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## Behavioral Biases in Entrepreneurs Vs Leaders

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### Abstract

*The research addresses the Behavioural biases in entrepreneurs vs. leaders in large organizations. It studies cognitive elements such as representation, overconfidence, and planning fallacy for making strategic decisions. In an organization, the major types of decisions are the funding, financing and growth decisions. The determining factors are behavioral bias, returns, and uncertainty. Previous theories have managed to solve some problems, but a major issue persist which is how entrepreneurs and managers make their decisions. The study gives insights to the body of research that has never been explored before or has received less attention. The research reviews as well as highlights the new and potentially important ways of thinking about the difference between leaders and entrepreneurs in decision making. The discussions and assessments help address as well as reveal tensions in literature, identify various opportunities in research that may not be evident by looking at previous work independently. It also contributes to how the bias theory can further facilitate the understanding of entrepreneurship.*

**Keywords:** Biases, Entrepreneurship, Optimism, Overconfidence, Planning Fallacy.

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### 1. Introduction

Existing theories mainly focus on the steps to start a venture and recognition of opportunity (Pinto, 2016 and Dushnitsky, 2009). It is important to have a cognitive approach because the traditional theories have remained unvoiced on the psychological front (Bitler *et al.*, 2009). The studies explain the personal and psychological differences between the managers and entrepreneurs in the large organizations.

Observation is that people who start their ventures are by far different from those who work in big firms (Busenitz, 2013). The description that best fits entrepreneurs are that they are risk takers who engage in social behaviors which deviate. They are different as compared to the managers who are risk averse and follow the accepted behavior norms which are predictable and typically professional in their decision making (Busenitz and Barney, 2014). Entrepreneurs are overconfident (Schwardmann and Van der Weele, 2016) and are capable of persuading others. Also, Dushnitsky (2010) and Van den Steen (2004) have looked at the possible ways entrepreneurial optimism could modify the potential investors' assessments of an entrepreneur's business plans.

In the research literature (Busenitz and Barney, 2014), the observations and the efforts to differentiate the leaders in the organization and the entrepreneurs have encountered limited success. Many researchers have deviated and focused more on the personal differences between the entrepreneurs and the leaders of the firm. The need to examine these differences continues

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to exist, and therefore this study further explores the differences and specifically on the decision making or cognitive differences.

## 2. Theory

Based on decision-making prototypes from the theory of behavioral decision science, the theory argues that the use of bias may explain the difference in the decision making. The study, therefore, looks at differences between managers and entrepreneurs in the large businesses with the focus on three biases.

Overconfidence has been conceptualized as overestimation (Zacharakis and Shepherd, 2001; Simon and Houghton, 2003; Simon and Shrader, 2012), over correctness (Busenitz and Barney, 1997; Busenitz, 1999; Simon *et al.*, 2000; Forbes, 2005), and over placement (Grichnik, 2008). Overconfidence is the distinction between subjective assessment and the objective accuracy (Busenitz, 1999; Gudmundsson and Lechner, 2013). It is critical in the cognitive study of entrepreneurial behavior. Hayward *et al.* (2010) argued that entrepreneurs who are more confident can cope cognitively, emotionally, financially and socially and that the benefits of behavioral bias can overshadow the negative outcomes of overconfidence bias in entrepreneurs.

Optimism is seen as a steady preference to assume the most positive results (Scheier *et al.*, 2001). Optimism can be seen when entrepreneurs necessitate creating innovative fresh ventures (Dushnitsky, 2010), financing decisions and growth decisions particularly when these decisions require additional resources (Simon and Shrader, 2012). In the Planning fallacy the time required for a goal tends to be underestimated (Kahneman and Lovallo, 1993). Despite failures the entrepreneur tends to ignore the learning and his determination and commitment actually increases (Staw, 1977).

Planning fallacy is common in situations where an estimate has to be made and the future is uncertain (Baron 1998), particularly when they decide to disregard lessons learnt from earlier failed ventures that are relevant to the new venture (Kahneman and Lovallo, 1993; Buehler *et al.*, 2010). Planning fallacy tends to affect the psychology such that there is diminished assessment of the uncertainty and there is significant simplified planning for emergencies.

## 3. Methods

Samples were drawn from two populations, the entrepreneurs, and leaders. The entrepreneurs were the founders of large electronic and plastic manufacturing industries. The sample would represent the majority of emerging firms. 573 firms were sampled, and there were 179 responses. The response rate was 31% out of which 22% were usable. Based on the classification of the industries, a test for bias response was conducted. Respondents were compared to non-respondents using a two-digit SIC category.

The chi-square test results suggested that the bias lacks in the helpful response. In this study, 57% of the applicable response rate was received. The managers SIC used in the sample came from 1300, 3400, 3500, 3600, and 3800. The chi-square test conducted between non-respondents and helpful response suggested that there was no bias in the response.

## 4. Measures

The studies' principal aim was to gauge the use of preferences in decision-making for entrepreneurs vs managers in large firms. Therefore, some different decision problems were sought to present a better illustration of the style of the ruling in a particular context with the two groups of the strategic decision makers. A series of 6 questions based on the cause of business failure in the U.S was developed in order to measure overconfidence. The answers

were two, which were A. Mismanagement and B. economic decline. Subjects were asked to choose from the two which was the correct answer. They were also told to rate their levels of confidence which had a range of 50-100. 50% would indicate that he guessed the answer, 70% would suggest that they estimated 7/10 chances of being right while 100% means total overconfidence confidence in their choice.

What's more, the grouping of the confidence response was put into probability categories from 0.50- 1.00 took place. This was further grouped into 0.60, 0.70, 0.80, 0.90 and 1.00. 0.6 represented very low confidence while 1.00 represented very high self-efficacy. The group calibration curve was also used to measure the confidence levels of the entrepreneurs and the managers. The introduction of a positive and negative score was introduced for statistical purposes where a positive score represented high confidence while negative are low confidence.

To measure planning fallacy and over optimism, a quantitative and cognitive style based problem was presented. The first issue entailed the purchase of pieces of the original equipment while the second involved decision to do with automation update. Subjects were required to choose among the various alternatives given and to describe the reasons behind their choices. The coding scheme was used to determine if the reasons given were made cognitively or otherwise. Besides, a variable of 3 categories (0-2) was used to measure whether the individual used statistical or cognitive reasoning to decide. 0- indicated that mathematical logic was used while 2- indicated the use of cognitive reasoning.

## 5. Results

Behavior analysis on the overconfidence variable remains significant. The curve shows the number of correct responses which is divided by the total number of replies. In the probability, entrepreneurs have high confidence levels with five of the six categories. On the other hand, managers were overconfident only three times in the likelihood. Planning fallacy and over-optimism also remain significant. Furthermore, the control variables of economic alertness remain statistically significant. Also, the measures remain statistically relevant and enable the distinction between managers and entrepreneurs.

## 6. Discussion

General experience suggests that in large organizations entrepreneurs and managers are, somehow, different from one another. Efforts of many researchers have met limits in the quest to find out the difference. This research by using the theory of behavioral biases has illustrated that entrepreneurs and business leaders are different in their thinking. Previous work sought to know if the behavior bias exists and what affects their usage. It goes further to suggest that behavioral bias exists and that different decision makers use bias to varying degree (Frese and Gielnik, 2014).

This research examines only three preferences: overconfidence, planning fallacy, and over-optimism. Previous literature has already identified other biases. Overconfidence is the belief in one's abilities to reach a given degree of performance or result which influences conditions affecting their lives amidst objective accuracy. It is critical in the cognitive study of entrepreneurial behavior.

This research seeks to make a distinction between the overconfidence of entrepreneurs and managers. People with higher levels of entrepreneurial overconfidence perceive more opportunities than the less entrepreneurial overconfident individuals. There are three problems in an enterprise which require decision making and they are related to growth, finance and funding. The determining factors are the behavioral finance, returns, and uncertainty. Traditional economic and finance

theories have successfully provided some (Kaplan and Stromberg, 2002 and Bitler *et al.*, 2009) solutions to the first and second problems but have failed in the third (Camerer and Lovo's work, 1999). They are not able to explain how entrepreneurs decide and select a new venture.

In this case, the leaders in the organization see risk and costs in every situation, (objective accuracy) (Sánchez *et al.*, 2011). They do not have the confidence to decide on an issue based on subjective certainty. The study explicitly, argues that entrepreneurs tend to have this bias more expansively in strategic decision-making in large organizations than managers.

Most entrepreneurs make an effort to convince prospective investors to finance their recent ventures. The entrepreneurial persuasiveness does not depend on accuracy but accurate projections. Investors tend to be more convince by projections that Entrepreneurs feel confident about even though they may not be accurate, in the real sense. Leaders, on the other hand, are more likely to lose the investment opportunities because they depend on the accuracy of the information. Managers seek to ascertain that what they are presenting to the investor is accurate. They are more likely to be unsuccessful as compared to entrepreneurs regarding the decisions made.

### **7. Planning Fallacy and Decision Making**

Planning fallacy is the propensity to underestimate the time needed to complete a potential entrepreneurial task regardless of knowing how long the tasks have formerly taken (Baron 1998; Buehler *et al.*, 2010). Entrepreneurs have a commitment in their new ventures and do not relay on the time frame needed for completion of projects despite knowing how much time the previous ventures took. Leaders, on the other hand, put into consideration the time frame for completion if a task while planning. The task focus belief of entrepreneurs and a greater planning level persuade investors to greatly fund their venture while the time focus on the leaders will not persuade investors easily.

### **8. Optimism and Decision Making**

Optimism arises when entrepreneurs uphold the idea that positive things will happen in the future with regard to their new ventures regardless of evidence of failure. From a cognitive bias, optimism produces negative outcomes when it arrives at extreme levels. (Arabsheibani *et al.*, 2000; Estebro *et al.*, 2007; Puri and Robinson, 2007; Hmieleski and Baron, 2009; Cassar, 2010). Optimistic biased entrepreneurs are capable of persuading investors that their estimates are realistic, and the investor will invest greater amounts. Leaders are not optimistic in nature, but they tend to focus more on the objective probability of the project at hand. Leaders tend to look at the probability of success of failure in every venture. Therefore the chances of a leader succeeding in a venture compared to an entrepreneur are very low.

Arguments exist explaining that bias decisions are only applied in this manner are immune to conscious behavior still exist and suggests that decisions made to change. They further suggest that bias to be made stable so that those who are not comfortable with it to work in larger firms and those that are comfortable to be absorbed in entrepreneurship.

This study, therefore, helps to resolve and further expound previous conclusions on risk. Most researchers suggest that entrepreneurs do not differ substantially with the leaders of prominent organizations in their propensity in risk taking. However, the evidence to support these conclusions is habitually weak and diverse. The issue here may not be the risk propensity but rather the way entrepreneurs think about the decisions they would make faced with an opportunity. Entrepreneurs are more vulnerable to the use of bias and are more likely to underestimate the risk in decision-making circumstances (Stephen and Cueto, 2015) than managers.

Practical implications in such decisions would exist without the biases because the opportunity might not be available when the relevant data is gathered and analyzed. Overcoming hurdles would be challenging, and postponement of decisions will be the order of the day plus making decision making very difficult and cumbersome. More particularly, a certain degree of overconfidence may be specifically advantageous in executing entrepreneurial decisions in the face of uncertainty and overconfidence may be contagious and help in influencing others by making them more passionate towards the venture (Busenitz and Barney, 2013), Schwardmann and Van der Weele (2016), Dushnitsky (2010) and Van den Steen (2004).

## 9. Conclusion

The use of biases may also explain why entrepreneurs occasionally make awful managers. Therefore, entrepreneurs differ in the behavioral bias from managers because they use the behavioral bias more than the leaders in an organization. An organization may use criteria to know the type of employees they have. If an employee has the bias characteristic, he or she should work in a department which deals with problem-solving or is released to pursue entrepreneurship. Future research should further explain and refine the differences, measure, and biases between the managers and the entrepreneurs in large organizations. Also further studies of the behavioral bias and if it remains constant over time need to be conducted.

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