepreneurs to pursue novelty, innovation and creativity and the traditional academic demands for rigor and analysis (Berglund and Wennberg, 2006).

Traditional educational methods such as testing impact creativity because traditional testing requires convergent thinking where there is typically one right answer. In spite of this it is possible to adapt test instructions to encourage creative thinking and to design activities that are presented in permissive and game-like fashion. It is also possible for instructors to model creative behaviors resulting in a positive impact on teaching quality (Runco, 2004). The learning of opportunity recognition skills is best suited to the experiential style described by Kolb as a process that creates knowledge through the "transformation of experience" (Corbett, 2005; Kolb et al., 2001).

2.7.1. Educational Insights

Typically entrepreneurs work with poorly structured/fuzzy problems. The use of techniques to increase the number of alternatives are appropriate and may involve searching past strategies, recalling past experiences, looking for analogies, among others.

Student engagement may be increased by providing authentic scenarios and hence appealing to the student's intrinsic motivational needs (Amabile, 1997). Previous studies have reported success in enhancing creativity of university students using techniques of relatively short duration (Greer and Levine, 1991).

Storytelling is a powerful way of engaging participants and building the efficacy beliefs identified as one of the components of personal traits that contribute to entrepreneurial alertness (Ardichvili et al., 2003). A well told story can enable listeners to visualize from a story in one context what is involved in an analogous context. The audience is engaged by creating a scenario they can see themselves in, one of the basic tenets of enhancing self-efficacy (Bandura, 1977, 1986, 1995; Zimmerman, 1995) which will allow entrepreneurs to persist at a task they may otherwise have given up on (Denning, 2000, 2005). Storytelling gives the participants permission to explore in unconventional ways (Kelley and Littman, 2005) and should increase the comfort level with

divergent thinking and the attendant need to defer judgment. This leads to hypothesis 6:

H6: There is a significant relationship between educational issues and student's entrepreneurial alertness.

2.8. Environment

A munificent environment allows entrepreneurs to achieve growth by capitalizing on abundant resources and capabilities. It also facilitates entrepreneurs' alertness, the individual's ability to notice, without search, opportunities that are invisible to other people (Kirzner, 1979).

The importance of entrepreneurial alertness for explaining economic development (Yu, 1997) and predicting opportunities discovered in the entrepreneurial process (Hills and Shrader, 1998; Ko, 2004) has been emphasized in the literature. Even when entrepreneurs have the "intuition" or "hunch" for new business ideas, in order to stay committed to the new venture, they must have heightened alertness to the opportunities that have been overlooked by the population at large (Kirzner, 1979) as well as to the potential value in those opportunities that are invisible to others.

Drawing on previous literature, we define entrepreneurial commitment as the extent to which an entrepreneur identifies with and is engaged in new business creation activities. Entrepreneurs are more committed to their new ventures because their alertness leads them to see the potential of the opportunities being exploited while others are oblivious to their potential.

The central role of entrepreneurs is to recognize and exploit opportunities by taking advantage of economic disequilibria through knowing or identifying opportunities. However, the process by which this is done is incessant, unsystematic and many times without any clear objective (Kirzner, 1979). Entrepreneurs can only manage this process with strong self-efficacy; the strength of an individual's belief that he or she is capable of successfully performing the roles and tasks of an entrepreneur (Chen et al., 1998).

Theory suggests that entrepreneurs possessing high self-efficacy achieve higher level of alertness through munificent environment than those with low self-efficacy (Yu, 2001). Thus, entrepreneurial self-efficacy moderates the relationship between munificence and alertness. These considerations lead to hypothesis 7:

H7: There is a significant relationship between environment and student's entrepreneurial alertness.

3. Research method

3.1. Sample and procedures

The sample was composed of 115 M.A students from University of Sistan&Baluchestan for the years 2012

and 2013. To measure student's attitudes towards these factors we use a questionnaire that contains four items in demographic information and 43 items in Likert's methods from 1 (Very low) to 5 (Very much). To ensure validity of the scale content, the components of the attitude area were determined. Then, the researcher formulated for each section of the scale. These items were classified and arranged according to the content of each section of the attitude scale. Before putting the scale in its final form, the researcher validated the scale by submitting

it to a panel of experts in the area of research. The experts were requested to evaluate the items of the scale, and to suggest any changes they considered appropriate in terms of the objectives of the scale, item formulation, and their suitability to the level of the students. To estimate the reliability of the scale, the Cronbach alpha test was used, being one of the most appropriate methods to measure the reliability of attitudinal scales. The result was 0.74, which is considered a high value for reliability. The analyses were conducted using SPSS 22.

3.2. Analysis and results

Table 1 shows demographic information of these samples:

TABLE1. DEMOGRAPHICAL DATA OF SAMPLES

| | Type | Result |
|------------------|------------------|--------|
| Gender | Male | 40.9 |
| | Female | 59.1 |
| Age | 20-30 | 95.7 |
| | 30-40 | 4.3 |
| Field | Management | 43.5 |
| | Economic | 20 |
| | Accounting | 13 |
| | Entrepreneurship | 23.5 |
| Year of Entrance | 2012 | 37.4 |
| | 2013 | 62.6 |

3.3. Hypothesis testing

Table 2 represents mean, variance accounted and the Pearson's correlations among all variables. All tests done on a level under 1% ($p < 0.01$). Results show that alertness is significantly correlated with creativity, self-efficacy, locus of control, social networks, prior knowledge, educational issues and environment.

TABLE 2. MEANS, STANDARD DEVIATIONS AND CORRELATION AMONG VARIABLES

| Variable | Mean | S.D. | Pearson Correlation | Sig. |
|--------------------|------|------|---------------------|------|
| Creativity | 4.09 | .72 | .246 | .008 |
| Self-efficacy | 3.97 | .84 | .254 | .006 |
| Locus of control | 3.85 | .78 | .650 | .000 |
| Social networks | 3.76 | .91 | .309 | .001 |
| Prior knowledge | 4.17 | .75 | .245 | .008 |
| Educational issues | 3.73 | .89 | .330 | .000 |
| Environment | 3.86 | .93 | .306 | .001 |

4. Results and Discussion

Hypothesis 1 predicts that creativity is significantly related to student's entrepreneurial alertness. As expected, the effect of creativity on student's entrepreneurial alertness was positive and significant ($r = .24$, $p < 0.01$). The results corroborated the Zampetakis and Moustakis (2006), Fong (2006) and Shane (2003) study that creativity and high intelligence may contribute to alertness.

Hypothesis 2 indicates that self-efficacy is significantly related to student's entrepreneurial alertness. As expected, the effect of self-efficacy on student's entrepreneurial alertness was positive and significant ($r = .25$, $p < 0.01$). The results corroborated

self-efficacy results from mastery of the activity through creating instances of the desired behavior and from observing models in which the entrepreneur can see themselves engaging in the activity (Bandura, 1977, 1986, 1995; Zimmerman, 1995).

Hypothesis 3 predicts that locus of control is significantly related to student's entrepreneurial alertness. As expected, the effect of locus of control on student's entrepreneurial alertness was positive and significant ($r = .65$, $p < 0.01$). The results corroborated the predictions derived from Harper's theory that internal locus of control increases entrepreneurial alertness (Harper, 1998, p. 249).

Hypothesis 4 predicts that social networks are significantly related to student's entrepreneurial alertness. The results indicate the positive and significant relationship among social networks and student's entrepreneurial alertness ($r=30, p<0.01$). The information search practices of 1176 entrepreneurs were studied and six sources of information widely used: accountants, friends or relatives, other business owners, bankers, lawyers, and generally available books and manuals. When entering unfamiliar fields both experienced and inexperienced entrepreneurs searched less intensively. This implies that the entrepreneur will have to go beyond their established information networks (Cooper et al., 1995).

Hypothesis 5 predicts that prior knowledge is significantly related to student's entrepreneurial alertness. As expected, the effect of prior knowledge on student's entrepreneurial alertness was positive and significant ($r=.24, p<0.01$). Fiet et al., (2004) in a study employing in depth interviews with 15 repeat entrepreneurs found that these entrepreneurs narrowed their search to areas where they had specific prior knowledge.

Hypothesis 6 predicts that educational issues are significantly related to student's entrepreneurial alertness. As expected, the effect of educational issues on student's entrepreneurial alertness was positive and significant ($r=.33, p<0.01$). The results corroborated the Sarasvathy (2001), Sarasvathy et al. (2003), Berglund and Wennberg (2006) observations that study identified the dissonance between the need for entrepreneurs to pursue novelty, innovation and creativity.

Hypothesis 7 predicts that environment is significantly related to student's entrepreneurial alertness. The results indicate the positive and significant relationship among environment and student's entrepreneurial alertness ($r=.30, p<0.01$). The results of Tang study show a strong relationship between environmental munificence and alertness especially when the entrepreneurs have high levels of self-efficacy in performing the roles and tasks of new venture creation (Tang, 2007, p.146).

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