# Entrepreneurship theories and Empirical research: A Summary Review of the Literature

Kwabena Nkansah Simpeh

Department of Business Studies, Wisconsin International University, Ghana P.O. Box LG 751, North Legon, Accra, Ghana E-mail:ksimpeh2001@yahoo.com

### Abstract

Entrepreneurship theories and research remain important to the development of the entrepreneurship field. This paper examines six entrepreneurship theories with underlying empirical studies. These are: (1) Economic entrepreneurship theory, (2) Psychological entrepreneurship theory (3) Sociological entrepreneurship theory, (4) Anthropological entrepreneurship theory (5) Opportunity-Based entrepreneurship theory, and (6) Resource-Based entrepreneurship theory. These theories offer us a fairly good opportunity to refocus our efforts at integrating the diverse viewpoints.

**Key words:** Economic entrepreneurship theory; Psychological entrepreneurship theory; Sociological entrepreneurship theory; Anthropological entrepreneurship theory; Opportunity-based entrepreneurship theory; Resource-based entrepreneurship theory

### 1. Introduction

Several theories have been put forward by scholars to explain the field of entrepreneurship. These theories have their roots in economics, psychology, sociology, anthropology, and management. The multidisciplinary nature of entrepreneurship is given a close examination in this article.

#### 2. Economic Entrepreneurship Theories

The economic entrepreneurship theory has deep roots in the classical and neoclassical theories of economics, and the Austrian market process (AMP). These theories explore the economic factors that enhance entrepreneurial behaviour.

### 2.1Classical Theory

The classical theory extolled the virtues of free trade, specialization, and competition (Ricardo, 1817; Smith, 1776). The theory was the result of Britain's industrial revolution which took place in the mid 1700 and lasted until the 1830s. The classical movement described the directing role of the entrepreneur in the context of production and distribution of goods in a competitive marketplace (Say, 1803). Classical theorists articulated three modes of production: land; capital; and labour. There have been objections to the classical theory. These theorists failed to explain the dynamic upheaval generated by entrepreneurs of the industrial age (Murphy, Liao & Welsch, 2006).

#### 2.2Neo-classical Theory

The neo-classical model emerged from the criticisms of the classical model and indicated that economic phenomena could be relegated to instances of pure exchange, reflect an optimal ratio, and transpire in an economic system that was basically closed. The economic system consisted of exchange participants, exchange occurrences, and the impact of results of the exchange on other market actors. The importance of exchange coupled with diminishing marginal utility created enough impetus for entrepreneurship in the neoclassical movement (Murphy, Liao &Welsch, 2006).

Some criticisms were raised against the neo-classical conjectures. The first is that aggregate demand ignores the uniqueness of individual-level entrepreneurial activity. Furthermore, neither use nor exchange

value reflects the future value of innovation outcomes. Thirdly, rational resource allocation does not capture the complexity of market-based systems. The fourth point raised was that, efficiency-based performance does not subsume innovation and non-uniform outputs; known means/ends and perfect or semi-perfect knowledge does not describe uncertainty. In addition, perfect competition does not allow innovation and entrepreneurial activity. The fifth point is that, it is impossible to trace all inputs and outputs in a market system. Finally, entrepreneurial activity is destructive to the order of an economic system.

### 2.3Austrian Market Process (AMP)

These unanswered questions of the neo-classical movement led to a new movement which became known as the Austrian Market process (AMP). The AMP, a model influenced by Joseph Aloi Schumpeter (1934) concentrated on human action in the context of an economy of knowledge. Schumpeter (1934) described entrepreneurship as a driver of market-based systems. In other words, an important function of an enterprise was to create something new which resulted in processes that served as impulses for the motion of market economy.

Murphy, Liao&Welsch (2006) contend that the movement offered a logic dynamic reality. In explaining this, they point to the fact that knowledge is communicated throughout a market system (e.g. via price information), innovation transpires, entrepreneurs satisfy market needs, and system-level change occurs. If an entrepreneur knows how to create new goods or services, or knows a better way to do so, benefits can be reaped through this knowledge. Entrepreneurs effectuate knowledge when they believe it will procure some individually-defined benefits.

The earlier neoclassical framework did not explain such activity; it assumed perfect competition, carried closed-system assumptions, traced observable fact data, and inferred repeatable observation-based principles. By contrast, AMP denied assumptions that circumstances are repeatable, always leading to the same outcomes in an economic system. Rather, it held entrepreneurs are incentivized to use episodic knowledge (that is, possibly never seen before and never to be seen again), to generate value.

Thus, the AMP was based on three main conceptualizations (Kirzner, 1973). The first was the arbitraging market in which opportunities emerge for given market actors as others overlook certain opportunities or undertake suboptimal activity. The second was alertness to profit-making opportunities, which entrepreneurs discover and entrepreneurial advantage. The third conceptualization, following Say (1803) and Schumpeter (1934), was that ownership is distinct from entrepreneurship. In other words, entrepreneurship does not require ownership of resources, an idea that adds context to uncertainty and risk (Knight, 1921). These conceptualizations show that every opportunity is unique and therefore previous activity cannot be used to predict outcomes reliably.

The AMP model is not without criticisms. The first of the criticisms is that market systems are not purely competitive but can involve antagonist cooperation. The second is that resource monopolies can hinder competition and entrepreneurship. The third is that fraud /deception and taxes/controls also contribute to market system activity. The fourth is that private and state firms are different but both can be entrepreneurial and fifth, entrepreneurship can occur in non-market social situations without competition. Empirical studies by Acs and Audretsch (1988) have rejected the Schumpeterian argument that economies of scale are required for innovation. The criticisms of the AMP have given impetus to recent explanations from psychology, sociology, anthropology, and Management.

### 3. Psychological Entrepreneurship Theories

The level of analysis in psychological theories is the individual (Landstrom, 1998). These theories emphasize personal characteristics that define entrepreneurship. Personality traits need for achievement and locus of control are reviewed and empirical evidence presented for three other new characteristics that have been found to be associated with entrepreneurial inclination. These are risk taking, innovativeness, and tolerance for ambiguity.

#### 3.1Personality Traits theory

### European Journal of Business and Management ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol 3, No.6, 2011

Coon (2004) defines personality traits as "stable qualities that a person shows in most situations". To the trait theorists there are enduring inborn qualities or potentials of the individual that naturally make him an entrepreneur. The obvious or logical question on your mind may be "What are the exact traits/inborn qualities?" The answer is not a straight forward one since we cannot point at particular traits. However, this model gives some insight into these traits or inborn qualities by identifying the characteristics associated with the entrepreneur. The characteristics give us a clue or an understanding of these traits or inborn potentials. In fact, explaining personality traits means making inference from behavior.

Some of the characteristics or behaviors associated with entrepreneurs are that they tend to be more opportunity driven (they nose around), demonstrate high level of creativity and innovation, and show high level of management skills and business know-how. They have also been found to be optimistic, (they see the cup as half full than as half empty), emotionally resilient and have mental energy, they are hard workers, show intense commitment and perseverance, thrive on competitive desire to excel and win, tend to be dissatisfied with the status quo and desire improvement, entrepreneurs are also transformational in nature, who are life long learners and use failure as a tool and springboard. They also believe that they can personally make a difference, are individuals of integrity and above all visionary.

The trait model is still not supported by research evidence. The only way to explain or claim that it exists is to look through the lenses of one's characteristics/behaviors and conclude that one has the inborn quality to become an entrepreneur.

#### 3.1.1Locus of Control

Locus of control is an important aspect of personality. The concept was first introduced by Julian Rotter in the 1950s. Rotter (1966) refers to Locus of Control as an individual's perception about the underlying main causes of events in his/her life. In other words, a locus of control orientation is a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation).

In this context the entrepreneur's success comes from his/her own abilities and also support from outside. The former is referred to as internal locus of control and the latter is referred to as external locus of control. While individuals with an internal locus of control believe that they are able to control life events, individuals with an external locus of control believe that life's events are the result of external factors, such as chance, luck or fate. Empirical findings that internal locus of control is an entrepreneurial characteristic have been reported in the literature (Cromie, 2000, Ho and Koh, 1992; Koh, 1996; Robinson et al., 1991). In a student sample, internal locus of control was found to be positively associated with the desire to become an entrepreneur (Bonnett & Furnham, 1991).

Rauch and Frese (2000) also found that business owners have a slightly higher internal locus of control than other populations. Other studies have found a high degree of innovativeness, competitive aggressiveness, and autonomy reports (Utsch et al., 1999). The same is reported of protestant work ethic beliefs (Bonnet and Furnham, 1991), as well as risk taking (Begley & Boyd, 1987).

#### 3.2 Need for Achievement theory

While the trait model focuses on enduring inborn qualities and locus of control on the individual's perceptions about the rewards and punishments in his or her life, (Pervin, 1980,), need for achievement theory by McClelland (1961) explained that human beings have a need to succeed, accomplish, excel or achieve. Entrepreneurs are driven by this need to achieve and excel. While there is no research evidence to support personality traits, there is evidence for the relationship between achievement motivation and entrepreneurship (Johnson, 1990). Achievement motivation may be the only convincing personological factor related to new venture creation (Shaver & Scott, 1991).

Risk taking and innovativeness, need for achievement, and tolerance for ambiguity had positive and significant influence on entrepreneurial inclination Mohar, Singh and Kishore (2007). However, locus of control (LOC) had negative influence on entrepreneurial inclination. The construct locus of control was also found to be highly correlated with variables such as risk taking, need for achievement, and tolerance

for ambiguity. The recent finding on risk taking strengthens earlier empirical studies which indicate that aversion to risk declines as wealth rises, that is, one's net assets and value of future income (Szpiro, 1986). In complementing Szpiro's observation, Eisenhauer (1995) suggests that success in entrepreneurship, by increasing wealth, can reduce the entrepreneur's degree of risk aversion, and encourage more venturing. In his view, entrepreneurship may therefore be a self perpetuating process. Further evidence suggests that some entrepreneurs exhibit mildly risk-loving behavior (Brockhaus, 1980). These individuals prefer risks and challenges of venturing to the security of stable income.

### 4. Sociological Entrepreneurship Theory

The sociological theory is the third of the major entrepreneurship theories. Sociological enterprise focuses on the social context .In other words, in the sociological theories the level of analysis is traditionally the society (Landstrom, 1998).

Reynolds (1991) has identified four social contexts that relates to entrepreneurial opportunity. The first one is social networks. Here, the focus is on building social relationships and bonds that promote trust and not opportunism. In other words, the entrepreneur should not take undue advantage of people to be successful; rather success comes as a result of keeping faith with the people.

The second he called the life course stage context which involves analyzing the life situations and characteristic of individuals who have decided to become entrepreneurs. The experiences of people could influence their thought and action so they want to do something meaningful with their lives.

The third context is ethnic identification. One's sociological background is one of the decisive "push" factors to become an entrepreneur. For example, the social background of a person determines how far he/she can go. Marginalized groups may violate all obstacles and strive for success, spurred on by their disadvantaged background to make life better. The fourth social context is called population ecology. The idea is that environmental factors play an important role in the survival of businesses. The political system, government legislation, customers, employees and competition are some of the environmental factors that may have an impact on survival of new venture or the success of the entrepreneur.

### 5. Anthropological Entrepreneurship Theory

The fourth major theory is referred to as the anthropological theory. Anthropology is the study of the origin, development, customs, and beliefs of a community. In other words, the culture of the people in the community .The anthropological theory says that for someone to successful initiate a venture the social and cultural contexts should be examined or considered.

Here emphasis is on the cultural entrepreneurship model. The model says that new venture is created by the influence of one's culture. Cultural practices lead to entrepreneurial attitudes such as innovation that also lead to venture creation behavior. Individual ethnicity affects attitude and behavior (Baskerville, 2003) and culture reflects particular ethnic, social, economic, ecological, and political complexities in individuals (Mitchell et al., 2002a). Thus, cultural environments can produce attitude differences (Baskerville, 2003) as well as entrepreneurial behavior differences (North, 1990; Shane 1994).

### 6. Opportunity-Based Entrepreneurship Theory

The opportunity-based theory is anchored by names such as Peter Drucker and Howard Stevenson. An opportunity-based approach provides a wide-ranging conceptual framework for entrepreneurship research (Fiet, 2002; Shane, 2000).

Entrepreneurs do not cause change (as claimed by the Schumpeterian or Austrian school) but exploit the opportunities that change (in technology, consumer preferences etc.) creates (Drucker, 1985). He further says, "This defines entrepreneur and entrepreneurship, the entrepreneur always searches for change, responds to it, and exploits it as an opportunity". What is apparent in Drucker's opportunity construct is that entrepreneurs have an eye more for possibilities created by change than the problems.

Stevenson (1990) extends Drucker's opportunity-based construct to include resourcefulness. This is based on research to determine the differences between entrepreneurial management and administrative management. He concludes that the hub of entrepreneurial management is the "pursuit of opportunity without regard to resources currently controlled" (pp.2).

### 7. Resource- Based Entrepreneurship Theories

The Resource-based theory of entrepreneurship argues that access to resources by founders is an important predictor of opportunity based entrepreneurship and new venture growth (Alvarez & Busenitz, 2001). This theory stresses the importance of financial, social and human resources (Aldrich, 1999). Thus, access to resources enhances the individual's ability to detect and act upon discovered opportunities (Davidson & Honing, 2003). Financial, social and human capital represents three classes of theories under the resource – based entrepreneurship theories.

#### 7.1Financial Capital/Liquidity Theory

Empirical research has showed that the founding of new firms is more common when people have access to financial capital (Blanchflower et al, 2001, Evans & Jovanovic, 1989, and Holtz-Eakin et al, 1994). By implication this theory suggests that people with financial capital are more able to acquire resources to effectively exploit entrepreneurial opportunities, and set up a firm to do so (Clausen, 2006).

However, other studies contest this theory as it is demonstrated that most founders start new ventures without much capital, and that financial capital is not significantly related to the probability of being nascent entrepreneurs (Aldrich,1999, Kim, Aldrich & Keister, 2003, Hurst & Lusardi, 2004, Davidson & Honing, 2003). This apparent confusion is due to the fact that the line of research connected to the theory of liquidity constraints generally aims to resolve whether a founder's access to capital is determined by the amount of capital employed to start a new venture Clausen (2006). In his view, this does not necessarily rule out the possibility of starting a firm without much capital. Therefore, founders access to capital is an important predictor of new venture growth but not necessarily important for the founding of a new venture (Hurst & Lusardi, 2004)

This theory argues that entrepreneurs have individual-specific resources that facilitate the recognition of new opportunities and the assembling of new resources for the emerging firm (Alvarez & Busenitz, 2001). Research shows that some persons are more able to recognize and exploit opportunities than others because they have better access to information and knowledge (Aldrich, 1999, Anderson & Miller, 2003, Shane 2000, 2003, Shane & Venkataraman, 2000).

#### 7.2Social Capital or Social Network Theory

Entrepreneurs are embedded in a larger social network structure that constitutes a significant proportion of their opportunity structure (Clausen, 2006). Shane and Eckhardt (2003) says "an individual may have the ability to recognize that a given entrepreneurial opportunity exist, but might lack the social connections to transform the opportunity into a business start up. It is thought that access to a larger social network might help overcome this problem" (pp.333)

In a similar vein, Reynolds (1991) mentioned social network in his four stages in the sociological theory. The literature on this theory shows that stronger social ties to resource providers facilitate the acquisition of resources and enhance the probability of opportunity exploitation (Aldrich & Zimmers, 1986). Other researchers have suggested that it is important for nascent founders to have access to entrepreneurs in their social network, as the competence these people have represents a kind of cultural capital that nascent ventures can draw upon in order to detect opportunities (Aldrich & Cliff, 2003., Gartner et al, 2004., Kim, Aldrich & Keister, 2003).

#### 7.3Human Capital Entrepreneurship Theory

Underlying the human capital entrepreneurship theory are two factors, education and experience (Becker, 1975). The knowledge gained from education and experience represents a resource that is heterogeneously distributed across individuals and in effect central to understanding differences in opportunity identification and exploitation (Anderson & Miller, 2003, Chandler & Hanks, 1998, Gartner et al, 2005, Shane &Venkataraman, 2000).

European Journal of Business and Management ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol 3, No.6, 2011

Empirical studies show that human capital factors are positively related to becoming a nascent entrepreneur(Kim, Aldrich & Keister, 2003,Davidson & Honing,2003, Korunka et al, 2003), increase opportunity recognition and even entrepreneurial success (Anderson & Miller, 2003,Davidson & Honing,2003).

#### 8. Conclusion

The purpose of this paper was to examine the theories and research outcomes of entrepreneurship. From the above discussions it is clear that the field of entrepreneurship have some interesting and relevant theories (ranging from economic, psychological, sociological, anthropological, opportunity-based, to resource-based) which are underpinned by empirical research evidence. This development holds a rather brighter future for the study, research, and practice of entrepreneurship.

#### References

Acs, Z.J., &Audretsch, D.B. (1988), "Innovation in large and small firms: An empirical analysis", *American Economic Review*, 78,678-690.

Aldrich, H.E & Zimmer. (1986), "Entrepreneurship *through Social Networks*", In Donald Sexton and Raymond Smulor.ed., The Art and Science of Entrepreneurship.Newyork: Ballinger, 3-23.

Aldrich, H.E. (1999). Organisations Evolving. Sage Publications

Aldrich, H.E., & Cliff, J. (2003), "The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective", *Journal of Business Venturing*, 18,573-596.

Alvarez, S., & Busenitz, L. (2001), "The entrepreneurship of resource based theory", *Journal of Management*, 27,755-775.

Anderson, A., & Miller, C. (2003), "Class matters: human and social capital in the entrepreneurial process", *The Journal of Socio-Economics*, *32*, 17-36.

Baskerville, R.F. (2003), "Hofstede Never Studied Culture", *Accounting, Organizations and Society*, 28(1), 1-14.

Becker, (1975), "Human Capital. Chicago", IL: Chicago University Press.

Begley, T.M., & Boyd, D.P. (1987), "Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses", *Journal of Business Venturing*, *2*, 79-93

Blanchflower, D., Oswald, A., & Stutzer, A. (2001), "Latent entrepreneurship across nations?" *European Economic Review*, 45,680-691.

Bonnett, C & Furnham, A. (1991), "Who wants to be an entrepreneur? A study of Adolescents interested in a Young Enterprise scheme", *Journal of Economic Psychology* 12,465-78.

Brockhaus, R.H. (1980), "Risk taking propensity of entrepreneurs", Academy of Management Journal, 23,509-520.

Chandler, G., & Hanks, S. (1998), "An examination of the substitutability of founder's human and financial capital in emerging business ventures", *Journal of Business Venturing*, *13*,353-369.

Clausen, T.H. (2006), "Who identifies and Exploits entrepreneurial opportunities", Retrieved from www.ccsr.ac.uk

Coon, D. (2004). Introduction to Psychology (9th Ed) Minneapolis: West Publishing Company.

Cromie, S. (2000), "Assessing entrepreneurial inclination: Some approaches empirical evidence", *European Journal of Work and Organizational Psychology*, 9, 1, 7-30.

Davidson, P., & Honing, B. (2003), "The role of social and human capital among nascent entrepreneurs", *Journal of Business Venturing*, 20,121.

Drucker, P.F. (1985). Innovation and Entrepreneurship. New York: Harper & Row Publishers

Eisenhauer, J.G. (1995), "The entrepreneurial decision: economic theory and empirical evidence", *Entrepreneurship theory & practice*. Retrieved from www.allbusiness .com

Evans, D., & Jovanovic, B. (1989), "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints", *The Journal of Political Economy*, 97, 808-827.

Fiet, J.O. (2002). The Systematic Search for Entrepreneurial Discoveries, Westport, CT: Quorum Books

Frese, M (2000). Success and failure of Micro business Owners in Africa: A psychological approach. Greenwood, Westport, CT

Gartner, W.B., Shaver, K.G., Carter, N.M., & Reynolds, P.D. (2004). *Handbook of entrepreneurial dynamics*. Thousand Oaks, CA: Sage Publications

Ho, T.S. & Koh, H.C. (1992), "Differences in psychological characteristics between entrepreneurially inclined and non-entrepreneurially inclined accounting graduates in Singapore", Entrepreneurship, *Innovation and Change: An International Journal*, *1*, 43-54.

Holtz-Eakin, D., Joulfaian, D., & Rosen, H, S. (1994), "Sticking it out: Entrepreneurial Survival and Liquidity Constraints, *Journal of Political Economy*, 1,102

Hurst, E., &Lusardi, A. (2004), "Liquidity Constraints, Household Wealth, Entrepreneurship, Journal of Political Economy, 2,112

Johnson, B. (1990), "Toward a multidimensional model of entrepreneurship: The case of achievement and the entrepreneur", *Entrepreneurship: Theory & Practice*, 14, 39-54.

Kim, P., Aldrich, H.E., &Keister, L.A. (2003). Access (not) denied: The Impact of financial, human and cultural capital on becoming a Nascent Entrepreneur. Working paper.

Kirzner, I.M. (1973). Competition and Entrepreneurship.Chicago, IL: University of Chicago

Knight, F.H. (1921). *Risk, uncertainty, and profit*, Library of Economics and Liberty. Retrieved from www.econlib.org/library/Knight/knRUP1.html

Koh, H.C. (1996), "Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students", *Journal of Managerial Psychology*, *11*, 12-25.

Korunka, C., Frank, H., Lueger, M., & Mugler, J. (2003), "The entrepreneurial personality in the context of resources, environment, and the startup process-A configurational approach", *Entrepreneurship Theory and Practice*, 28(1), 23-42

Landstrom, H. (1998). *The Roots of Entrepreneurship Research*, Conference proceedings, Lyon, France, November 26-27.

McClelland, D.C. (1961). The Achieving Society, NJ: Van Nostrand, Princeton

Mitchell, R.K., Smith, J.B., Morse, E.A., Seawright, K.W., Peredo, A., &McKenzie, B. (2002a), "Are Entrepreneurial Cognitions Universal? Assessing Entrepreneurial Cognitions across Cultures", *Entrepreneurship, Theory and Practice*, 9-32.

Mohar, Y. M.S, Singh, J & Kishore, K. (2007), "Relationship Between psychological characteristics and entrepreneurial inclination: A Case Study of Students at University Tun Abdul Razak", *Journal of Asia Entrepreneurship and Sustainability*, 8. ProQuest Information and Learning Publishers

Murphy, J.P, Liao, J & Welsch, P.H. (2006), "A Conceptual history of entrepreneurial thought", *Journal of Management History*. 12, 9-24.

North, D.C. (1990). Institutions, Institutional Change, and Economic Performance. New York: Norton

Pervin, L.A. (1980). Personality: Theory, Assessment and Research. New York: John Wiley & Sons

Rauch, A., & Frese, M. (2000), "Psychological approaches to entrepreneurial success: A general model and an overview of findings", In: Cooper C L, Robertson I T (eds.), *International Review of Industrial and Organisational Psychology*, 10, 1-41

European Journal of Business and Management ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol 3, No.6, 2011

Reynolds, P.D. (1991), "Sociology and entrepreneurship: concepts and contributions", *Entrepreneurship: Theory & Practice*, *16*(2), 47-70

Ricardo, D. (1817). On the Principles of Political Economy and Taxation. London: John Murray.

Robinson, P.B., Stimpson, D.V., Huefner, J.C., & Hunt, H.K. (1991a), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship Theory and Practice*, 15 (4)13-32.

Robinson, P.B., Huefner, J.C., &Hunt, H.K. (1991b), "Entrepreneurial research on student subjects do not generalize to real world entrepreneurs", *Journal of Small Business Management*, 29, 42-50.

Rotter, J. (1966), "Generalised expectancies for internal versus external control reinforcements", *Psychological Monographs*, 80, Whole No.609.

Say, J.B. (1803). Trait éD'économie Politique, ou Simple Exposition de la Mani ère Dont se Forment, se Distribuent, et se Composent les Richesses, A.A. Renouard, Paris.

Schumpeter, J.A. (1934). The Theory of Economic Development. Cambridge, MA: Harvard University Press

Shane, S.A (1994), "The Effect of National Culture on the Choice between Licensing and Direct Foreign Investment", *Strategic Management Journal 15*,627-642.

Shane, S (2000), "Prior Knowledge and the discovery of entrepreneurial opportunities", *Organisation Science*, *11*, 448-469.

Shane, S.A & Venkataraman, S. (2000), "The promise of entrepreneurship as a field of research", Academy of Management Review.

Shane, S.A. (2003). A General Theory of Entrepreneurship: The Individual-Opportunity Nexus. Cheltenham: Edward Elgar

Shane, S.A &Eckhardt, J.T. (2003), "Opportunities and Entrepreneurship', *Journal of Management*, 29 (3), 333-349.

Shaver, K.G & Scott, L.R. (1991), "Person, process, choice: the psychology of new venture creation", *Entrepreneurship Theory & Practice*, 16, 23-45.

Smith, A. (1776). An Inquiry into the Nature and Causes of the Wealth of Nations. London: Methuen Publishers

Stevenson, H., & Harmeling, S. (1990), "Entrepreneurial Management's Need for a More "Chaotic" Theory", *Journal of Business Venturing*, *5*, 1-14.

Stevenson, H.H & Jarillo J.C. (1990), "A Paradigm of Entrepreneurship: Entrepreneurial Management", *Strategic Management Journal*, 11, 17-27.

Szpiro, G. (1986), "Measuring risk aversion: An alternative approach", *Review of Economics and Statistics*, 68, 1156-159.

Utsch, A., Rauch, A., Rothfuss, R., & Frese, M. (1999), "Who becomes a small scale entrepreneur in a post-socialist environment: On the differences between entrepreneurs and managers in East Germany", *Journal of Small Business Management* 37(3), 31-41

Venkataraman, S. (1997). *The distinctive domain of entrepreneurship*. In Katz, J.A. (Eds), Advances in Entrepreneurship: Firm Emergence and Growth, *3*, 119-38

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/Journals/</u>

The IISTE editorial team promises to the review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

## **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

