Cognitive Biases, Risk Perception, and Individual’s Decision to Start a New Venture

Salma Zaiane, Faculty of Economics and Management Sciences of Tunis, Tunis, Tunisia
Fatma Ben Moussa, Faculty of Economics and Management Sciences of Tunis, Tunis, Tunisia

ABSTRACT

The purpose of this article is to investigate the relationship of overconfidence and illusion of control towards the start of new venture, taking in consideration the mediating role of risk perception in the context of Tunisia. This article examines students’ responses to surveys based on a teaching case titled “Optical Distortion, Inc.” The authors tested hypotheses by correlation and regression analysis. The results show that the perception towards risk associated with new venture plays an important role in decision-making. Moreover, they find that overconfidence and illusion of control reduce risk perception associated to the decision to start a venture. While overconfidence directly affects the decision to start a venture and indirectly through its effect on reducing the risk perception, illusion of control has neither a direct nor an indirect impact on that. These results partially confirm those of Simon show that the mediation exists but partially.

KEYWORDS

Cognitive Biases, Decision-Making, Entrepreneurs, New Venture Formation, Risk Perception

1. INTRODUCTION

Nowadays, all businesses face an unstable business environment with high levels of uncertainty. This uncertainty makes decision-making more complex than ever before. In a rapidly changing environment, it is a challenging task to use available opportunities and make decisions by utilizing all available information for being a rational decision maker. By the time decisions are made, there is a possibility that the opportunity would not exist. In such complex circumstances, cognitive biases play an important role in decision-making. In fact, they are considered as common types of mental shortcuts used to make judgments.

In order to explain venture creation decisions, a cognitive approach can offer great insights into entrepreneurship research (Robinson and Marino, 2013). In fact, many researchers have studied how the entrepreneur think and the role-played by cognition in the process (Nigel Wadeson, 2008; Baron, 1998).

The decision to start a new venture involves risk (Kannadashan et al., 2014). In fact, decisions makers base their decisions upon interpretations of risks representing the possibility for loss and uncertainty (Forlani& Mullins, 2000).
Based upon anticipated chances of success, individual’s perceptions of risk may influence venture creation decision. In fact, lowered risk perception help us to explain why ventures are formed at such high rates relative to high failure rates (Hayward et al., 2006).

This study extends the cognitive theory in the context of new venture formation by capturing the students’ perceptions regarding their overconfidence, illusion of control, risk perception and decision to start a new venture.

Our study examines the relationship among two cognitive biases. The first bias is overconfidence. It refers to the failure to know the limits of one’s knowledge. The second bias is illusion of control. It occurs when individuals overemphasize the extent to which their skill can lead to an increase in the performance in situations where chance plays a major role.

Our study is among the fewest studies that provide empirical evidence for the interconnections between overconfidence, illusion of control, risk perception and the decision to start a venture. In fact, under developed country, the relationship among cognitive biases to start a new venture and risk perception, as a mediator is less investigated (Bhatnagar, 2007). As limited literature is available in the Tunisian context, our study explores the relationship that would exist between cognitive biases and perceived risk. Secondly, the relationship between perceived risk and starting a new venture.

To understand the relationship between these psychological factors, risk perception and individual’s decision to start a venture, we apply the same method used in past research by Simon et al (2000). This method ensured that all the participants analyzed the same venture. We collect responses from 74 postgraduate students after teaching discussion of a Harvard Business School case titled ‘Optical Distortion, Inc. (Clarke, 1988). The survey contains questions about the students’ willingness to start a new venture, their perception of the risk related to this venture, and the extent to which they are subject to cognitive biases in their decision processes.

This study finds that overconfidence and illusion of control reduce risk perception associated to the decision to start a venture. While overconfidence affects directly the decision to start a venture and indirectly through its effect on reducing the risk perception, illusion of control has neither a direct nor an indirect impact on that.

The rest of the paper is organized as follows. Section 2 establishes the theoretical background for the hypotheses. Section 3 provides the empirical setting. Section 4 presents and discusses the empirical results. Finally, Section 5 concludes the paper with a summary of the main findings and explores some future perspectives.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Risk Perception and Decision to Start a Venture

According to GePhart et al. (2009), “Risk is the probability of an event multiplied by the magnitude of losses or gains associated with the event.” Chavvin and Hermand (2007) explain that “Risk is subjective in nature and represents a mixture of important psychological, social, cultural, and political factors “.

In the literature, risk and starting a new venture are linked. In fact, starting a new venture has always been considered as a risky action regardless of the time in which it is located (Vérin, 1982).

The perception of risk significantly affects the decision to create (Dubard-Barbosa, 2008), and it is negatively associated with the act of the creation of the firm.

According to Tounes and Fayolle (2006), the entrepreneur is considered as an adventurer who exploits very risky situations. Julien and Cadieux, (2010) indicate that the entrepreneur is the person who is willing to sacrifice his career and his financial security to implement an idea or to give his time and to invest a part of his capital in a risky venture.

According to Schumpe et al. (2017), risk taking depends on the extent to which a behavior serves an individuals’ motivation in a given situation. Josef et al. (2016) demonstrated the stability of participants’ responses over time and the consistency of several risk-related tasks, thus demonstrating
How Service Firms Manage Innovation: Development Process and Factors of Success
www.igi-global.com/chapter/service-firms-manage-innovation/61871?camid=4v1a

Exploration of Adoption of Service Innovations through Technology Road-Mapping: Case of Location Based Services
www.igi-global.com/article/exploration-adoption-service-innovations-through/43619?camid=4v1a