



## METACOGNITION AND ENTREPRENEURIAL OPPORTUNITY RECOGNITION



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### ABSTRACT

**T**his paper proposes that the opportunity recognition of entrepreneurs is influenced by their metacognitive thinking process. The process of identifying a potential opportunity is the first step that may precipitate future action towards establishing a new venture. This is induced by cognition or thinking. Thinking is again powered underneath by the metacognitive adaptability of the entrepreneurs. "Metacognition" is simply defined as "thinking about thinking." The term Metacognition refers to the processes that allow people to reflect on their own cognitive abilities. This is researched by haynie (2010) in his paper the situated metacognitive model of entrepreneurial mindset. Adhering to the ideas haynie have focused, the main objective of this paper is to study is there any relationship between metacognitive awareness and entrepreneurial opportunity recognition of entrepreneurs. The study was conducted on forty entrepreneurs of cuddalore district in Tamilnadu. A well structured questionnaire was administered and the findings endorse that there is relationship between metacognition and entrepreneurial opportunity recognition

**KEYWORDS:** Entrepreneurial opportunity, Metacognitive awareness, entrepreneurial cognition.

### INTRODUCTION

Cognition is thinking. It is the ability of the brain to process, store, retrieve and retain information. The role of memory is inevitable when going forth for information search to utilize in the current or address a future situation. Recalling or remembering occurs in three methods, which are attention, orientation and decision-making. These areas of cognition/thinking move from and between levels of complexity without cause or even awareness. The most advanced level of complexity is meta-cognition, which involves knowledge and control; people have over their own thinking and learning activities. Cognition and meta-cognition ultimately lead to comprehension, which is to have knowledge about a topic demonstrated through things said and/or actions and behaviors which are either fact-based or implied.

(Marjorie, 2012)

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"Metacognition" is often simply defined as "thinking about thinking." The term Metacognition refers to the processes that allow people to reflect on their own cognitive abilities. Metacognition refers to the ability to reflect upon, understand and control one's own learning. In other words, metacognition allows people to know what they know, or to think about their thinking. Metacognition refers to the conscious application of an individual's thinking to their own thought processes with the specific intention of understanding, monitoring, evaluating and regulating those processes. Metacognitive processes include planning, monitoring one's own thoughts; problem solving, making decisions and evaluating one's thought processes. It also involves the use of strategies for remembering information. Flavell (1979) defined metacognitive knowledge as knowledge about persons, tasks, and strategies.



Schraw and Dennison( 1994) brings that, Metacognition distinguished the two major components, metacognitive knowledge(knowledge about cognition) and metacognitive experiences or regulation.(regulation of cognition) Metacognitive knowledge refers to acquired knowledge about cognitive processes, knowledge that can be used to control cognitive processes.(**Brown, 1987;Flavell, 1987;Jacobs &Paris,1987**) Flavell further divides metacognitive knowledge into three categories: knowledge of person variables, task variables and strategy variable . According to **Paris, Lipson, and Wixson (1983)** the knowledge about different kinds of strategies can in turn be divided into declarative (Knowledge about self and about strategies), procedural (knowledge about how to use start), and conditional strategy knowledge. The assessment of different facets of metacognition requires different measurement procedures. Metacognitive knowledge is often assessed by so-called metacognitive awareness inventories with questionnaire character or by metacognitive knowledge tests.

Scholarly findings show that being alert to and recognizing new opportunities for market development is an important factor determining the growth and economic sustainability of entrepreneurship ventures. New product offerings or new ventures arise from opportunity recognition amidst changing environments. Entrepreneurs need to become more alert in recognizing new opportunities (**West & Meyer, 1997**). **Long and McMullan (1984)** proposed a model of opportunity identification as a “creative structuring process” with four stages sequentially: pre-vision stage, point of vision, opportunity elaboration and decision to proceed. The pre-vision stage involves undirected focus or the product of directed study. The point of vision stage is a much like the “Aha” experience of discovery, or a sense of gestalt. The third stage is a stage, involving a closer and more critical evaluation of the initial idea; and the final stage is the stage in which there will be a joint function of the completeness of the concept, the relevant previous experience of the entrepreneur, and the expected return to the entrepreneur

The study of Mumin et.al (2013) proves alertness to opportunity is mandatory for the entrepreneur to develop his/her venture. Yasemin (2005) quotes Kirzner as: “human action involves a *posture of alertness* toward the discovery of as yet *unperceived* opportunities and their exploitation”. From a subjectivist perspective there is not only entrepreneurial discovery of existing opportunities (Jacobson, 1992), but also entrepreneurial creativity, whereby entrepreneurs *create* economically

profitable opportunities through their interactions with customers, technologies, and other stakeholders (Buchanan and Vanberg, 1991). Following **Janet L. Nixdorff (2008)** in her study defined opportunity recognition as the active, cognitive process (or processes) through which individuals conclude that they have identified the potential to create something new that has the potential to generate economic value and that is not currently being exploited or developed, and is viewed as desirable in the society in which it occurs (i.e., its development is consistent with existing legal and moral conditions)

**Shepherd and Levesque (2000)** suggested that entrepreneurial opportunity assessment represents the use of one’s knowledge base and knowledge accumulated over time to make a decision on whether to pursue or reject a specific business opportunity. Metacognition describes the process of formulating strategies positioned to choose from a set of available cognitive mechanisms, given what the individual understands about their own motivations, assumptions, strengths, and weaknesses (**Flavell, 1987**). **Baron (2006)** stressed this view by pointing that rich and varied life experience can be a major determinant for entrepreneurs in recognizing potential opportunities. In other words, knowledge is an important factor for many entrepreneurs to use as a basis both for being open to potential opportunities, and for evaluating whether to pursue them. Metacognitive awareness represents a general level of awareness one has concerning their own cognitions focused on a specific entrepreneurial task. Entrepreneurial tasks are those central to discovering, evaluating, and exploiting opportunities to create future goods and services (**Shane and Venkataraman, 2000**). **Brockner et al. (2003)** described several tasks central to successful entrepreneurial action, including conceiving the entrepreneurial idea, screening the idea, procuring resources, and proving the business model through execution. (**Haynie, 2010**)

## **LITERATURE REVIEW**

**Ashford C. Chea (2008)** in his **Entrepreneurial Venture Creation: the Application of Pattern Identification Theory to the Entrepreneurial Opportunity-Identification Process** discusses the theory of pattern identification. The theory of pattern identification suggests that cognitive frameworks serve as template (patterns or guides), assisting specific persons to recognize connections between apparently independent events and trends and to detect meaningful patterns in these connections. This aspect of pattern identification

theory suggests an intriguing explanation of the fact that particular business opportunities are recognized by specific persons but not by others. Briefly the persons who recognize specific opportunities may do so because they possess relevant cognitive framework that help them accomplish this task—frameworks that enable them to perceive the emergent patterns (i.e., technological, economic, social, cultural, etc.) that underlie many new business opportunities. An aspect of the theory of pattern identification with important implications for understanding opportunity identification is the suggestion that cognitive frameworks, developed through individuals' unique life experiences, play a crucial role in pattern identification. In this research a number of factors that influence opportunity identification ways by the entrepreneurs. Among the major factors include entrepreneurial awareness and alertness, information asymmetry and prior knowledge, discovery versus purposeful search, networking versus solo entrepreneurship, creativity.

**Vesa Puhakka (2012) in Entrepreneurial Creativity as Discovery and Exploitation of Business Opportunities** reflects on organizational creativity in terms of discovery and exploitation of entrepreneurial opportunities. A theoretical foundation for the notion of perceiving and seizing business opportunities as a creative process is first sought in creativity research. On this basis, the paper constructs a view of entrepreneurial creativity as a creative process and presents a theoretical conception of the discovery of business opportunities as a creative process. The paper starts with theoretical background of the research area, followed by an inquiry into what makes the processing of business opportunities a creative activity. This paper also presents a review of existing research on creativity, which it then used as a foundation for developing an understanding of creativity as a phenomenon. Then the essence of creativity has been charted and the concept of creativity, as it emerges from research, was discussed. Next, a framework, based on a theoretical approach to creativity, was presented for the entrepreneurial ability to generate business opportunities. Finally, a discussion was conducted on the issues raised by this research.

**José Carlos Sánchez García et.al (2014) in their Psychometric Properties and the Factor Structure of the Spanish Version of the Cognitive Adaptability Scale (MAC)** discusses Cognitive Psychology. It has made important contributions to the field of Entrepreneurship in areas such as cognitive styles of entrepreneurs (Bridge, O'Neil, & Cromie, 2003), enterprising self-efficacy (Markman, Baron, & Balkin,

2005), decision-making heuristics (Mitchell et al., 2007), knowledge structures of entrepreneurs (Smith, Mitchell, & Mitchell, 2009), etc. Knowing how these cognitive elements function has helped to understand how entrepreneurs perceive and interpret information and how they use it to make the decision to start a successful business. This study states that researchers in this field are making an effort to find instruments to measure this ability in a way that allows us to predict success in the context of enterprise creation or intention. Jose and others conducted a series of exploratory and confirmatory analyses of the cognitive adaptability scale (MAC), using a sample of Spanish ( $N = 494$ ), in addition to the reliability and validity analyses and found that a three-factor solution of the MAC best fit the data. The reliability coefficients of consistency were acceptable. The validity of the MAC was confirmed by its correlation with Need for Cognition (NFC). The NFC measures the degree to which individuals enjoy cognitive activity

## OBJECTIVE

The objective of this paper is to examine the relationship between the entrepreneurial opportunity recognition and metacognition of entrepreneurs.

## METHODOLOGY

Descriptive research design has been selected for the present study. The study uses both primary and secondary data. Secondary data have been collected from books, journals, internet, published and unpublished papers. Primary data have been collected with the help of well designed structured questionnaire on the basis of literature. The questionnaire was designed on the basis of the generalized measure of adaptive cognition (GMAC) developed by Haynie (2008). The items are 37 in numbers with five dimensions describe goal orientation, meta-cognitive knowledge, meta-cognitive experience, meta-cognitive choice and monitoring. This is a five point scale. The questionnaire was pre-tested on a sample of 20 and necessary changes were incorporated. For the present study non-probability convenience sampling was administered on a sample of 40 entrepreneurs from the district of Cuddalore, Tamilnadu. Pearson's coefficient of correlation was applied to establish the relationship among the variables.

**Table 1: showing relationship between Metacognition and opportunity recognition of entrepreneurs.**

Opportunity recognition	GMAC	N	Df(N-2)	'r' value	Level of significance
Opportunity recognition	Goal orientation	40	38	0.467	**
	Metacognitive knowledge	40	38	0.343	*
	Metacognitive experience	40	38	0.368	*
	Metacognitive choice	40	38	0.498	**
	Monitoring	40	38	0.463	**

\*denotes Significant at 0.05 level; \*\*denotes significant at 0.01 level

## DISCUSSION OF RESULTS

**Ha: there is significant correlation between the entrepreneurial opportunity recognition and metacognition of entrepreneurs.**

The above table shows the analysis of the opportunity recognition with the various dimensions of metacognitive adaptability. The results clearly indicate that there exists a positive correlation between opportunity recognition with all the dimensions of metacognition of entrepreneurs. This indicates that there is a significant correlation between entrepreneurial opportunity recognition and the metacognition of the entrepreneurs. The results emphasize the findings of **Vesa Puhaka (2012)** who identified **Entrepreneurial Creativity as Discovery and Exploitation of Business Opportunities** which is basically possible only when the entrepreneurs are metacognitively adaptable. The results also endorse the findings of **Cheah (2008)**. **Long and McMullan (1984)** proposed a model of opportunity identification as a "creative structuring process". This concept is further enhanced by the results of this study through the existence of positive correlation between the opportunity recognition and the metacognition of entrepreneurs. This implies that is creativity based on cognitive abilities whereas the end result is opportunity identification. **Amabile (1997)** in her note stresses that entrepreneurial action should take place in creativity to make it as entrepreneurial creativity. This is possible only when the entrepreneurs are aware of the opportunities available to exhibit their creativity and this gets further possible only when the entrepreneurs are able to adapt themselves cognitively.

## CONCLUSION

Researchers have proved that creativity as an act of seeing things that everyone around us sees while making connections that no one else has made. This becomes possible only when cognitive skills are active. Moreover an entrepreneur should be cognitively adaptable to identify his creativity; this is other way round

called as metacognitive adaptability. Maslow (1954) thought of creativity as having two levels. He envisaged primary creativity as the source of new discovery, real novelty, or ideas which depart from what exists at a given point in time. He saw secondary creativity as a characteristic possessed by many scientists in their collective search for discovery achieved by working alongside other people, extending the work of previous researchers, and exercising prudence and caution in their claims about new insights or ideas. He envisaged creativity as an aspect of human nature that was to be found universally in all human beings. This is what an entrepreneur in need of. Though creativity is found in all human it should be made to influence the entrepreneurial abilities to boom it as entrepreneurship. To conclude only when creativity is embedded with entrepreneurial action it flowers out as profitable entrepreneurial opportunity recognition and venture creation.

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