

Cognitive and affective determinants of entrepreneurial decisions experimentally examined

Theresa Michl¹, Isabell M. Welpe², Matthias Spörrle³, Arnold Picot¹

¹Ludwig-Maximilians-University Munich, ²Technical University of Munich, ³University of Applied Management Erding

Abstract

Objectives. Our study investigates the role of emotions and cognitions in the pre-entrepreneurial decision-making process, i.e., the process prior to the decision to exploit an entrepreneurial opportunity, which has only looked at by few researchers so far.

Methods. An online questionnaire experiment with three different samples, i.e., employees, students, and entrepreneurs ($N = 578$) using 16 different experimentally manipulated entrepreneurial scenarios was conducted.

Results. Findings indicate that the relationship between the characteristics of an entrepreneurial opportunity and the evaluation of it is mediated by cognitive appraisals. Moreover, negative and positive affects moderate the relationship between the evaluation of an entrepreneurial opportunity and the decision to exploit it.

Conclusion. This study confirms the central assumption of cognitive appraisal theories of emotion which state that the subjective representation of objective entrepreneurial opportunities better predicts the decision to exploit an entrepreneurial opportunity than the objective characteristics of the entrepreneurial situation.

Introduction

The question why some individuals and not others exploit entrepreneurial opportunities is still not fully answered. There is consensus that the nature of opportunity plays a key role in the pre-entrepreneurial decision-making process (Lang-von Wins, 2004; Phan, Wong, & Wang, 2002) which contains the recognition, the evaluation and the decision to exploit an entrepreneurial opportunity (Shane & Venkataraman, 2000). Some researchers (Busenitz & Lau, 1996; Mitchell, Smith, Seawright, & Morse, 2000) argue that the subjective, mental processes in individuals play a crucial role in the pre-entrepreneurial process and for the decision to exploit an opportunity. Therefore, this study seeks to explore individuals' different perceptions of entrepreneurial opportunities and the role of cognitive appraisals as well as emotions in this perception-shaping process in order to fill the gap of the 'Individual-Opportunity-Nexus' (Shane, 2003; Spörrle, Breugst, & Welpe, 2009; Spörrle, Welpe, Breugst, & Scapin, 2008).

The Pre-entrepreneurial Process

As most present studies look at entrepreneurial behavior *after* individuals have decided to exploit an entrepreneurial opportunity, we only know inadequately, who for what reason recognizes and evaluates entrepreneurial opportunities and decides for or against entrepreneurial activity. This work, therefore, examines the decision-making process *before* individuals start exploiting an entrepreneurial opportunity.

Richard Lazarus' Cognitive Appraisal Theory of Emotion

In general, appraisal theories assume that the emotions elicited by an event depend on how the event is appraised by a person along a number of appraisal dimensions (Siemer & Reisenzein, 2007). There are two appraisal dimensions in Lazarus' appraisal theory: primary and secondary appraisal (Lazarus, 1991; Smith & Lazarus, 1993). Primary appraisal is concerned with whether and how an encounter is relevant for a person's well-being, and consists of two components, namely motivational relevance and motivational congruence. Motivational relevance describes the extent to which the encounter is important for a person's goals and concerns, whereas motivational congruence describes the extent to which the encounter is consistent or inconsistent with a person's goals (i.e., a person's desirability; Smith & Lazarus, 1993). Secondary appraisal is concerned with to what extent a person's available resources can be applied to cope with the encounter, and consists of four components, namely accountability, problem-focused coping potential, emotion-focused coping potential, and future expectancy.

Method

We applied a questionnaire experiment with a scenario technique commonly used within the fields of psychological and entrepreneurship research.

Overall, 16 different entrepreneurial scenarios resulting from four fully crossed independent variables ($2 \times 2 \times 2 \times 2$ design):

- Profit margin (high: 350 000€ vs. low: 25 000€), Manipulation Check (MC) 3 items with $\alpha = .94$
- Time to profit (long: 7 years vs. short: 1 year), (MC 3 items with $\alpha = .93$)
- Prior investment (high: 90% equity share vs. low: 10% equity share), (MC 3 items with $\alpha = .94$)
- Probability of success (high: 90% vs. low: 10%), (MC 3 items with $\alpha = .95$)

Emotions: Fear ($\alpha = .88$), joy ($\alpha = .93$) (Both based on PANAS-X)

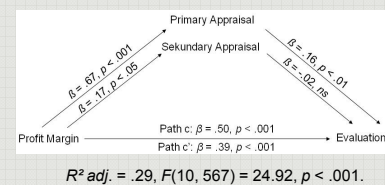
Appraisals: Primary appraisal (3 items for motive relevance and 3 items for motive congruence: 6 items with $\alpha = .97$), Secondary Appraisal (3 items for emotion-focused and 3 items for problem-focused coping potential: 6 items with $\alpha = .94$)

Dependent Variables: Entrepreneurial Evaluation (3 items with $\alpha = .89$) and Likelihood of Exploitation (3 items with $\alpha = .91$)

Results

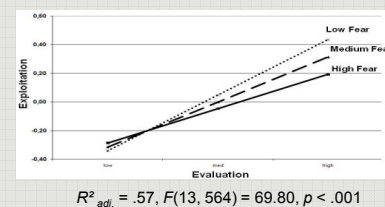
Results 1:

Findings indicated that the relation between profit margin (and probability of success) and entrepreneurial evaluation, was mediated by primary appraisal. No mediation was found for time to profit and prior investment.



Results 2:

In addition to an inverse main effect ($\beta = -.07, p < .05$), fear ($\beta = -.08, p < .05$), but not joy ($\beta = .04, p = .16$), moderated the relationship between the evaluation of an entrepreneurial opportunity and the decision to exploit it. Joy also had no positive main effect ($\beta = .05, p = .18$).



Discussion

Primary appraisal but not secondary can be regarded as a central variable within the context of the evaluation and exploitation of an entrepreneurial opportunity. Primary appraisal mediates the relationship between profit margin and evaluation indicating the importance of this variable for entrepreneurial situation evaluation.

The negative affective state of fear was found to have a direct negative effect on exploitation and to reduce the influence of evaluation on exploitation. Joy was no significant moderator. Thus, our results indicate that entrepreneurs are more concerned by the fear of failure than they are attracted by the prospects of success which is consistent with recent research indicating a powerful negativity bias (cf. Vaish, Grossmann, & Woodward, 2008).

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