

## **ENTREPRENEURSHIP, COGNITION AND DECISION MAKING: LITERATURE REVIEW**

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### **Abstract**

Having in mind that this approach to entrepreneurship and as a consequence to entrepreneurial decision-making is not quite analyzed in our region, the main objective of the paper would be to provide an extensive literature review, that would put forward the basis for future direct and well-structured analysis of cognitive entrepreneurship in the Republic of North Macedonia and provide insights as regards to the influence of optimism and overconfidence as two of the main cognitive biases in entrepreneurship on entrepreneurial intentions among youngsters in the Republic of North Macedonia

**Keywords:** entrepreneurship, cognition, decision making, employee's

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### **Introduction**

Although young, entrepreneurship has managed to shape a large part of our everyday lives, at least for most of the previous and almost the entire length of this century, thus far. Usually when discussing entrepreneurship and its various aspects, a trait approach is considered, meaning that mainly trait elements such as being innovative and creative, the willingness to undertake risks, managerial abilities etc. Canutillo described the entrepreneur as an "adventurer", someone willing to undertake risks in order to create profits and McClelland put forward the idea that the need for achievement is what drives an entrepreneur while one of the greatest managerial minds of our time, Peter Ducker perceives entrepreneurs as people who strive as changes occur since they can see and use the opportunities brought forward by changes in the external environment. But, even besides the many achievements of the trait's theories, cognition has always been present as a central point of view on entrepreneurship according to which different cognitive structures and processes differentiate an entrepreneur from a non-entrepreneur. It is imperative that the spring of entrepreneurship, the strength of the entrepreneurial spirit permeates the four corners of the globe. New jobs are created. Wealth is distributed. The entrepreneur becomes the centre of attention. The entrepreneur is responsible for this invisible revolution that has been transforming the world. No economic, social advances, creation and distribution of wealth happen without their presence. Monopolies are broken, revitalizing the economic fabric. The entire sector of the economy has been invaded by the entrepreneurial wave. It is the impactful performance of entrepreneurs (Leite, 2021).

Research on factors triggering employee's entrepreneurial behaviour predominantly lies in realms of corporate entrepreneurship and entrepreneurship. Entrepreneurship literature has lacked studies and theoretical frameworks aimed at investigating factors influencing the employee's decision to become entrepreneurs (Krasniqi, 2019).

If entrepreneurs are indeed an essential part of the process through which new ventures are created, it is reasonable to suggest that at least some aspects of their behaviour and cognition play an important role in this process (Baron, 2007, p. 167). The cognitive approach uses the cognitive aspects of entrepreneurs to study and even to explain their behaviour, which is related to the identification of opportunities for the creation of businesses and business growth (Staunchev et al, 2011). But as Gregory et al (2011) point out, despite its many achievements, scholarship at the intersection of entrepreneurship and cognition has focused primarily on the consequences of what happens when an entrepreneur benefits from various cognitive characteristics, resources, or other dispositions.

Cognition has always been central to the popular way of thinking about entrepreneurship. Entrepreneurs imagine a different future. They envision or discover new products or services. They perceive or recognize opportunities. They assess risk and figure out how to profit from it. They identify possible new combinations of resources. Common to all of these is the individual's use of their perceptual and reasoning skills, what we call cognition, a term borrowed from the psychologists' lexicon (Katz & Shepherds, 2003).

Cognitive adaptability though has no direct impact on risk decision-making speed, whereas it directly affects risk decision-making effect; opportunity identification has a full mediating effect between cognitive adaptability and decision-making speed, and a partial mediating effect between cognitive adaptability and decision-making effect; entrepreneurial efficacy plays a moderating role between opportunity identification and decision-making speed, and a same role between opportunity identification and decision-making effect (Wang et al, 2020).

Researchers in cognitive theories that address entrepreneurs' perceptions of the start-up process assert that in order to keep their long-term goals alive in the face of surprises, shortages and barriers, entrepreneurs develop intense mental images of desirable futures. These researchers also found that to cope with the uncertainties and urgencies they face, entrepreneurs draw upon tacit knowledge, like intuition, through cognitive processes based on compressed experience, rather than on strategic thinking. The combination of these images and tactics comprises the overall scheme of the venture that the entrepreneurs want to create (Kari, 2011, p.44)

Since decision making and cognition are affected by the knowledge acquired through the learning process, it is necessary to highlight the fact that there is virtually no perfect information in the world we live in, making it difficult for anyone to acquire knowledge (Cacciolatti & Lee, 2015).

Although at a first glance, one might perceive such cognitive biases of positive influence to the entrepreneurial decision-making process, as the paper will show several studies have proved that such biases are not to be always considered positive since after all they "limit" entrepreneurial rationality in decision making.

### **Objectives of the study**

Having in mind that this approach to entrepreneurship and as a consequence to entrepreneurial decision-making is not quite analysed in our region, the main objective of the paper would be to provide an extensive literature review, that would put forward the basis for future direct and well-structured analysis of cognitive entrepreneurship in the Republic of North Macedonia and provide insights as regards to the influence of optimism and overconfidence as two of the main cognitive biases in entrepreneurship on entrepreneurial intentions among youngsters in the Republic of North Macedonia

## Hypothesis

The following hypothesis will be tested as part of the study:

Hypothesis1. Optimism is positively linked with entrepreneurship intention.

Hypothesis2. Overconfidence is positively linked with entrepreneurship intention.

Hypothesis3. Optimism is positively associated with positive entrepreneurial emotion.

Hypothesis4. Optimism is positively associated with positive entrepreneurial emotion.

Hypothesis5. Positive entrepreneurial emotion is positively associated with entrepreneurship intention.

## Variables

The following variables will be used in order to test the research hypothesis:

Variable 1: Optimism

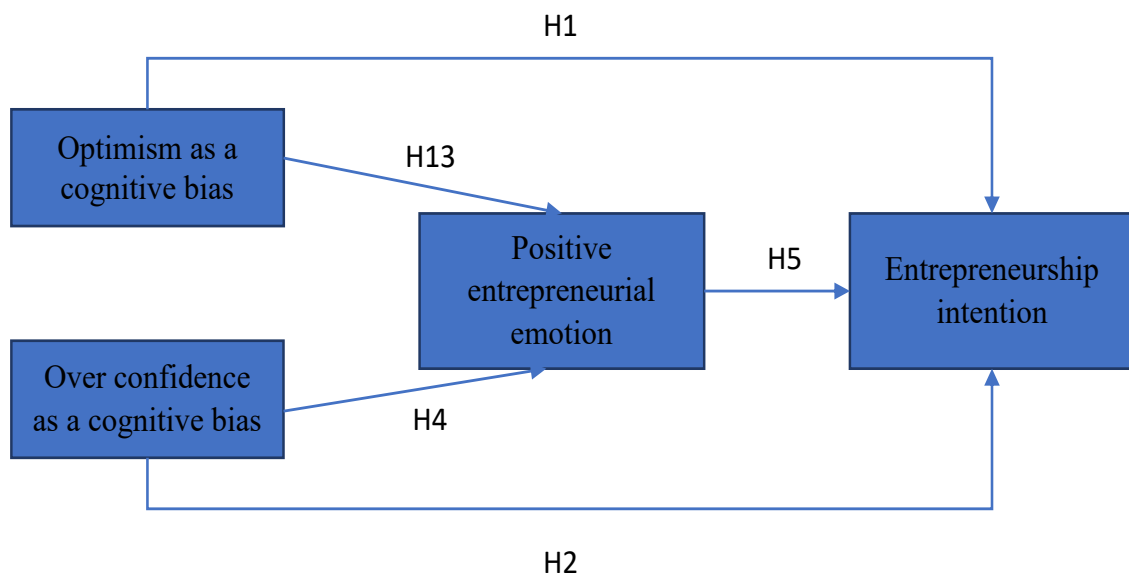
Variable 2: Overconfidence

Variable 3: Entrepreneurial emotion

Variable4: Entrepreneurship intention.

## Proposed research model

A simplified research model for this study might be presented as follows.



## Research methodology

In order to assess the influence of cognitive factors on making the decision to engage in entrepreneurial activity, a questionnaire survey will be conducted with third- and fourth-year students in the Faculty of Economy at the University of Tetovo, as well as master students from this institution. Aside from this, the questionnaire will be distributed to the general young population using the social networks. This would ensure a viable sample that would make it possible to create a proper data set and adequate conclusions regarding the matter being studied.

The questionnaire will be prepared based on a combination of different methods, aimed at studying the main variables of our research.

The questionnaire will be divided in several parts, each including 5 to 8 questions. The first part of the questionnaire will aim at measuring the level of optimism. These questions will be derived from the Attribution Style Questionnaire provided by Peterson et al (1982) being the most widely used questionnaire in assessing the level of optimism. The second part of the questionnaire will contain questions regarding to measure the level of overconfidence based on Michailova (2010). The third part of the questionnaire will contain questions regarding the assessment of entrepreneurial emotion, based on approaches identified in Othman et al (2019). The last part of the questionnaire will contain question to measure the entrepreneurship intention of the respondents in term of the chances of engaging in entrepreneurial activity. STATA will be used as a tool for data analysis.

### **Significance of the study**

Having in mind the main objective of the study, the outcome of the paper will be of a theoretical importance in providing a comprehensive analysis of pros and cons of cognitive aspects of an entrepreneur's personality and their consequences on entrepreneurial activity as well as of a practical nature in determining the potential influence of cognitive factors on entrepreneurial intentions in the Republic of North Macedonia.

### **Expected imitations of the study**

The research will be followed by two main limitations. The first limitation has to do with the fact that cognitive entrepreneurship is a growing field of research, thus the list of cognitive factors to be considered as important is not yet fully determine. Therefore, the paper will be organized around the two main cognitive factors that are overconfidence and optimism, since they are the most usually researched factors in similar studies. The second limitation is imposed by the global pandemic and the difficulties in reaching a larger number of students as respondents.

### **References**

- [1]. Baron R. A. Behavioral and cognitive factors in Entrepreneurship: entrepreneurs as the Active element in new venture creation. *Start. Entrepreneurship J.*, 1: 167–182 (2007).
- [2]. Gregory D.A., Corbett A. C., and McMullen J. The Cognitive Perspective in Entrepreneurship: An Agenda for Future Research (September 2011). *Journal of Management Studies*, Vol. 48, Issue 6, pp. 1443-1477, 2011.
- [3]. Sanchez J., Carballo T., Gutierrez A. The entrepreneur from a cognitive approach. *Psicothema* 2011. Vol. 23, nº 3
- [4]. Cacciolatti L., Lee S.H. (2015) Entrepreneurial Cognition and Learning. In: *Entrepreneurial Marketing for SMEs*. Palgrave Macmillan, London
- [5]. Peterson Ch., Semmel A., Bayer C., Abramson L., Metalsky G., Seligman M. E.P. (1982). The attributional style questionnaire. *Cognitive Therapy and Research*, Vol. 6, No. 3, 1982, pp. 287-300
- [6]. Michailova J. (2010). Development Of the Overconfidence Measurement Instrument for The Economic Experiment. [https://mpira.ub.uni-muenchen.de/26384/1/ Construction\\_of\\_the\\_Test\\_02.11.2010.pdf](https://mpira.ub.uni-muenchen.de/26384/1/Construction_of_the_Test_02.11.2010.pdf)
- [7]. Othman N., Othman N., Nuhdi N. (2019). Determining The Validity and Reliability of Entrepreneurial Emotion. *Academy of Entrepreneurship Journal*. 25. 1-5.
- [8]. Katz, J.A. and Shepherd, D.A. (2003), "Cognitive Approaches to Entrepreneurship Research",
- [9]. Katz, J.A. and Shepherd, D.A. (Ed.) *Cognitive Approaches to Entrepreneurship Research* (Advances in

- Entrepreneurship, Firm Emergence and Growth, Vol. 6), Emerald Group Publishing Limited, Bingley, pp. 1-10
- [10]. Kariv D. (2011). Entrepreneurship: An International Introduction. Routledge: London
- [11]. Wang, G., Li, X., Zhou, J. and Lan, S. (2020), "The influence of entrepreneurial team's cognitive adaptability on its risk decision making", *Industrial Management & Data Systems*, Vol. 120 No. 2, pp. 329-349
- [12]. Krasniqi, B.A., Berisha, G. & Pula, J.S. Does decision-making style predict managers' entrepreneurial intentions? *J Glob Entrepr Res* 9, 68 (2019)