

Entrepreneurial Well-Being

The Payoff Structure  
of Business Creation



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Entrepreneurial Well-Being: The Payoff Structure of Business Creation

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*To the Memory of Sabatai Rotem (Rottenberg)*



# Foreword

This volume is the result of a research project carried out at the Department of Management and Organization at the Stockholm School of Economics (SSE).

This volume is submitted as a doctor's thesis at SSE. In keeping with the policies of SSE, the author has been entirely free to conduct and present his research in the manner of his choosing as an expression of his own ideas.

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# Acknowledgements

Writing a thesis such as this one is in many ways similar to creating a new venture. Both are socially dependent, goal-directed, self-organized (even if not entirely self-chosen), uncertain, and complex processes, which are difficult to instigate, implement, and pursue. Both emerge through planning, time, and effort. Both pose challenges to one's ability to innovate and undergo shifts in perspective. Also, both are emotional, experiential, and at times experimentally oriented, involving the production of new ideas and the transformation of existing ones, in ways which can't be clearly foreseen. In all cases, however, it remains true that much like the creation of new business activities, writing a thesis like this is fundamentally a learning process in which one depends on the help of others, while hoping to serve and benefit many more.

I wrote this book between the years of 2010 and 2015, while enrolled at the Department of Management and Organization of the Stockholm School of Economics. An important phase in the development of these ideas took place in 2012 and 2013, when I was a visiting scholar at the Department of Management and Organization of the Stern School of Business, New York University. Whereas any errors and omissions in this book are entirely my own, all of its merits are the fruits of my collaborations and interactions with people from whom I am still learning.

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*Stockholm, September 7, 2015*

*Nadav Shir*

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# Section I: Preliminaries



# Chapter 1

## Introduction

Over the last several decades, well-being or mental health, beyond the mere absence of mental illness, has become a central concern occupying the minds and interests of researchers, organizations, practitioners, and policy-makers working in various contexts across the globe. Among other things, this is the result of recurring observations that well-being is positively associated with a wide spectrum of human activities and conditions. Numerous studies conducted in several different fields (e.g., clinical, positive, social, cognitive, and personality psychology, organizational behavior, economics of happiness, and subjective well-being) and across a variety of cultural and national contexts indicate that well-being is associated with a wide range of benefits in life as well as in organizations (Huppert, 2009; Kaplan, Bradley, Luchman, & Haynes, 2009; Keyes, 2010; Lyubomirsky, King, & Diener, 2005a).

In recent years, interest in well-being has found a welcoming home in management and entrepreneurship studies. Notable efforts to link phenomena related to well-being with entrepreneurship are Baron's work on positive affect in entrepreneurship (Baron, 2008), Cardon and colleagues' work on entrepreneurial passion (Cardon, Wincent, Singh, & Drnovsek, 2009), and labor and happiness economists' work on the link between self-employment and work and life satisfaction (e.g., Benz & Frey, 2003; Blanchflower, 2004; Hamilton, 2000; Hundley, 2001). More recently, *Entrepreneurship Theory and Practice*, one of the top peer-reviewed journals dedicated to entrepreneurship research, published a special issue on the role of

emotions in entrepreneurship (Cardon, Foo, Shepherd, & Wiklund, 2012) and keenly encouraged future research.

This is for a very good reason. Whereas previous research on well-being in psychology was directed by broader and more theoretically informed research-based models (e.g., Diener, 1984; Keyes, 2002; Ryff, 1989), research on entrepreneurs' well-being has been extremely limited in the fields of economics and entrepreneurship. In fact, the only systematic approaches that have theorized and investigated the link between entrepreneurship and well-being have been offered by economists, not by entrepreneurship scholars, and then only in terms of self-employment and business ownership. Yet, with their focus on preferences and job satisfaction on the one hand and self-employment on the other, economic approaches fall short of examining the more intimate link between entrepreneurship, as a self-organized and active goal pursuit, and well-being.

In fact, despite claims that a positive relationship exists between entrepreneurship and well-being, scant progress has been made towards understanding how these two phenomena are related. While there is some evidence that engagement in entrepreneurial activities bodes favorably for individuals' well-being, other evidence seems to contradict this, and the nexus between these two phenomena is complex and poorly understood. We still know very little about the mechanisms through which entrepreneurship impacts well-being, how well-being evolves along the process of venture creation, the factors that impact well-being in entrepreneurship, and the role that well-being states play in continuous entrepreneurship.

Given the importance of entrepreneurship to the individual and to society, and given that the individual has come to be seen as not only an important function of social and economic processes but also as an important end of these very processes to which it contributes, this area clearly requires further investigation.

## Purpose and Research Questions

The overall purpose of this thesis is to explore whether, how, and why entrepreneurship and well-being are related to each other. In order to accom-

plish this objective I will attempt to adequately answer each of the following questions:

1. Does entrepreneurship have an impact on individual's well-being?
2. How does well-being evolve during the entrepreneurial process?
3. Who benefits the most from entrepreneurship in terms of well-being?
4. Why is *entrepreneurial well-being* significant, and how can it be measured?

In order to answer these questions, and to guide investigation into the causes and effects of well-being in entrepreneurship, I develop a new theoretical model of entrepreneurs' well-being. My propositions are based on the extant literature on self-determination, personal goal pursuit, and well-being in psychology, as well as on grounded work in the fields of entrepreneurship, labor economics, and the economics of happiness. I also present empirical results based on a unique and representative sample (Global Entrepreneurship Monitor; GEM 2011) of the adult Swedish population (n=3101). Guided by theory, I compare and contrast individuals actively engaged in entrepreneurial activities with regular (non-entrepreneurial) employees, and further analyze the temporal dynamics of well-being along the various phases of the venture creation process. Finally, over a 2-year period, I follow a cohort of intended and actively engaged entrepreneurs (n=160) from the original sample in a more comprehensive investigation of their well-being and goal striving in entrepreneurship. On this basis, I establish the important roles played by individuals' life goals and entrepreneurial motives for successful reaping of the rewards of entrepreneurship, and develop and validate a context-specific measure of well-being in entrepreneurship.

## Why is it Important to Consider Well-Being in Entrepreneurship?

Popular conceptions and existing models of entrepreneurship are often built on normative theories of opportunity and opportunity recognition (e.g., Eckhardt & Shane, 2003; Shane & Venkataraman, 2000). In these, the entrepreneurial process begins with an alert individual's perception of the existence of an objective opportunity to pursue profit. People turn to entrepreneurship simply because it pays to do so, and they are compensated for their efforts solely in terms of positive earnings and accumulated financial resources. However, recent empirical evidence produced by entrepreneurship and economic scholars indicates that entrepreneurship cannot be properly understood as simply a profit-seeking activity, and that its payoff structure is not yet well understood (Benz, 2009; Van Praag & Versloot, 2007).

For instance, recent empirical research has shown that many enter entrepreneurial activities or *persist* in their entrepreneurship even when and where there is no recognizable or foreseeable profit opportunity, and/or despite the apparent absence of a positive opportunity trend. Perhaps more alarmingly, previous empirical evidence has also shown that despite positive opportunity trends and profit projections, many never progress beyond their initial intentions to start up their ventures (Reynolds, 2000; Van Gelderen, Kautonen, & Fink, 2015), or otherwise refuse to (or lose their drive to) grow and persist in entrepreneurship (Wiklund, Davidsson, & Delmar, 2003). This makes it clear that the career choices of entrepreneurs cannot be explained explicitly in these terms.

The observation that individuals strive not only for profit, but also for non-pecuniary returns in entrepreneurship, is well established by now. The Panel Study of Entrepreneurial Dynamics (PSED) shows that people pursue entrepreneurship for a myriad of reasons, and are in fact highly motivated by other rewards than income and wealth. Most profoundly, in the past decade, entrepreneurship scholars have investigated in depth the class of social entrepreneurs, for whom the motive to enter entrepreneurship is mainly a social one, rather than one of profit maximization. This emerging

entrepreneurial perspective has clearly broadened the more traditional economic view of entrepreneurship to include non-profit-seeking activity. This is an important accomplishment as it sheds light on what drives people into entrepreneurship as well as on what makes them persist in continuous entrepreneurship. Most commonly, scholars have suggested factors such as psychic income (Gimeno, Folta, Cooper, & Woo, 1997), job satisfaction (Blanchflower & Oswald, 1990), and independence from employment hierarchies (Benz & Frey, 2008a), but we still know very little about how these factors operate, what other factors are actually in play, and whether they influence conscious processes of decision making and utility maximization, or any other motivational processes.

An important reason for our lack of understanding and results in this area may be our narrow focus on, and the difficulties inherent in, the measuring of individuals' motives and values. Existing measures typically rely on self-report surveys, and focus on self-professed attitudes towards entrepreneurship. This involves a number of methodological problems, particularly social desirability bias, wishful thinking and cognitive dissonance, and extreme sensitivity to fluctuating circumstances. Such a heavy reliance on self-reporting and self-professed attitudes may have been motivated partly by the theory of revealed preferences in economics, which has greatly influenced the study of entrepreneurship over the decades. However, the connections between our preferences and our behavior (activities) are not as simple as we might think.

For example, motivational researchers (e.g., Kruglanski et al., 2002) frequently distinguish between motivational constructs at different levels of abstraction – goals and their means (or sub-goals) are often construed at different levels. Moving towards more concrete phenomena, it is commonly pointed out that the same means could correspond to vastly different specific activities. Thus, particular motives for engaging in entrepreneurship would seem to restrict predictions of particular concrete actions to relatively small degree. Moreover, as pointed out by a long tradition in motivational research, it is not only the cognitive strength of such motives that merits consideration. Close attention needs to be paid to other factors, such as the structure and contents of goals as determined by individuals' volition. As a result, both economists and entrepreneurship scholars have so far failed to

focus on and unpack the complexity of the goal striving process in entrepreneurship, having typically assumed that strong intentions are straightforwardly translated into concrete and motivated forward motions.

Focusing more directly on people's appreciation of entrepreneurship in terms of well-being seems to be an important and novel method for understanding not only the impact of entrepreneurship on individuals' mental health, but also the incentives and motivation behind entrepreneurial engagement. Knowing how, when, where, and why entrepreneurship influences individuals in terms of their well-being would take us one step closer to unpacking the drives and motivations of individuals pursuing entrepreneurial activities. Thus, in order to understand what motivates individuals to enter and persist in entrepreneurship, an important aim of this thesis is to map out the payoff structure of the process of venture creation in terms of well-being. I compare key propositions and test various hypotheses based on a number of conceptual approaches developed in this thesis – all aimed at studying either the effects of entrepreneurship on well-being, the effects of well-being *in* entrepreneurship, or the likely consequences of these effects for subsequent engagement in entrepreneurship.

Studying the nexus between well-being and entrepreneurship also promises valuable insights into some of the most fundamental conditions for human development, growth, and well-being. It is a central claim of this thesis that entrepreneurship is a unique human endeavor which enables people to organize their own approaches to work, and by so doing transform their wage earning processes into meaningful experiences and active pursuits. Indeed, planning, starting, and running business activities, can all require a lot of entrepreneurs. But entrepreneurship also seems to offer unique opportunities to grow and develop, which can potentially outweigh the negatives. As individuals face increasing responsibility for their lives on the one hand, and decreasing economic certainty on the other, the act of self-organizing one's own approach to work not only becomes a vital element of the well-being of individuals, their families, and the people around them, but it is also an important attitude towards the conditions one faces as an individual and member of society. Understanding the mechanisms through which entrepreneurship leads to well-being thus enables a better

understanding of conditions that can support and give rise to individuals' motivation and mental health, both in work and in private life.

## A Brief Outline of the Thesis

Starting from the works of entrepreneurship scholars, the next chapter (chapter 2) complements previous conceptualizations of entrepreneurship with a psychological perspective in which it is regarded as a *self-organized* and goal-directed phenomenon. Although restrictive in scope, the definition offered emphasizes an aspect of entrepreneurship that has been habitually underplayed in the past – one for which the individual (or team of individuals), rather than the firm, market, or the economy, is the end of the process, as well as its prime agent and function. Thus, the suggested definition also facilitates the goal of this thesis (to examine the relationship between entrepreneurship and well-being), since well-being is not only a fundamental and evolved outcome of entrepreneurship as goal-directed process, but also a psychological resource which has a variety of self-regulatory effects.

Drawing on this conceptualization of entrepreneurship as a self-organized and goal-directed phenomenon, chapter 3 outlines an action-phase model of the process of business creation in order to facilitate systematic examination of the effects of intended engagement, goal progression, and goal attainment on individuals' well-being in entrepreneurship, as well as the self-regulatory functions that various affective phenomena may perform at each stage of the process. In other words, the model developed helps us theorize and study the effects and roles of experiences of well-being in entrepreneurship, as well as their significance for the process of venture establishment. These tasks will be undertaken in the subsequent chapters.

In chapter 4, having defined entrepreneurship, I move on to develop an integrative model of entrepreneurs' well-being that goes beyond existing measures and conceptualizations of affect in entrepreneurship. Synthesizing the theoretical and empirical work conducted by well-being psychologists from both the theoretical and the clinical traditions, the model presented integrates two different, yet central, philosophies of well-being – the hedonic and the eudaimonic – into an overall model of entrepreneurs' well-being.

Aside from its inclusion of positive affect, positive evaluations, and positive psychological functionings – all of which are considered key aspects of entrepreneurs' well-being – the model further incorporates a context-specific category of well-being derived from entrepreneurship: *entrepreneurial well-being*, or EWB.

Drawing on the subjective well-being approach as well as on recent theoretical advances made by entrepreneurship scholars, the specific features of this construct and its relation to and differentiation from other related constructs in entrepreneurship are further theorized and discussed in chapter 5. There I show that EWB – understood as subjective well-being *from* entrepreneurship – is a distinctive and important cognitive-affective entrepreneurial outcome; a state of positive mental wellness with potentially far-reaching effects on entrepreneurs' psychology, behavior, and performance. Specifically, I define entrepreneurial well-being as a positive mental state that reflects entrepreneurs' affective and cognitive experiences of engagement in venture creation. In other words, experiencing high EWB entails judging one's entrepreneurial life positively and feeling good about it.

Having established a general model of entrepreneurs' well-being, I then proceed in chapter 6 to comprehensively review and discuss the literature on the causes of well-being, as a first step to disentangling the payoff structure of entrepreneurship in terms of well-being. I start by describing some of the most important theoretical approaches to explaining individuals' well-being, and then briefly and separately discuss how they can potentially be used to explain specific instances of well-being in the context of entrepreneurship. Thereafter, I summarize and review some of the more important empirical findings regarding the effects of entrepreneurship on well-being and outline a general causal model of entrepreneurs' well-being that identifies three overarching sources of variance in terms of well-being: entrepreneurs' life circumstances (events and demographics), their personalities and psychological states and processes, and their personal goals and intentional activities (behavioral processes and outcomes).

In chapter 7, I present the *entrepreneurial well-being as resource perspective*. It complements the discussion in the previous chapters by theorizing on the role played by EWB as an informational source, a trigger, and a resource, in promoting entrepreneurial motivation and persistence. On the basis of the

extant literature on well-being and positive affect, I link EWB to key processes of goal setting and goal striving through various psychological systems. I particularly focus on cognitive and motivational processes as mediating the effects of EWB on behavioral outcomes such as direction, intensity, and persistence in entrepreneurship. This is an important theoretical contribution to entrepreneurship research, since previous research has only marginally theorized on the effects of context-specific affective phenomena in entrepreneurship, and then mainly in terms of highly activated forms of positive affect. I distinguish the more proximal effects of well-being generated within the entrepreneurial process from other related concepts in entrepreneurship, and reveal some of the crucial mechanisms involved, along with their functions in terms of self-regulation and behavioral outcomes.

The main theoretical contributions of this thesis are presented in section 4, in chapters 8, 9, 10, and 11, where the entrepreneurial pay-off structure is unpacked. The aim of this section is to develop three theoretical approaches to elucidating and predicting the well-being effects arising from, and during, the process of venture creation: *the self-organizational approach*, *the action-phase approach*, and *the life goal and motive approach*. Each of these theoretical approaches addresses a different facet of the relationship between entrepreneurship and well-being. The first two are focused on the structural and temporal features of the influence of entrepreneurship on well-being relative to engagement in non-entrepreneurial work alternatives (chapters 9 and 10), whereas the last one focuses on the explanatory force of life goals and motives in relation to within-level variations in entrepreneurs' well-being (chapter 11).

Having developed my theoretical perspective in the previous sections, I go on to investigate and assess its empirical cogency. Whereas section 5 (chapter 12) describes the methodological approach and the data collected, section 6 (chapters 13 to 16) presents four separate studies aimed at empirically testing the theoretical approaches and propositions advanced in the previous chapters with the ulterior purpose of providing adequate answers to each of the research questions of the thesis. Study 1 (chapter 13) tests the proposition that active engagement in entrepreneurial activities leads to greater well-being relative to engagement in non-entrepreneurial employ-

ment alternatives, by virtue of being well-suited for supporting people's basic psychological needs for relatedness, competence, and autonomy. Study 2 (chapter 14) complements study 1 by investigating the dynamics of well-being experiences as they evolve throughout the entrepreneurial process, focusing on intended entrepreneurs, active entrepreneurs, and established business owners, and thus treating entrepreneurship as a temporal and experiential goal-directed phenomenon.

Whereas studies 1 and 2 are focused on the effects *of* entrepreneurship on people's well-being in general, study 3 (chapter 15) is focused on the variations in entrepreneurs' well-being arising from various life goals and motives. While it establishes the importance of intrinsic, relative to extrinsic, motivational forces for the well-being of those engaged in starting up ventures, this study also points towards the necessity of understanding the matching conditions between life goals and entrepreneurial motives (i.e., the extent to which they are congruent with each other). Lastly, study 4 (chapter 16) validates a context-specific measure of EWB, the entrepreneurial satisfaction scale (ESS). Fundamentally, ESS measures the overall satisfaction that entrepreneurs derive from their active engagement in entrepreneurship, an important yet under-theorized psychological outcome of such engagement. I discuss the nature of this construct and its relation to other related constructs, and demonstrate its favorable psychometric properties, including high internal consistency and high temporal reliability.

Finally, I conclude the thesis with a discussion in section 7 (chapter 17), in which I reflect on and deliberate over some of the major empirical findings and implications of this thesis. I also point towards a variety of inviting avenues along this line of research, as well as the more critical limitations underlying them.

Section II:  
Entrepreneurship: Review and  
Conceptualization



# Chapter 2

## Definitions of Entrepreneurship

The word ‘entrepreneur’ originates from the French word ‘entreprendre’, which means ‘to undertake or do something’, and was originally used in the Middle Ages to denote ‘a person who is active, who gets things done’ (Swedberg, 2000) or a ‘battlefield commander’ (Murray James Chapter 4 in Landes, Mokyr, & Baumol, 2010). The term ‘entrepreneurship’ was coined around the 1920s, while the loan from French of the word entrepreneur itself dates back to the 1850’s (Landström, 2007). More recently, entrepreneurship became something of a buzzword from around the year 2000 – especially after the emergence of the high tech sector and the creation of entrepreneurial icons such as Steve Jobs, Bill Gates, and Mark Zuckerberg – with its usage culminating at the beginning of 2010 in the context of the public disputes which erupted in the wake of the Great Recession.

Since the early works of economists who studied entrepreneurship (e.g., Cantillon, Hayek, Kirzner, Say, Schumpeter, Von Mises), studies of entrepreneurship have been carried out within a number of social science disciplines other than economics – such as sociology (e.g., Aldrich, Durkheim, Granovetter, Kanter, Ward, Weber), psychology (e.g., Baum, Hagen, Lock, McClelland), economic and business history (e.g., Baumol, Gerschenkron, North), economic anthropology (e.g., Barth, Geertz), as well as within the broader category of management studies (e.g., Alvarez, Baron, Busenitz, Bird, Davidsson, Delmar, Frese, Gartner, McMullen, Mitchell, Reynolds, Shane, Shaver, Shepherd, Venkataraman, Wiklund, Zahra, and many others). These days, most of the research is carried out by entrepreneurship

scholars operating within the field of entrepreneurship; an interdisciplinary sub-field of management studies. In fact, while one would probably expect the economics literature to be rich in analysis of entrepreneurship, this is far from the case, although the contributions of economists are often underplayed more than they deserve to be by contemporary scholars of entrepreneurship.

But what do we mean when we talk about entrepreneurship? The phenomenon of entrepreneurship has been defined from a multitude of perspectives that differ along a number of different dimensions. As noted by Davidsson (2009), some of the more relevant questions include whether entrepreneurship should be defined in terms of individual psychological orientations (e.g., Baumol, 1996), behavioral processes (e.g., Frese, 2009; Gartner, 1988), or some relevant outcomes (e.g., Carland, Hoy, Boulton, & Carland, 1984; Kirzner, 1978); whether we should exclusively consider it as an economic and business phenomenon or whether it should also encompass activities within the illegal, political, aesthetic, or not-for-profit domains; and whether it is applicable only to small businesses and/or owner-managed firms, or also to larger organizational contexts. According to Davidsson (2003), other criteria that have been proposed as essential for something to be considered entrepreneurship include: purposefulness (Cole, 1949), profit (Casson, 1982), value creation (Turgot & Say; Drucker, 1984; Morris, 1998), risk (Cantillon; Casson, 1982), uncertainty (Knight, 1921; Sarasvathy, 2001), charisma and leadership (Weber), innovation or novelty (Amit & Zott, 2001; Bhave, 1994; Schumpeter, 1934), proactivity (Frese, 2009), the presence of opportunities (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000; Shane, 2000), growth, and success.

Surely, entrepreneurship means different things to different stakeholders. From a national-economic perspective entrepreneurship is an important factor of production, from a market perspective it is a force that drives the market, from an organizational perspective it is the dynamics underlying the emergence of new organizations and/or a strategic framework for successful management, from an individual perspective it is a number of other things: a work-related alternative (career choice), a personal engine of change and development, the intended process (i.e., the personal goal) of establishing new and successful ventures, and/or a role or source of indi-

vidual identity. Regardless of definition, and regardless of, or even due to, the great dynamics involved in the practice of entrepreneurship, from an individual perspective, entrepreneurship has specific features that exert various effects on individuals' psychology and behavior. Thus, the main purpose of this chapter is to review the concept of entrepreneurship and complement previous conceptualizations with an individual (psychological) perspective of it as a self-organized and goal-directed phenomenon.

I will begin by briefly reviewing the concept of entrepreneurship as a social phenomenon and then proceed to discuss previous conceptualizations of entrepreneurship as a scholarly domain. I start with these approaches as they are the ones most commonly used to define and delimit the phenomenon and the scientific domain of entrepreneurship. Following this brief review, I develop a narrower conceptualization of entrepreneurship as a self-organized goal-directed endeavor for which the individual is the end rather than its primary function, with the intention of facilitating exploration of the influence that entrepreneurship has on individuals' well-being on the one hand, and the role of individuals' well-being in entrepreneurship on the other.

## Entrepreneurship as a Broader Social Phenomenon

Entrepreneurship is typically defined non-restrictively, and from a social (which also implies economic) perspective. A definition which shares conceptual similarities with and broadens previous conceptualizations of entrepreneurship as a social phenomenon (e.g., Gartner, 1988; Katz & Gartner, 1988) is offered by Davidsson (2005: 8):

- Entrepreneurship: *the introduction of new economic activity that leads to change in the market place.*

This conceptualization is largely based on the work of Austrian economic theorists (Kirzner, 1978, 1997), who conceptualize it as the competitive *behaviors* that drive the market process towards more effective and efficient

use of resources. Despite being clearly delimited, this definition is permissive in that it does not take a restrictive stand on issues such as the creation of new organizations, purposefulness, innovation, the role of individuals, teams, and corporations, organizational context, or ownership and personal risk-taking (Davidsson, 2009).

Nevertheless, whereas this non-restrictive definition is a good starting point, its focus on the market overlooks the individual as an important end of that process; for, as we will see later, entrepreneurship, from the perspective of the individual, is not only a vehicle for wealth attainment but also a process of personal change, growth, and well-being. In other words, the focus on the outcome criteria of driving the market process and the agnostic stance of where new economic activity starts pose conceptual as well as analytical difficulties for understanding the role of individuals in entrepreneurship and the role of entrepreneurship in the lives of those engaged in it.

Thus, for this as well as for other reasons, it has been extensively argued that if we wish to gain a broader understanding of entrepreneurship as a social phenomenon, we must separate this notion from that of entrepreneurship as a scholarly domain. As noted by Davidsson (2003: 4): “when talking about the scholarly domain, we would benefit from a delineation that does not presuppose the outcome, and instead focus on the behaviors undertaken in the processes of discovery and exploitation of ideas for new business ventures.” According to Davidsson (2003: 20) “this is because we have to be able to study entrepreneurship as it happens, before the outcome is known. It would be awkward indeed not to know until afterwards whether one was studying entrepreneurship or not.” Accordingly, the scholarly domain should study these processes as well as their antecedents and effects. Below, I present a more detailed account of entrepreneurship as a scholarly domain, followed by a definition of entrepreneurship as a unique goal-directed endeavor which accommodates my investigation of the relationship between entrepreneurship and well-being.

## Entrepreneurship as a Scholarly Domain

Since the early contributions of Gartner (1988) and Venkataraman (1997), entrepreneurship scholars have maintained a necessary separation between entrepreneurship as a social phenomenon and entrepreneurship as a field of research (Davidsson, 2009). This is important, because, as just discussed, a multitude of important questions that proved necessary to reveal aspects of entrepreneurship as a phenomenon would never have been asked if the scientific domain of entrepreneurship had simply been equated to its phenomenon. Thus, the purpose of the practice of defining the scholarly domain of entrepreneurship more broadly than its phenomenon is to provide a better understanding of entrepreneurship as a social phenomenon (and of the role of individuals as active agents of this process). I draw here on Davidsson's (2003: 47) delineation of the field:

“Starting from assumptions of uncertainty and heterogeneity, the scholarly domain of entrepreneurship encompasses the processes of (real or induced, and completed as well as terminated) emergence of new business ventures, across organizational contexts. This entails the study of the origin and characteristics of venture ideas as well as their contextual fit; of behaviors in the interrelated processes of discovery and exploitation of such ideas, and of how the ideas and behaviors link to different types of direct and indirect antecedents and outcomes on different levels of analysis.”

This delineation is broad enough to embrace the core issues highlighted by Venkataraman's (1997), Shane and Venkataraman's (2000), and Gartner's (1988) respective perspectives, while broadening the scientific inquiry to also include the study of entrepreneurial outcomes or consequences (Zahra & Dess, 2001).<sup>1</sup> This is no doubt a crucial addition by Davidsson, since,

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<sup>1</sup> In their seminal paper Shane and Venkataraman (2000) did not include as a core research question in entrepreneurship the outcomes from entrepreneurship. This has been noted by Zahra and Dess (2001) and further acknowledged and developed by Shane and Venkataraman's (2001) response to Zahra and Dess. Relatedly, Zahra and Dess also add to their critique, and Shane and Venkataraman respond positively, that a fourth reason for studying entrepreneurship (aside from its function in diffusing technical information, mitigation of market inefficiencies, and as an engine of social change) is its likely effects on the development of human capital. It is central to this thesis to explore and further develop this approach.

among other things, if we know how entrepreneurship impacts various factors we may also gain knowledge of how these factors influence entrepreneurship in return. Central to this thesis is the analysis and study of the effects that entrepreneurship has on individual outcomes – more specifically on personal development and well-being. This is especially important because knowing how, when, and why entrepreneurship influences the individual in these respects will bring us one step closer to knowing what drives and motivates individuals in and into entrepreneurship. Having said that, I believe that this definition involves two conceptual difficulties.

First, while I agree with Davidsson about the problems of including an outcome criterion in a delineation of the field – especially due to problems of a tautology inherent to the concept of opportunity – I believe that the gap between the definitions of the phenomenon and the scholarly domain of entrepreneurship can be bridged once the antecedents of behavior he mentions in his delineation of the field are allowed into the definition of the phenomenon. It is a central tenet of this thesis that entrepreneurship involves freedom, in the negative sense of the word, from the usual employment hierarchy. Even for those entrepreneurs who operate within the limits of employment, and for which the act of entrepreneurship may not be self-chosen, entrepreneurship still entails self-organization. Such negative freedom thus engenders freedom in the positive sense of the word: the freedom to do, to embark on goal-directed activities, and engage in behaviors that would not otherwise be possible. This is what makes entrepreneurship a unique human endeavor.

Second, while Davidsson's delineation of the field is permissive of the view that the pre-emergence phase of new economic activity ought also to be considered a part of the entrepreneurial process, the boundary between pre-emergence and emergence of new economic activity is still ambiguous and underdeveloped. Here I find Katz and Gartner (1988) especially relevant for drawing the boundaries for when such new activity starts. Katz and Gartner suggested four criteria for identifying when organizations come into existence (i.e., properties of emergence): (1) intentionality, as evident by actors' stated goals; (2) mobilization of resources; (3) coalescence

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Accordingly, entrepreneurship is seen as vehicle through which individuals aspire to and actually attain greater levels of well-being and personal growth.

of boundaries, such as through formal registration; and (4) the exchange of resources with outsiders. These criteria are also important for an investigation of the emergence of new economic activity. In particular, the inclusion of intentionality is central for considering the pre startup phase as an important element of the entrepreneurial process and for considering entrepreneurship more generally from a psychological perspective as a goal-directed phenomenon. In other words, there are meaningful behaviors that need to be considered also in these pre-emergence phases, which should be seen as parts of the entrepreneurial process.

## Entrepreneurship as an Individual (Psychological) Phenomenon

The separation between the phenomenon and the scholarly domain – although crucial for entrepreneurship research in many respects – still imposes a dividing gap and acts as a constant source of confusion in our understanding of entrepreneurship as a unique human endeavor. In light of this, it seems necessary to offer a definition of entrepreneurship which can be applied to both the phenomenon and the scholarly domain, by virtue of not only accounting for the process nature of entrepreneurship and the creation of new economic activities, but also acknowledging the role of individuals as prime agents and important ends of that process.

Attempting to define entrepreneurship as an individual-based phenomenon is not a new idea. Early research and theorizing in entrepreneurship sought to explain entrepreneurship as a function of the types of people engaged in entrepreneurial activity (e.g., Eckhardt & Shane, 2003; Gaglio & Katz, 2001; Kirzner, 1978; Low & MacMillan, 1988; McClelland, 1965; Schere, 1982). While this produced some important insights (McClelland, 1965), it largely resulted in insignificant research; aside from making it clear that such an approach has little explanatory power in regards to entrepreneurship (Davidsson, 2005).<sup>2</sup>

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<sup>2</sup> Nevertheless, trait-based research in entrepreneurship has regained some popularity in recent years, guided by more systematic research than before (Mitchell et al., 2002; Rauch & Frese, 2007a; Zhao & Seibert, 2006).

One important reason why the person-centric approach has been largely unsuccessful in explaining entrepreneurship lies in the very nature of entrepreneurship as discontinuous, non-linear, and episodic, which makes it unlikely that it could be adequately explained by factors that influence human action in the same way all of the time (Carroll & Mosakowski, 1987). Furthermore, researchers taking a person-centric perspective were inescapably bound to study entrepreneurship with variance-based explanations rather than as a process phenomenon. Following Gartner's earlier publication, the individual was largely dismissed as the focal theoretical point in entrepreneurship research, and with this, the role of psychology in explaining entrepreneurship became severely underplayed.<sup>3</sup>

Without a doubt this shift was important for moving the field of entrepreneurship forward, or restoring it to earlier traditions. For instance, while Schumpeter (1949) afforded a significant role to the individual entrepreneur in his theory of entrepreneurship he also made it clear that what matters is the behavior, the actual activity of the entrepreneur, not the actor. Nonetheless, this welcome reorientation of the field had several unintended effects on entrepreneurship research. First, shifting the focus away from the individual has led to a state of affairs where scholars of entrepreneurship have made meager advances towards understanding the psychology of entrepreneurs and the effects of entrepreneurship on the individual, taken not merely as a function in the process, but as an end of the process per se.<sup>4</sup>

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<sup>3</sup> Today, it is broadly recognized that psychology is necessary for understanding entrepreneurship, and that entrepreneurship is an important domain for testing and developing psychological theory. Be that as it may, the hallmarks of entrepreneurship are actions and behaviors, specifically those aimed at new business creation. Moreover, as mentioned above, there is more evidence to suggest that personality variables do matter after all (Frese, 2009). Also, more and more psychologists are working in the field, and informing us of the importance of psychological variables and processes in entrepreneurship (e.g., Baron, 1998, 2002, 2004, 2008; Baum et al., 2007; Baum & Locke, 2004; Foo et al., 2009; Frese, 2009; Rauch & Frese, 2000; Shaver, 2010). In fact one of the most cited variables in the entirety of entrepreneurship research is the psychological construct of self-efficacy. Last but not least, the field of psychology has oriented itself more and more towards social psychology, which sits well with entrepreneurship as a both social and individual phenomenon.

<sup>4</sup> Although Shane and Venkataraman in their seminal article (2000) afford the individual a central role as the discoverer of new opportunities and carrier of new combinations, none of their proposed research questions include the potential effects of entrepreneurship on the individual. The individual is viewed as fulfilling an instrumental function in the process of venture creation rather than being an important end of that process. Thus, even researchers who embrace a behavioral approach to entrepreneurship (Davidsson, 2009; Gartner, 1988) or endorse the individual as an important actor in that process

Second, and relatedly, it resulted in limited progress towards an understanding of the drives and motivational processes that fuel this process; something made especially evident by the dearth of publications on the role of motivation in entrepreneurship during the past 20 years of entrepreneurship research (Carsrud & Brännback, 2011).

However, in the light of the facts that the individual remains the crucial driver of entrepreneurship and that entrepreneurship is both an emotional and a goal-oriented process phenomenon which necessitates active agency and self-regulation, advancing a socio-psychological approach to entrepreneurship (Shaver, 2010) affords great opportunities to study this phenomenon. Indeed, entrepreneurship research is not required to start from a person-centric approach in order to consider the individual an important element of entrepreneurship (c.f., Mischel, 1973 in the psychology literature). All that is required is to consider psychological and behavioral mechanisms as part of its antecedents, and psychological and behavioral effects as part of its intended outcomes.

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have usually failed to incorporate the individual as an important end of the entrepreneurial process, largely focusing on outcomes at the level of the venture or the market in large. Not even entrepreneurial psychologists, for whom the individual is a central and focal theoretical entity in that process, have studied the ways in which engagement in entrepreneurship impacts the individual's psychology and behavior. Instead, much of their efforts focused on attempting to explain entrepreneurship; either by trying to isolate an entrepreneurial personality or disposition, or through various psychological mechanisms on the basis of structural theory and analysis (e.g., Baron, 1998, 2004; Baum et al., 2007; Busenitz, 2007; Carsrud, & Johnson, 1989; Chell et al., 1991; Davidsson, 1995; Delmar, 1996; Delmar & Witte, 2012; Frese, 2009; Markman, 2007; Mitchell et al., 2002; Mitchell et al., 2007; Rauch & Frese, 2007b; Shaver & Scott, 1991; Wiklund et al., 2003; Zhao & Seibert, 2006). Nevertheless, in recent years there has been an increase in studies in entrepreneurship and economics on the effects of entrepreneurship and self-employment on psychological states and individual level outcomes (e.g., Blanchflower et al., 2001; Krueger, 1993). Still, the only scholars who have more systematically and directly investigated how phenomena related to entrepreneurship impact individuals' well-being are labor and happiness economists (e.g., Benz & Frey, 2003, 2004, 2008ab; Binder & Coad, 2013; Blanchflower, 2004; Hamilton, 2000) studying the link between self-employment and work satisfaction, and a handful of entrepreneurship scholars, who have still only investigated related constructs of well-being (e.g., Bradley & Roberts, 2004; Cooper & Artz, 1995; Patzelt & Shepherd, 2011; Shepherd & Cardon, 2009).

For this purpose, I give the following definition of entrepreneurship:

- Entrepreneurship: *a self-organized and socially dependent (and hence by implication socio-psychological) phenomenon, which comprises sets of processes, activities, and behaviors that unfold over time aimed at the creation of new business activities as ends in and of themselves, or as means to higher individual ends.*

But what does such definition imply? First and foremost, that entrepreneurship is a cognitive, motivational, and behavioral process. Under the postulation that entrepreneurship is goal-directed, it is assumed to be guided by the mental representation of the goal to start up and create or alternatively to grow a venture. The mental representation of such a goal is both internal and subjective, although it may be shared by a group of people, such as an entrepreneurial team. Additionally, regarding entrepreneurship as goal-directed also implies that the process is behavioral, that it summons individual motivation and self-regulation, and that it is temporal.<sup>5</sup> Thus, entrepreneurship fundamentally entails the problem of selection, goal setting, or intention formation on the one hand, and the problem of vigor, activation, goal striving, or the actual movement towards the goal on the other hand (Ach, 2006; Atkinson, 1957; Lewin, Dembo, Festinger, & Sears, 1944).

The definition proposed is also permissive of the view that entrepreneurship may be either a self-selected personal goal, and in that sense self-started or self-chosen (Frese, 2009), or assigned by others as in the case of intrapreneurship.<sup>6</sup> In both cases, though, the process of entrepreneurship

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<sup>5</sup> Much like the goal to become a professional football player and to maintain this status, also entrepreneurs must continuously strive towards and accomplish their business goals, if only to stay in and enjoy the game. In other words, one does not engage in entrepreneurship after becoming an entrepreneur. One becomes an entrepreneur by relentlessly engaging in entrepreneurship. Thus, I consider individuals entrepreneurs as long as they actively pursue the establishment and growth of their businesses. In that sense entrepreneurship, self-employment, and business ownership – although overlapping to a degree – are very different concepts. Although some previous conceptualizations do address this ephemeral facet of entrepreneurship, they typically leave unaddressed its goal-directed features as well as its distinctive intrinsic value.

<sup>6</sup> Of course, even when the entrepreneurial “task” is assigned, there will be a necessity for a great amount of self-starting behavior. This is because of the dynamics and the uncertainty underlying entrepreneurship. Thus, even when assigned the individual intrapreneur will have a significant discretion in his/her decision making and will by necessity engage in entrepreneurial activities that are self-started.

implies a pro-active and self-organizational approach which entails the psychological processes of goal setting (e.g., commitment) and goal striving (e.g., persistence). This means that entrepreneurs are ultimately self-determining, even when subjected to an employment hierarchy. It also implies that individuals do not necessarily engage in entrepreneurship for profit alone, but possibly also for other social, political, civic, and psychological returns. In chapter 9, I develop the self-organizational approach, where I argue that entrepreneurs enjoy relatively higher well-being than non-entrepreneurial employees by virtue of their self-organization, which allows them the freedom to organize their own opportunities to exercise agency, utilize their own resources and skills, and form business relationships.

This definition is also appropriate for inquiring into the general research questions underlying this thesis. Aside from studying whether, how, why, and when active engagement with entrepreneurship affects individuals' well-being, this thesis also inquires into the dynamics of well-being along the specific phases of the entrepreneurial process. It is my firm conviction that entrepreneurship research in general and entrepreneurial psychology in particular needs an idea that links the individual entrepreneur's experience to the circumstances and behaviors that occur within the entrepreneurial process.

In the next chapter, drawing on this conceptualization of entrepreneurship as self-organized and goal-directed phenomenon, I advance an action-phase model of the venture creation process with the aim of further laying the conceptual groundwork for a more comprehensive analysis of the relationship between entrepreneurship and well-being.



# Chapter 3

## An Action Phase Model of Venture Creation

The proposed definition of entrepreneurship as a self-organized and goal-directed phenomenon implies that entrepreneurship is a major attempt at personal goal striving. The purpose of this chapter is to draw on this goal-related definition of entrepreneurship in developing a self-regulatory model of the business creation process. This "entrepreneurship as goal-directed" model is an elaboration of the active performance approach to entrepreneurship developed by Frese (see Frese, 2009, for a detailed examination of an active performance approach or action approach to entrepreneurship). The central objective of this modelling is to prepare the conceptual ground for theorization and examination of the entrepreneurship/well-being nexus.

Self-regulation is important for entrepreneurship and well-being for several reasons: we compare alternatives before we make decisions/take actions; effort is required for progress towards our entrepreneurial goals; major parts of the process require planning and coordination; and the process is demanding and difficult, and needs to be managed and monitored effectively. A self-regulatory framework which reflects the significance of well-being in the context of personal goal striving is Heckhausen and Gollwitzer's Rubicon model of action phases (Gollwitzer, 1990; Heckhausen & Gollwitzer, 1987). On its basis, I develop the *entrepreneurial action phase model* of venture creation, which incorporates entrepreneurs' goal setting and goal striving processes, and further allows for a systematic exami-

nation of the effects of goal progression and goal attainment on individuals' well-being in entrepreneurship, as well as the self-regulatory functions that are performed by various affective phenomena at each phase.

## An Entrepreneurial Action Phase Model

The action phase model in figure 3.1 portrays entrepreneurship as a temporal goal-directed process of venture (business) creation involving four core phases, each characterized by a distinctive set of processes, activities, and behaviors which are in turn associated differently with well-being (I will develop these conceptual relationships between action phases and well-being in chapter 10): a set of exploration and deliberation processes leading to the emergence and adoption of the goal, a set of planning processes (in which decisions are made regarding when and where to start acting, how to act and for how long), a set of implementation and enactment processes (gestation and startup activities as well as strategy formation and maintenance of important practices), and a set of evaluative and reflective processes leading to disengagement, continued engagement, or reengagement with new goals.<sup>7</sup>

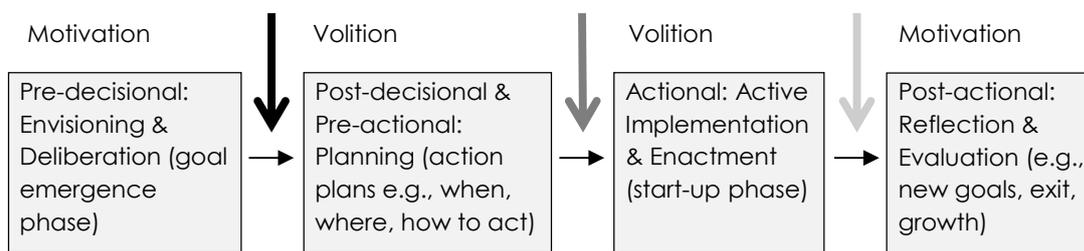
Conceptualized temporally, each transition between these four phases is accompanied by a distinctive process of decision making (represented by the arrows in figure 3.1): selection (between opportunities: entrepreneurial-entrepreneurial or entrepreneurial-non-entrepreneurial), initiation (to start up or to wait), and termination (to continue or to disengage). These are

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<sup>7</sup> From a self-regulatory and goal-oriented perspective the goal of creating new ventures is not the only mental representation that guides goal-directed behavior in entrepreneurship. A second, more abstract and higher-order goal, or a wishful form of mental representation, is the personal identity goal of becoming an entrepreneur (Cardon et al., 2009; Farmer et al., 2011; Hoang & Gimeno, 2010; Ireland & Webb, 2007; Krueger, 2007; Shepherd & Haynie, 2009). However, while the two goals differ in important ways, they also share many similarities. For instance, the problem of selection or goal setting and the problem of implementation or goal striving is common to both. That is, identity choices (e.g., becoming an entrepreneur, a business consultant, etc.) need to be followed by willful pursuit (Gollwitzer, 1987; Gollwitzer & Kirchhof, 1998). In this thesis I have chosen to focus on the behavioral rather than on the identity aspects of entrepreneurs' goal pursuit. After all, the creation of new business activities, for whatever purpose or based on whatever outlook on success, is the very essence of entrepreneurs' goal pursuit. In other words, even for identity seekers, active engagement in the creation of new business activities is a necessary condition of and chief indicator the fact that one *is* an entrepreneur.

each characterized by distinctive intention formation: entrepreneurial intention (e.g., “I want/plan to start up a business in the near future”), initiation intention (e.g., “Tomorrow, I will go to the bank to loan money”), and termination intention, respectively, with the last two being types of behavioral intentions (note: both planning and execution intentions also occur, but do not require any primary decision making, as they follow from the previous decisions).<sup>8</sup>

Figure 3.1. An action phase model of venture creation



- ➔ **Entrepreneurial goal setting: Entrepreneurial (goal) selection or intention formation**
- ➔ **Entrepreneurial goal striving: Implementation intention formation (intention initiation)**
- ➔ **Entrepreneurial goal conclusion: Termination intention formation**

These four action phases together with the three outlined decision-making processes, I argue, capture fairly well what people usually go through in pursuing the goal of establishing and creating a venture: envisioning the business idea and deliberating between various options, setting the goal and planning for its implementation, initiating early action and actively implementing the business idea, and eventually terminating the goal-directed behavior and reflecting over the process. Thus the process components of this action phase model reflect some of the core processes of entrepreneurship as highlighted by scholars of entrepreneurship: opportunity discovery,

<sup>8</sup> It should be made clear that concrete venture ideas can precede the process of deliberation and thus guide that process, or follow it in the process of planning for their discovery/creation. Thus, depending on the breadth of the overall goal to start up a venture (i.e., narrow when it includes a specific opportunity and broad when it doesn't), selection will take different forms (e.g., between two concrete venture opportunities, between one concrete venture opportunity and one concrete non-venture opportunity, between a non-concrete venture opportunity and a non-concrete non-venture opportunity, etc.).

evaluation, exploitation, and growth. However, the action phase model has the advantage of being not only applicable to the general process of venture creation but also to its sub-processes (i.e., it can be applied to processes of both exploration and exploitation, in which the goal is to discover a business idea or to exploit it, respectively). Different entrepreneurial sub-goals may take days (e.g., finding an employee), weeks (e.g., writing a business plan), or months (e.g., developing a product or a service). This means that goal setting and goal pursuit occur in relation to these time frames. In other words, the model not only helps organize the entire process of venture creation hierarchically, but also applies equally to the different entrepreneurial phases.

Furthermore, and equally important from the perspective of this thesis, the model's underlying assumption that entrepreneurship is a personal goal pursuit invites a more focused investigation into well-being phenomena as important considerations and evolved outcomes of goal progression, and as vital psychological resources and triggers of entrepreneurship. In line with existing theorizing on the action phase model (Gollwitzer, 1990) each of the four phases is represented by a different *mindset* (i.e., cognitive orientation), and hence a different set of goals and processes, which are in turn associated differently to different experiences of well-being. Each phase of the model calls for or otherwise results in a variety of context-specific cognitions and affective sensations, which either prepare individuals for venture creation or hinder them in pursuing it.

Later in the thesis I will develop these arguments in greater detail by investigating the cognitive and motivational effects of well-being along the process of venture creation on the one hand (chapter 7), and the ways that engagement across each of these entrepreneurial action phases results in differences in individuals' well-being on the other (chapter 10). My theorizing in chapter 10, and the empirical testing in chapter 14, will reveal that the distinctive action phases along the process of attaining one's goal to establish a venture crucially impact how individuals think, feel, and act during that process. Of course, well-being may not be merely an important outcome of entrepreneurship, but it is likely to also have distinct self-

regulatory effects itself, which impact, or moderate the impact of, each of these phases through various psychological mechanisms.<sup>9</sup>

### Relationship to Entrepreneurial Motivation

Research and theories on self-regulation has drawn a distinction between motivation and volition (Achtziger & Gollwitzer, 2008; Oettingen & Gollwitzer, 2007). Motivation, essentially seen as a general drive or inclination to do something, is regarded as a process that leads to the formation of goal intentions, and is largely dependent on perceptions and judgments of feasibility and desirability. Volition, the primary function of self-regulation, and essentially the capacity to control and override one's responses, is driving the process by which intentions are converted to actual behavior. Volition is largely dependent on individuals' self-regulatory strength, more commonly referred to as willpower or ego strength (Bauer & Baumeister, 2011; Baumeister, Bratslavsky, Muraven, & Tice, 1998), the psychological resources necessary to persist and strive towards the chosen goal, and is governed by the motivational force behind the goal intention as well as by a host of other factors, including the type and structure of the goals (Higgins, 1997; Kasser & Ryan, 1993), and ineffective management and monitoring of behaviors (e.g., failing to act on opportunity, getting derailed, escalation commitment, etc.; Carver & Scheier, 2001; Gollwitzer & Sheeran, 2006).<sup>10</sup> In other words, motivation and volition relate to goal setting and goal pursuit, respectively.

Notwithstanding this established theoretical platform in the study of motivation and self-regulation, entrepreneurship-based goal research has focused primarily upon goal setting processes in relation to specific characteristics of individuals, such as their experiences, attitudes, efficacy beliefs, and estimations of the feasibility and desirability of engagement in entre-

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<sup>9</sup> The self-regulatory role of affective phenomena has long been considered an important aspect of personal goal pursuit. Recently, several researchers have argued that different aspects of well-being may have distinct self-regulatory advantages, depending on the goal-related context in question. I will discuss this in much greater detail in chapter 7.

<sup>10</sup> Volitional processes, because of their reliance on willpower, are directly associated with subjective vitality or energy available to the self (Ryan & Deci, 2008; Ryan & Frederick, 1997), which is one core element of individuals' well-being.

preneurship (e.g., Chen, Greene, & Crick, 1998; Kickul, Gundry, Barbosa, & Whitcanack, 2009; Krueger, 1993). Thus, the self-regulatory processes that underlie goal striving in entrepreneurship have gone largely unexamined. This is alarming considering that a large proportion of those who form entrepreneurial intentions may never move beyond these intentions, thus failing to act on their commitments and goals. The four basic volitional functions included in the model are: planning, initiating, realizing and maintaining the intentions (“impulse control”), and disengaging; with initiation (or entry) and disengagement (or exit) represented at the boundaries between phases 2-3 and 3-4, indicated by the middle and the right-hand arrow.

Well-being phenomena may play distinctive roles in the motivational and volitional processes relevant to entrepreneurship. Individuals’ well-being does not only constitute an important outcome in entrepreneurship but also a source of information and a vital psychological resource to draw upon when deliberating action, planning for it, implementing it, and/or preparing for disengagement from it. In chapter 7, I theorize on the cognitive and motivational effects of well-being phenomena within a self-regulatory framework of venture creation.

### Entrepreneurial Opportunities

Something needs to be said about the notion of opportunity – a fundamental concept in entrepreneurship research, education, and practice – and its relation to the action phase model and to well-being. It is common to refer to entrepreneurial opportunities in accordance with Casson’s (1982) and Shane and Venkataraman’s (2000) definition, which treats entrepreneurial opportunities as situations “conducive of profit-making”. Such a definition presents at least two major problems. First, it is tautological in that the definition of the construct of opportunity includes an assumption about its effect on the dependent variable (Davidsson, 2012a). Thus, we can only observe opportunities after the fact. Second, defining opportunity as a situation where profit can be made seems to clash with fundamental notions of entrepreneurship as an activity performed under uncertainty (McMullen & Shepherd, 2006).

To resolve these problems, Davidsson (2012a) suggests a confluence perspective in which three new constructs are combined: Opportunity Conditions (context); Perception of Opportunity (people); and Venture Ideas. In other words, individuals react to the context (although sometimes also change it), conceive of a favorable future entrepreneurial scenario (for themselves and/or for others), and form an idea of how they can realize it through venture creation.

From this perspective, entrepreneurial opportunities are related to the action phase model and to well-being in at least two fundamental ways. First, opportunity conditions may include objective characteristics of the individual which cause her to perceive specific opportunities relevant to her well-being. For instance, an individual who has lost his arm may be more likely to identify potential improvements to prosthetic limbs. Second, different ideas for ventures are likely to have different effects on individuals' well-being when exploited. For instance, on the basis of humanistic psychological assumptions, striving to establish a venture that has social utility is more likely to affect the individual positively than striving to establish a venture that is markedly anti-social in nature. Thus, some opportunities or venture ideas might be more conducive to individuals' well-being than others.

### Progress under Uncertainty

Entrepreneurship entails a high degree of uncertainty. However, while discussions on uncertainty in entrepreneurship have been vital for illuminating entrepreneurship as a phenomenon, we still have very little understanding of the processes associated with perceiving, evaluating, and managing uncertainty within the entrepreneurial process (Miller, 2007). Notwithstanding its theoretical value, existing work remains disorganized both in terms of theorizing about uncertainty and attempting to measure it empirically (McMullen & Shepherd, 2006; Milliken, 1987). How, then, can the action phase model above deal with the fact that entrepreneurial goals are pursued under uncertain conditions? And how it can assist in organizing competing strategies for handling uncertainty and decision making in entrepreneurship?

In line with the theoretical underpinning of the model, the most important facets of uncertainty in entrepreneurship are those that impact one's deliberations and actions. On the one hand, problems of uncertainty concern the motivational processes of goal setting, as they relate to the problems of perceived feasibility and desirability of intended actions. On the other hand, aside from the selection of opportunities (Do I have the information required to make a decision regarding alternative courses of actions?), the ability to pursue the opportunity from conception to realization (Can I bring this venture creation process to successful fulfillment?) and the estimation of whether one will enjoy the desired effects once the goal has been accomplished (Will doing so benefit me?) are also both important sources of perceived uncertainty in entrepreneurship. In essence then, the question being asked is how people think about, feel about, and manage to pursue their entrepreneurial goals in the face of these uncertainties.

According to Gollwitzer's theory of mindsets, each of the four phases is represented by a different mindset conducive to performing the tasks involved in that phase, by paying attention *only* to relevant information, and by adjusting one's behavior to the goals and processes relevant to that particular phase. That is, each phase is facilitated by particular mindsets which cause individuals to feel and act in specific ways that enable them to accomplish the task at hand. For instance, during deliberation individuals tend to become more critical and receptive to various ideas and thoughts, which allows them to process information regarding feasibility and desirability more objectively and impartially (this processing may in turn be facilitated by supporting well-being states). Furthermore, once deliberation is over and the goal to establish the venture is set, the individual will move on to planning and initiation. In these circumstances, the implementation and actional mindsets help the entrepreneur to focus on implementing and achieving the goal. Cognitively, this is characterized by close-mindedness, which helps the entrepreneur to plan and stay on track by shielding her from disruptive information which would otherwise result in greater perceived uncertainty, which could in turn forestall the entire process (of course, for a number of reasons, it is possible that goal progression may occur in entrepreneurship while the mindsets linger on – in chapter 10 I develop several theoretical predictions in this regard).

Alongside the effects of mindsets on reducing perceived uncertainty, entrepreneurs reduce uncertainty by planning, rather than by not planning as argued by a certain line of research in entrepreneurship. In fact, planning and adopting clear goals and belief structures helps to constrain the experience of uncertainty by reducing the spread of competing action plans (Hirsh, Mar, & Peterson, 2012). Poor planning results in poor uncertainty management, since vaguely specified goals cannot be used to sufficiently narrow the range of competing action plans. Entrepreneurs can specifically develop (i.e., engage in planning of) if-then scenarios or alternative action plans in order to deal with any uncertainty as it arises (thus quickly and efficiently shifting focus from one thing to another), and many in fact do just that. Making use of if-then planning has been found to alleviate the limitations of conscious processing under conditions of uncertainty (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001; Gollwitzer & Sheeran, 2006) by automating the goal striving process. The overall idea is thus to minimize doubt and to be attentive to feedback, so that one can quickly decide whether to disengage, continue, or modify one's course of action.

This is, I argue, the hallmark of the entrepreneurial planning process. Successful entrepreneurs do not simply pursue this or that opportunity or the venture creation process out of the blue. They are action-oriented and planners in every sense of the word. Planning serves as a tool that entrepreneurs can use to develop their efficacy (and their ability to meet and respond to uncertainties), prepare their actions, quickly realize when they are on the wrong track, have alternative ideas on hand in case the need arises (access to a plan B), and finally, interpret feedback better because they have a notion of what feedback to expect (Frese, 2009). As further noted by Frese, experiments, scientific as well as entrepreneurial, require planning in the sense of thinking through and designing a certain approach to attempting something, such as developing a product or starting up a firm.

Aside from planning, effectuation (Sarasvathy, 2001) and bricolage (Baker & Nelson, 2005; Stinchfield, Nelson, & Wood, 2013) are two active approaches that can be used to alleviate uncertainty and facilitate goal-directed action under conditions of uncertainty. Effectuation can be employed to facilitate the process of selection, and hence of goal setting, by adjusting to affordability, while bricolage can be regarded as a way to qui-

ckly respond, with whatever is at hand, to errors and obstacles along the way to goal attainment. Below, I describe the relationship of the model to the concept of effectuation in greater detail.

### Relationship to Causation-Effectuation

Effectuation is a goal-finding process that has implications for goal pursuit, and deals first and foremost with the problem of entrepreneurial selection or goal setting. There are two fundamental problems of selection in entrepreneurship: between entrepreneurship and other wage taking alternatives and/or between different entrepreneurial opportunities once the goal to create a new venture has been set. Now, assume that the first problem of selection is resolved; i.e., that entrepreneurship has been formed as a goal, but that the opportunity to pursue has not been selected. In this scenario, effectuation can be employed as a strategy for finding, setting, and pursuing opportunities during the planning and actional phases relating to the overall goal of creating a new venture. First, looking inward rather than outward (i.e., introspecting rather than searching) makes the problem of selection more manageable, because the ideas and opportunities that can be envisioned based on a given set of means are fewer by far than those that can be envisioned based on an open set. Regarded in this way, effectuation is a process of exploration and selection of opportunities. Second, once an opportunity has been chosen, effectuation can be employed in the planning and actional phases as a method or strategy for attaining one's goal by finding, setting, and pursuing sub-goals as means to the end of creating the new venture.

In sum, within the goal-directed approach, effectuation is best employed as a method for setting and realizing one's goal of establishing the venture, but its functions will differ depending on the level of analysis used in the goal system. Hence, this is something that people can consider and prepare for on multiple levels before acting. In general, if causation is chosen, more extensive searching and planning is expected before implementation, whereas if effectuation is chosen the individual will move to implement sooner. After action has been taken, reflection can bring the individual back to the envisioning phase if the venture has been called into doubt or if a

different opportunity has been moved to the planning phase, which allows further consideration of either more effectuation or more causation. Typically, if the opportunity-outcome is very uncertain, more effectuation will be employed, and transitions to the implementation phase for further experimentation will be more rapid.

## Concluding Remarks

The action phase model portrays entrepreneurship as a temporal goal-directed process of venture creation and growth. Among other things, it differs from the process modelling of Shane and Venkataraman (2000) in not making the assumption that the process of venture creation necessarily starts with a perceived opportunity (i.e., it is neutral on whether the opportunity precedes planning or is an integral part of the planning process). It further explicitly portrays the entrepreneurial process as a goal-directed phenomenon. Most importantly, it highlights and bridges current gaps in the literature on entrepreneurial motivation by combining the two central aspects of entrepreneurs' goal pursuit (goal setting and goal striving), and by describing specific motivational phenomena connected to these processes (deliberation, planning, execution, and evaluation).

It should also be noted that while the model describes the phases behaviorally and temporally in terms of engagement in key phases of the entrepreneurial (venture creation) process, they could also be interpreted on the level of psychological processes rather than that of behavior (and thus not temporally). This would imply that individuals go through the processes of goal setting and goal striving simultaneously, and with constant iterations (short cycles between two phases and long cycles between all phases). Thus, the most distinctive feature of the model is its clear separation between the processes of goal setting and goal striving.<sup>11</sup> The model also doesn't suggest that every act of entrepreneurship is initiated by people's deliberation over

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<sup>11</sup> In other words, the two goal processes interact and intersect as they co-occur on different levels. If we take entrepreneurship to be the pursuit of a personal goal to create a venture, then part of the planning and implementation of the goal entails the setting and accomplishment of various behavioral goals (i.e., moving from planning to acting), which in themselves involve taking action in one's overall goal pursuit.

the feasibility and desirability of their goal to start up their venture. Many intended entrepreneurs simply resume activities that have been started in the past, or otherwise postponed due to a lack of appropriate opportunities to start up the venture.

Section III:  
Well-being: Review  
and Conceptualization



# Chapter 4

## Entrepreneurs' Well-Being

Over the decades that have passed since WWII, there has been major growth in the study of individuals' well-being. Aside from the social, political, and historical reasons for this, it followed from the disconcerting realization that the field of psychology, since its early foundation, had devoted much more work and theoretical attention to chronic psychological disorders and other sources of suffering and unhappiness, rather than to the causes and consequences of positive feelings and functionings.

Since its inception in the 1950s, the study of well-being has broken out of mainstream psychology, and has grown to encompass a great variety of disciplinary interest and scientific journals.<sup>12</sup> In the field of psychology alone, phenomena related to well-being have been increasingly researched by notable psychologists within positive (Csikszentmihalyi, Frederickson, Lyubomirsky, Seligman), cognitive (Forgas, Isen), social and humanistic (Deci, Elliot, Higgins, Keyes, Maslow, Rogers, Ryan, Ryff, Sheldon), personality (Tellegen), and clinical (Jahoda, Jung, Keyes) psychology, as well as more direct efforts by well-being researchers, mainly within the psychological sub-field of subjective well-being (Diener, Lucas). Sociologists (Argyle, Veenhoven), economists (Benz, Frey, Easterlin, Kahneman, Sen), and organizational and management scholars (Amabile, Baron, Corpanzano,

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<sup>12</sup> Some of the most important scientific journals that publish work on the topic include the Journal of Personality and Social Psychology, Journal of Happiness Studies, Perspectives on Psychological Science, Social Indicator Research, Psychological Bulletin, American Psychologist, and the Journal of Positive Psychology.

Grant, Seo, Warr, Weiss) are also increasingly interested in the phenomenon of well-being, and have mostly drawn on psychological measures of well-being in developing their theories and instruments.

But what exactly is well-being? How do we measure it? And, how does it figure in entrepreneurship? Drawing on the mental health, well-being, and organizational work literatures, the main purpose of this chapter is to offer an integrative definition of entrepreneurs' well-being that goes beyond mere general positive affect (Baron, 2008), passion (Cardon et al., 2009), and satisfaction (Cooper & Artz, 1995) in entrepreneurship. On the basis of recent theoretical development by Keyes (2002, 2005, 2007), in which he merges two central streams of psychological research on well-being (for recent reviews see Ryan & Deci, 2001; Ryff & Singer, 2008; Waterman, 2008), I develop an integrated model of entrepreneurs' well-being as the overall psychological wellness of entrepreneurs.<sup>13</sup>

I start by asserting the importance of including in a definition of entrepreneurs' overall well-being the two central dimensions of individuals' well-being: subjective well-being and psychological well-being. I discuss the nature of these distinct but related dimensions of well-being and how they are typically measured by psychologists. These concepts are central to this thesis since measures of both subjective and psychological well-being figure in its empirical investigations, and since they function as building blocks for much of the theorization to come in subsequent chapters.

## The Meaning of Individuals' Well-Being: an Integrative Approach

It has become standard to distinguish between theories of well-being as either hedonic theories, desire theories, or "objective" list theories (Parfit, 1984); with the last category often corresponding to 'substantive good theories' or eudaimonic theories of well-being. These three approaches correspond to three different conceptualizations of individuals' well-being: as

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<sup>13</sup> In other words, well-being is understood here as a psychological phenomenon (with distinctive cognitive, affective, and conative elements). For this reason, the review and theoretical work that will follow is based largely on the work of psychologists.

happiness (positive affect), as life satisfaction, and as eudaimonia (a normative account of the good life), respectively. Aside from philosophers, theories of well-being have been mainly developed by modern psychologists embracing one or other of these theoretical underpinnings.<sup>14</sup> Modern psychology thus offers three main approaches to well-being, which although empirically related, originate from very different ontological and ethical assumptions concerning the nature of human beings and the state of well-being.

Briefly stated, ontological theories and measures of well-being differ with respect to their emphasis on external/internal individual conditions (e.g., possessing material conditions and having friends vs. being satisfied and experiencing vitality), and (relatedly) whether these are externally evaluated by others and/or internally evaluated by the individual, and lastly whether they are designated as objective and/or subjective in the sense that what constitutes well-being is either set a priori by the researchers – or is left open for the respondent to decide, respectively. Since external accounts of well-being are sociological and non-psychological (e.g., life quality indexes), psychologists of well-being, regardless of their take on the subjectivity or objectivity of well-being criteria, refer more broadly to well-being as subjective well-being, defined as the overall *internal* state of mental wellness, which may include both “objective” (eudaimonic) and subjective (hedonic and desire-based) measures of mental wellness (Keyes, 2006).

Despite this use of the term “subjective well-being”, it has become strongly associated with the hedonic and desire-based well-being movement known as the Hedonic Approach (Bradburn, 1969; Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Gurin, Veroff, & Feld, 1960; Kahneman, Diener, & Schwarz, 1999), while the concept of psychological well-being is commonly identified with the eudaimonic movement (Deci & Ryan, 2000; Jahoda, 1958; Ryff, 1989; Ryff & Singer, 2008). Thus, in order to avoid confusing terminology, I will adhere to this usage here.

According to the hedonic approach, well-being, which is more colloquially referred to as happiness (not in the sense of an emotion, but rather an overall mental state) or subjective well-being, stems from efforts to max-

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<sup>14</sup> Other theoretical account of well-being have been developed by welfare economists, and, to a much lesser extent, by sociology scholars, who have otherwise focused on quality of life indexes.

imize pleasure and minimize pain, and is subject to influence from genetics, life circumstances, and individuals' goal-directed behavior (Lyubomirsky, Sheldon, & Schkade, 2005b). It is captured by people's evaluations of their lives, and encompasses both cognitive judgments of satisfaction and affective appraisals of moods and emotions (Diener et al., 1999). It is described as a positive state of mental wellness which involves the whole life experience.<sup>15</sup>

According to the eudaimonic approach, on the other hand, well-being is a derivative of personal fulfillment and expressiveness (Waterman, 1993), personal development (Erikson, 1959), self-actualization (Maslow, 1968), individuation (Jung, 1933), and self-determination (Deci & Ryan, 2000), or results more generally from being fully functional (Rogers, 1962; Ryff, 1989; Ryff & Singer, 2008).

I discuss each of these two perspectives, their differences, and similarities in more detail below, from an integrative perspective where they are regarded as separate core dimensions of a higher-order construct of mental health (Keyes, 2002, 2005). In support of this, both Keyes et al. (2002) and Ring et al. (2007) recently reported that eudaimonic facets of psychological well-being and measures of subjective well-being form distinct, though correlated, dimensions of mental health. This is also shown in their differential patterns of correlation with both socio-demographic and psychological factors (Keyes et al., 2002). Adopting Keyes's conceptualization of mental health, I am proposing that both subjective and psychological well-being states should be viewed as core components of entrepreneurs' well-being, representing positive feelings and evaluations on the one hand, and positive psychological functions on the other.<sup>16</sup>

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<sup>15</sup> Today, happiness (in the narrower sense as positive affect) and life satisfaction are treated as both belonging to a collective hedonic framework. The fundamental feature that integrates the two under the same roof is that both recognize the individual as the principal evaluator of his own well-being. Moreover, while happiness has traditionally been considered within a hedonist psychological framework (as the presence of positive affect to a greater degree than negative affect), and life satisfaction within a desire psychological framework (as a cognitive evaluation), some scholars argue that they cannot be separated (Veenhoven, 2008).

<sup>16</sup> Note 1: Keyes's conceptualization of well-being as mental health is heavily based on both clinical and developmental work on well-being (Jahoda, 1958 and Ryff, 1989). From a clinical perspective, the presence of well-being is contrasted with that of mental illness or the state of ill-being (Keyes's two continua model of mental health and illness). Much as well-being involves both positive feelings and positive

## Positive Hedonic Feelings and Evaluations: Subjective Well-Being

Although no absolute definition of subjective well-being exists, by most accounts it entails “judging life positively and feeling good” (Veenhoven, 2008).<sup>17</sup> As stated by Diener and colleagues:

“a person is said to have high SWB [subjective well-being] if she or he experiences life satisfaction and frequent joy, and only infrequently experiences unpleasant emotions such as sadness or anger. Contrariwise, a person is said to have low SWB if she or he is dissatisfied with life, experiences little joy and affection and frequently feels negative emotions such as anger or anxiety” (Diener, Suh, & Oishi, 1997: 25).

In other words, subjective well-being refers to people’s evaluations of their own lives, and encompasses both affective appraisals of moods and emotions and cognitive judgments of satisfaction.<sup>18</sup>

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psychological functionings, mental illness has for long time been assessed by the same dimensions. Depression, for example, involves both symptoms of an-hedonia (absence of hedonic feelings) and psychological mal-functioning (Keyes, 2007). Note 2: Positive feelings and evaluations can also be seen as a form of functioning, and were indeed regarded so in early research on subjective well-being. This is similar to the observation that even hedonic and desire based theories can be regarded as objective list theories in that one attributes the highest value to individuals’ free choice of standards. Note 3: Recent research indicates that the two constructs indeed share a single underlying psychological phenomenon, i.e., mental health, although they differ in crucial ways. For instance, they tend to differ in their self-regulatory function and otherwise in their respective placement within the overall causal structure of mental health.

<sup>17</sup> Psychologists within the subjective well-being school have thus come to differentiate between four separable components of subjective well-being that combine in comprehensible ways. These are life satisfaction in general (Diener et al., 1985), satisfaction in important life domains (Campbell, 1976), and positive and negative affect (Bradburn, 1969; Fredrickson, 2004). Although each of these specific constructs should be viewed in its own light, the components often correlate substantially, suggesting the need for a higher-order factor (Diener et al., 1999; Stones & Kozma, 1985).

<sup>18</sup> Such a conceptualization of subjective well-being as the product of an overall appraisal of life, wherein the good and the bad are weighed against each other, does not restrict itself to specific feelings, and does not conflate the subjective experience with its possible causes (Veenhoven, 2008). It holds individual human beings to be the single best judges of their own well-being (Kesebir & Diener, 2008). This is in fact, the hallmark of the field of subjective well-being, which remedies the problem of value and choice posed by many objective accounts of individuals’ well-being (e.g., Nussbaum’s Aristotelian approach).

### **Moods and Emotions: the Role of Positive and Negative Affect in Subjective Well-Being**

Two of the components underlying the structure of subjective well-being are labeled positive and negative affect. The inclusion of these in the definition of subjective well-being indicates that the experience of pleasure is fundamental to the subjectively rewarding life. According to most basic accounts, affect refers to the underlying basic and general experience of moods, feelings, and emotions (Frijda, 1993, 1999). Moods are usually taken to be unconscious affective states of mind without a particular trigger. Emotions are usually seen as short term and more intense affective experiences coupled with triggers. They occasion changes in behavior (such as facial expressions), physiology (changes in heart rate), and subjective expressiveness (they must be felt) in reaction to some internal or external stimulus.<sup>19</sup> Feelings are more complicated as they combine both cognition and affection (which makes them the most conscious of affective experiences).<sup>20</sup>

While some have collapsed the terms emotions, moods, and feelings into one category (Lucas, Diener, & Larsen, 2003), there is still a lot of disagreement about the definitions of emotional phenomena and their underlying components (see Frijda, 1999; Larsen & Fredrickson, 1999). Despite this, researchers studying emotions usually agree that the structure of affect is divided into two core dimensions: the accompanied positive or negative valence (or hedonic tone) and the degree of arousal (or activation)

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<sup>19</sup> It should be noted however that while we tend to assume that perceptions of events trigger emotional responses that eventuate in bodily expressions – that when we suddenly see a competitor taking from us a market share, we become frightened or angered, and then run away or fight – the actual sequence, according to James (James-Lange theory), is perception followed by bodily expressions, followed by emotional feeling – that when we see the competitor act, we run away or fight, and only after that experience those physical events as what we call fear or anger. In my opinion, the significance of this view is that our emotions are connected to our ideas! That is, emotions result from the mind's own physiological state or condition, which results from a stimulus. Controlling our emotions is thus a matter of controlling the kinds of ideas we associate with our organismic responses. This insight, although not explicitly mentioned, is inherent in the construal theory of happiness (Lyubomirsky, 2001), according to which happy individuals are more likely to construe and thus to experience their world and their environments more positively by “seeing” others and by “seeing” events more favorably. This will be carefully reviewed in the last chapter of this section.

<sup>20</sup> Subjective well-being can thus be said to accompany general feelings of wellness as the underlying affective-cognitive construct.

of an emotion (Russell, 1980; Russell & Barrett, 1999). While the first refers to whether the experience of an emotion is attractive or pleasant (from this perspective all positive emotions are wanted, and all negative ones are unwanted),<sup>21</sup> the latter refers to the degree of intensity and action tendency (high or low) that accompanies the subjective experience. Thus, while some affective experiences are positive in tone and deactivating (calm, relaxed), others are positive in tone yet activating (joy, elation).<sup>22</sup>

Research on affect within the field of subjective well-being has converged on the idea that the affective portion of subjective well-being is best defined and studied as the ratio of positive affective experiences to negative ones in terms of the frequency of occurrence rather than in terms of their intensity. According to Diener, Sandvik, & Pavot (1991b), while the experience of frequent positive affect is both necessary and sufficient for the experience of overall subjective well-being, the intensity of positive affect is not – although it can heighten the experience at the moment of its occurrence (it is also possible that intense positive affect is a likely precursor of subjective well-being for people who have an explicit preference for high arousal). Furthermore, too high a ratio of frequent positive affect (relative to negative affect) also seems to come at a cost, and a better balance between the two has been found to be necessary for sustainable subjective well-being (Fredrickson & Losada, 2005; Grant & Schwartz, 2011; Oishi, Diener, & Lucas, 2007).

As far as measurement is concerned, Lucas, Diener, and Larsen (in the collected works of Ed Diener, 2009) provide an excellent review of a variety of well-validated techniques that can be used to measure and study positive emotions in entrepreneurship. They argue that while both self-report

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<sup>21</sup> While most positive emotions show increased asymmetrical activity of the left prefrontal cortex, where approach motivated behavior also occurs, most negative emotions (negative valence) show activity in the right side of the prefrontal cortex. Hence, most positive emotions are approach oriented, and most negative ones are avoidance oriented. Anger on the other hand is an exception, and appears on the left side of the prefrontal cortex, hence exhibiting approach tendencies (Carver & Harmon-Jones, 2009; Harmon-Jones & Sigelman, 2001).

<sup>22</sup> In addition to these dimensions, affective experiences may also be distinguished in terms of their association with self-regulation (Higgins, 1997); as some affective experiences result from the promotion of something while others from prevention of something. For instance, pride and happiness usually results when we accomplish an important goal with effort (e.g., establishing a successful startup) while feelings of relaxation will typically follow upon successful prevention of some negative outcome (e.g., establishing a great patent protection).

and non-self-report measures may provide distinct and valuable information, self-reports probably provide the best insight into individuals' experiences of emotion over time. According to Lucas et al., the simplest and most readily used self-report measures of positive emotions are global single-item measures of happiness – a broad category of positive emotions such as “How happy do you feel in general?” – and various multi-item and response scales such as the Bradburn Affect Balance Scale (Bradburn, 1969).<sup>23</sup> Lucas et al. claim that these not only have the virtue of brevity, but also display a fair amount of validity. Indeed, global judgments of happiness (as subjective well-being) are consistently and moderately to strongly correlated with the frequency with which one experiences pleasant and discrete emotions such as joy, elation, pride, contentment, excitement, affection, happiness, and energy (Diener & Lucas, 2000). I therefore make extensive use of this measure of affective well-being in the empirical studies to be offered in this thesis.

By virtue of its goal-directedness, complexity, and uncertainty, as well as the intensity and dynamics of its actions, entrepreneurship is very likely to influence and be influenced by a range of well-being affective phenomena. Although we are seeing the start of both theoretical (Baron, 2008) and empirical (e.g., Schindehutte, Morris, & Allen, 2006) work on the link between entrepreneurship and affective-laden phenomenon, we still lack a systematic approach to studying this link and a solid theoretical basis to guide empirical investigation. Theories and empirical evidence, unlike in the more general work-based literature, are still very limited in terms of how entrepreneurship is related to affective well-being. As will be discussed in chapters 6 and 7, most of the theoretical work and empirical evidence concerning the link between well-being and entrepreneurship is directed at cognitive measures of satisfaction or otherwise exclusively focused on more intense and highly activated forms of positive affective experiences. One objective of this thesis is to bridge these gaps by strengthening both the empirical and theoretical basis for research into the link between entrepreneurship and affect-laden well-being phenomena.

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<sup>23</sup> Thus, happiness is not only a discrete type of basic emotion, but also the higher-order subjective assessment of affective well-being.

### **Life Satisfaction and Satisfaction in Important Domains**

The two other components of subjective well-being are life satisfaction and satisfaction in important life domains, and together they form the cognitive dimension of subjective well-being. The inclusion of these two related components in the definition of subjective well-being reflects the recognition that the subjectively rewarding life is constituted not only by emotions and feelings, but also by the way that people come to think about their lives in positive terms (Kahneman & Riis, 2005). And while people may draw on their affective experiences when evaluating their lives, other sources may also play a role. For instance, if it is necessary in order to attain their important life goals, people may be willing to endure high levels of negative affect. Thus, the associations between affective and cognitive components may vary across individuals, and we need to pay greater attention to the underlying structure of the subjectively rewarding life.

Life satisfaction is by far the most used and validated concept of subjective well-being across studies and disciplines (see Pavot & Diener, 2008 for the most recent review), and is often mistakenly equated with subjective well-being in general. Originating within a desire-based conceptualization of well-being, the concept of life satisfaction has become an integral part of the hedonic approach to well-being, and sees heavy use by psychologists and clinicians, as well as by other social scientists, economists, and sociologists in particular. Underlying life satisfaction is an overall *subjective* cognitive judgmental process whereby individuals assess their life in general, drawing on two sources of information: cognitive comparisons with standards of the good life, in which people assess the extent to which their life so far measures up to *their* expectations and resembles *their* envisioned ultimate model of the good life, and affective information concerning how one feels most of the time.

Thus, whereas life satisfaction is considered to be an exclusively cognitive judgment (Pavot & Diener, 1993) some researchers have argued that it also has an affective dimension (Veenhoven, 1996, 2008), which would imply that "overall happiness" is synonymous with life satisfaction and subjective well-being. In fact, Lucas, Diener, and Larsen (in Diener, 2009) also included in their review a measure of cognitive well-being, the Satisfaction With Life Scale (SWLS: Diener, Emmons, Larsen, & Griffin, 1985), as a

proxy for emotional well-being. Measures of cognitive well-being are moderately correlated (around 0.4 to 0.5) with the experience of positive affect or happiness (Lucas, Diener, & Suh, 1996; Lyubomirsky et al., 2005a), and accordingly, 1) life satisfaction is a defensible proxy for happiness, and 2) life satisfaction and positive affect, although separable, are not independent of one another.

Nonetheless, later advancements in theory and methodology draw a clear and critical line between the affective and the cognitive components of subjective well-being, and highlight important differences between the two (see Weiss, 2002 for a strong critical stance). For instance, while affective measures tend to be relatively ephemeral, life satisfaction has a greater stability over time. Also, measures of life satisfaction correlate more significantly with individuals' beliefs and with circumstantial variables, indicating the role played by cognition in forming ideas about one's life. However, the two are also related in important ways. For instance, one's emotional experiences over time are important sources of information when forming judgments of life satisfaction. Current affect is also likely to influence one's judgments of satisfaction by providing readily available information on which to base evaluations of overall life satisfaction (Schwarz & Strack, 1991). On the other hand, causality can run both ways, so that positive evaluations of one's life may trigger positive affective responses (Pavot & Diener, 1993).

There are two principal ways in which global life satisfaction has been measured, either as a single-item measure – often in big surveys with large numbers of respondents, such as the World Values Survey (used by Diener, Gohm, Suh, & Oishi, 2000) – or as a multi-item scale. The most widely used multi-item scale of life satisfaction is the SWLS; a five item Likert scale with seven response alternatives. Since its inception, the SWLS has been shown to correlate positively with various psychological, behavioral and performative outcomes. For instance, it has been found to be associated moderately to strongly with other measures of well-being (Lucas et al., 1996; Ryan & Frederick, 1997), to be a significant predictor of engagement in self-destructive behaviors (Pavot & Diener, 2008), and to be predictive of positive future outcomes such as higher income and reemployment (Krause, 2013). Both the validity (discriminate, convergent, and temporal)

and reliability of the scale have been subject to impressive examination since its inception in 1985, with generally consistent positive results (see Diener, Inglehart, & Tay, 2013 for the most recent review). Single-item measures of life satisfaction also show adequate levels of reliability and validity estimates, although lower than SWLS. For instance, Lucas and Donnellan (2011) found, on the basis of four large representative samples, and taking into account the occasion-specific changes in the measures over time, that the reliabilities varied from .68 to .74, with a mean of .72. This is also supported by Fujita and Diener (2005), and Michalos and Kahlke (2010), who found that single item life satisfaction was stable at .67 and .65 for one and two years, respectively, whereas the SWLS produced correlations of .80 and .75. In general, studies on life satisfaction thus indicate that both SWLS and the single-item scales are reliable, valid, and sensitive to changes in life circumstances.

Aside from the global approach to life satisfaction, domain satisfactions have long been considered an integral part in the study of subjective well-being and overall quality of life (Campbell, Converse, & Rodgers, 1976; Cummins, 1996), and subject to continuous research in psychology, economics, and sociology (e.g., Cummins, 2003; Easterlin, 2006; Van Praag & Ferrer-i-Carbonell, 2007; Van Praag, Frijters, & Ferrer-i-Carbonell, 2003; Veenhoven, 1996). The life domain approach is grounded in early work within aspiration-level theory by Campbell and colleagues (Campbell, 1981; Campbell et al., 1976), and has been further developed by Michalos's (1986) multiple discrepancy approach. According to this approach, well-being depends on judgments of discrepancy between actual conditions (i.e., attainments) and aspirations in important life domains – which echoes McGill's (1967) assertion that happy life depends on the ratio of “fulfilled desires to total desires”.<sup>24</sup>

In contrast to the global life satisfaction approach, the life domain approach has the advantage of combining both psychologists' work on subjective aspirations and economists' work on objective (circumstantial) conditions, and thus provides a fuller view of the quality of life experienced. In general, four core aspirations seem to emerge at the core of the

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<sup>24</sup> Note that this disaggregated approach could be then seen as a (higher-order) version of an “objective” list theory, in that the domains are presupposed.

life domain approach: to do, to become, to have, and to love (a relational mode). These core aspirations (which can be regarded as life goals) neatly correspond to the core domains specified by both Campbell (1976) and Cummins (1996), which theoretically and consistently look at satisfaction along the domains of: work/do, self/be(come), financial/have, family/love, and health. Indeed, empirical evidence suggests that global life satisfaction tends to correlate strongly with satisfaction with self (or self-esteem), finances, and family life, and moderately with satisfaction with work, health, and community. Furthermore, domain satisfactions tend to correlate better with global measures of subjective well-being than objective conditions. According to Diener (1984), this may be because they share method variance with the global measures, which tends to inflate the correlations, or, perhaps more importantly, because subjective judgments seem to be closer in the causal chain to global measures of subjective well-being “because objective conditions will usually be mediated by subjective processes”. Finally, whether the association is the result of top-down processes, so that domain satisfaction is determined by a global tendency to be satisfied and happy, or bottom-up processes, so that domain satisfaction determines global evaluations of happiness and life satisfaction, or whether the relation is bi-directional, is the subject of ongoing debate (see chapter 6 for further discussion).

Equally important, satisfaction in these domains tidily corresponds to the core dimensions in measures of psychological well-being (i.e., autonomy, capability and relatedness), and is further likely to constitute the informational basis upon which individuals draw their more general conclusions about their lives. Importantly, aspiration theory in itself does not indicate how aspirations come to be. That is, it does not say whether they are the products of personal experiences and values, social comparison, adaptation and/or self-regulative strategic behavior. The theory also does not elaborate on the differences between, and consequences of, the types of aspirations that are being pursued and fulfilled. These are interesting and very relevant questions; especially since they might shed light on how subjective well-being is (or could be) experienced – which could in return have consequences for policymaking. In principal, satisfaction within the various domains is measured by a single-item measure – this method is often used in

big surveys with large numbers of respondents, such as the United States General Social Survey.

Most of the empirical work on the link between entrepreneurship and well-being has looked at either global measures of life satisfaction or measures of work and job satisfaction; mostly seen in the context of economic studies that investigate the effects of self-employment on these measures of satisfaction as proxies of individuals' utility (e.g., Benz & Frey, 2003, 2004, 2008a; Benz & Frey, 2008b). However, utility is not well-being, well-being is not just life and work satisfaction, and entrepreneurship is not just another domain of employment. In fact, we know very little about how entrepreneurship is related not only to general life satisfaction but also to important domains of satisfaction.

Next, before I go on to discuss the concept of psychological well-being and its inclusion in the overall definition of entrepreneurs' well-being, a few questions should be addressed with respect to measures of subjective well-being.

### **How Reliable are Self-Report Measures of Subjective Well-Being?**

This general question can be divided into three separate concerns often voiced by researchers and individuals when first encountering and critically reflecting over the study of subjective well-being. I will describe these concerns, and give brief and hopefully convincing responses to each.

1. Don't self-reports vary extensively from moment to moment during the day, the week, or the month, and aren't they contingent on peoples' fleeting moods and emotions? While there is some evidence for this (e.g., Schwarz & Strack, 1991), in general, it seems that the answer to this question is no. Longitudinal studies show a considerable stability in individuals' self-reports over periods of weeks and months, which indicates that the questions used to assess subjective well-being actually measure relatively stable states.
2. Are people honest when reporting their experiences of well-being? In most cases, individuals do appear to be truthful in their

responses. For example, when external observers – such as members of one’s family, friends, or expert clinicians – are questioned about the well-being of a study subject, there is considerable reliability between the viewers’ reports and the subjects’ self-evaluation (Diener, Smith, & Fujita, 1995). Also, clinical measures of both subjective and psychological well-being, neuroimaging brain scans, and studies of facial expressions all corroborate individuals’ sincerity in self-evaluations (Fredrickson, 1998). But even if the respondents are honest, a problem remains: we all know that perceptions, even affective and bodily perceptions, can be mistaken. To this, I respond that mistaken or not, the perceptions are peoples’ experiences, and constitute the data that they will eventually act on.

3. Finally, can we really get at concepts such as subjective well-being or overall happiness? Relatedly, can we really compare self-reports across individuals – even if each is honest and correct, and even if feelings of well-being are relatively stable, doesn’t the meaning of happiness or the subjectively rewarding life differ from person to person, or from culture to culture? It is true that as far as measures of subjective well-being are concerned, no guiding principles are provided, and people are free to respond according to their particular concept of happiness, or otherwise use their own criteria for judging it. But this is precisely the hallmark of the subjective well-being movement: that it tries to get at people’s own evaluations of their lives rather than study their responses in relation to some external criteria imposed by the research team. And besides, when respondents are asked to rank the most important factors influencing their happiness and contentedness with their lives, there is a considerable correlation between their rankings and subjective well-being reports. For example, Easterlin (2006) reports that the most important factors usually mentioned are one’s relations to others, health, work, and material conditions. This may indicate that the guidelines and aspirations that people use when forming their judgments of sub-

jective well-being are rather similar, and hence that responses are actually reasonably comparable across individuals (Easterlin, 2010).

### Positive Functioning: Psychological Well-Being and Subjective Vitality

Besides positive feelings and evaluations, the concept of well-being developed at the beginning of this chapter includes positive psychological functionings as one of its central dimensions. Keyes's criteria for positive functioning include facets of both psychological well-being (Ryff 1989 and Deci & Ryan, 2000) and social well-being (Keyes, 1998). However, as Keyes's (1998) specific measure on social well-being has shown poor internal consistency (alpha coefficients  $< .70$  for each subscale), only psychological well-being is considered here.<sup>25</sup> In addition to this, I also regard subjective vitality or the sensation of being psychologically energized (Ryan & Frederick, 1997) as another facet of positive functioning, since being vital and energetic constitutes part of what it means to be fully functioning and psychologically well (Cowen, 1994). Subjective vitality, much like the concept of psychological well-being, is an eudaimonic aspect of well-being, although it differs from psychological well-being by explicitly designating an emotional state, and thus demonstrates elements of hedonic well-being as well (Ryan & Deci, 2001, consider vitality to be an important eudaimonic aspect of emotional and psychological well-being).

#### **Psychological Well-Being and Basic Psychological Need Satisfaction**

The concept of psychological well-being is based on the eudaimonic approach to well-being, according to which well-being relies on the fulfillment of healthy (pre-defined and value-laden) psychological processes, i.e., on positive psychological functioning. The psychological well-being approach, unlike the hedonic approach, is more theoretically developed and normatively informed by various historical traditions and thinkers. Aristotle's *Nicomachean Ethics*, in which he attempted to answer the question of *how a*

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<sup>25</sup> One dimension of the Scales of Psychological Well-Being, "Positive Relations with Others", assesses social well-being, and hence this important aspect of well-being will not be omitted altogether.

*life should be lived*, is mentioned in almost every theoretical study on psychological well-being.<sup>26</sup> The approach is also heavily informed by early humanistic, clinical, and developmental psychologists (see Deci & Ryan, 2000, and Ryff & Singer, 2008, for reviews).

Two approaches currently dominating the field of psychological well-being are Ryff's (1989) and Ryff and Keyes's (1995) theory and conceptualization of psychological well-being, and Deci and Ryan's (2000) theory of self-determination (SDT), which is a macro theory of human motivation, personal development, and well-being. The first emanates from a more clinical tradition, mostly relying on the important work of Jahoda (1958), who was the first to outline the basic dimensions of mental health in terms of positive functioning. The second approach is more directly influenced by humanistic ideas, in particular those expressed by Maslow (1943, 1968) and Rogers (1962). However, both approaches are heavily influenced by humanistic and existential thoughts, and each other.

Nevertheless, although the two converge in important ways, SDT and Ryff's theory of psychological well-being differ somewhat with respect to their views on well-being. SDT approaches well-being more affectively (the term emotional well-being is often used by SDT researchers), and focuses on both hedonic and eudaimonic feelings, considering them both indicators of positive psychological functionings. At its core, the theory postulates a set of universal and innate psychological needs – for autonomy, competence, and relatedness – the fulfillment of which is considered necessary and essential to vital and healthy human functioning and well-being. Stated differently, SDT posits that individuals have basic needs to *feel* free of coercion in their behavior (deCharms, 1981), to feel effective and competent in their behavior (White, 1959), and to interact meaningfully with others and feel valued by them (Baumeister & Leary, 1995). According to SDT, each type of experience provides distinct “psychological nutrients” that sustain optimal well-being (Ryan, 1995). The three basic needs specified in SDT capture the very essence of Ryff's model of psychological well-being, which

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<sup>26</sup> In fact Aristotle's *Ethics* is also cited by studies on subjective well-being (e.g., Bradburn, 1969; Diener, 1984) although psychological well-being researchers have claimed that these studies confound the meanings of hedonism and eudaimonia. According to Keyes and Singer (2008), the concept of eudaimonia captures a value-laden or virtue-based conception of happiness, and must not be confused with hedonism, which is founded on the notion of pleasure as the greatest of all goods.

equates well-being with the fulfillment of six pre-defined positive psychological functionings: self-acceptance, purpose in life, environmental mastery, positive relations with others, autonomy, and personal growth (Ryff, 1989 and Ryff & Keyes, 1995).<sup>27</sup> Thus, while SDT views these needs as conducive of well-being, Ryff and Keyes's psychological well-being approach considers the fulfillment of these needs as facets of well-being *per se*.

Taken together, the three needs postulated by SDT correspond neatly to Ryff and Keyes's structure of psychological well-being. They cover a range of positive functionings such as the capacity to deal effectively with the environment and achieve valued outcomes, the maintenance of significant and good relationships with other people, and experiencing one's behavior to be self-chosen and meaningful. The Basic Psychological Needs Scale (BPNS) – originally a 21 item scale with 7 items per subscale, or alternatively a 9 item scale with 3 items per sub scale – was developed to assess people's fulfillment of their basic psychological needs in their work, relationships, and life in general (e.g., La Guardia, Ryan, Couchman, & Deci, 2000). Research in a variety of countries, including some cultures with collectivist, traditional values and others with individualist, egalitarian values, has confirmed that satisfaction of the needs for competence, autonomy, and relatedness do indeed predict various measures of psychological and subjective well-being in all cultures and across a variety of contexts (e.g., Deci et al., 2001; Sheldon et al., 2004). Furthermore, satisfaction of the basic needs has been found to mediate the effects of personal goal attainment and progress (mainly for those who hold intrinsic motives) in both cross-sectional and longitudinal designs (Sheldon & Elliot, 1999).

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<sup>27</sup> According to Ryff and Keyes (1995: 720), these six categories “encompass a breadth of wellness that includes positive evaluations of one's self and one's life, a sense of continued growth and development as a person, the belief that life is purposeful and meaningful, the possession of good relationships with other people, the capacity to manage one's life and the surrounding world effectively, and a sense of self-determination”. Ryff (1989) and Ryff and Keyes (1995) were the first publications to validate the six-factor model of psychological well-being. Since then, multiple studies have been undertaken to validate the model and examine its reliability, with moderate to fairly good results. In general, the six factor model projects good factorial validity and internal reliability, and the construct further correlates as expected with both psychological and physiological factors (see Ryff & Singer, 2006 and Ryff & Singer, 2008, for reviews).

To conclude, from the perspective of SDT, satisfaction of the basic psychological needs leads to positive emotional well-being, usually in terms of experienced vitality, which is considered an indication of healthy psychological functioning. At the same time, the satisfied needs themselves can also be considered indicators of positive psychological functionings in a broader psychological well-being framework, to match Ryff and Keyes' conceptualization of psychological well-being. It is in this respect that SDT and Ryff's theory and model of psychological well-being converge. However, as mentioned earlier, SDT regards the presence of vigor or vitality as a separate facet of psychological well-being. This more affective dimension of psychological well-being is considered next, after which I will briefly discuss the state of affairs in current research on the link between the concepts of psychological well-being and entrepreneurship and what this thesis aspires to achieve in this regard.

### **Subjective Vitality**

The concept of subjective vitality (Ryan & Bernstein, 2004; Ryan & Frederick, 1997) refers to the presence and appraisal of positive sensations of being alive and alert, and is assessed in terms of individuals' subjective experiences of feeling energized and vital. Conceptualized within the broader theory of self-determination, subjective vitality is associated with activated forms of positive affect (Watson & Tellegen, 1985), with feelings of vigor and calm energy (Thayer, 2001), and with the concepts of self-regulatory strength and ego depletion (Baumeister et al., 1998; Ryan & Deci, 2008). In SDT, subjective vitality captures a state of organismic well-being which is linked to both psychological (e.g., need satisfaction) and somatic (e.g., sleeping and level of blood glucose) factors which regulate the energy available to the self to enable it to successfully strive for personal goals and navigate the challenges of life (Baumeister & Vohs, 2007). Vitality is considered an emotional aspect of eudaimonic well-being with a strong positive affective tone (Ryan & Deci, 2001), since being vital and energetic constitutes part of what it means to be fully functioning and psychologically well. It thus contains elements of both hedonic and eudaimonic well-being (Boehm & Kubzansky, 2012).

Ryan & Frederick (1997) developed a 7 item scale for assessing individuals' current state of subjective vitality. The scale has proven to be strongly correlated (typically between 0.5 and 0.7) with other well-validated psychological measures of well-being, such as the SWLS, the self-determination and self-actualization scales, measures of self-esteem, and other more clinical measures and symptoms of negative well-being. It has also been found to be significantly associated with personality traits in a fashion similar to other measures of subjective well-being (i.e., significantly negative with neuroticism and significantly positive with extraversion). The scale was further validated by structural equation modelling techniques on the basis of a longitudinal effort, with encouraging results (Bostic, Rubio, & Hood, 2000).

Empirical work performed in both clinical and non-clinical settings has considered the relation of vitality to a host of physiological and psychological phenomena. Especially relevant are the noted positive effects of autonomous self-regulation, intrinsic life aspirations, and satisfaction of basic psychological needs (see Ryan & Deci, 2008, for a review). For instance, Sheldon et al. (1996) examined daily fluctuations in basic need satisfaction, and found that feelings of autonomy and competence predicted experiences of positive affect and vitality at the between-persons level. Subsequently, Reis et al. (2000) showed that within a person, fluctuations in all three of SDT's basic needs contributed unique variances to predictions of positive affect and vitality. More recently, Boehm and Kubzansky (2012) found subjective vitality to be strongly and negatively associated with cardiovascular health problems and stroke incidence. In fact, they found that subjective vitality is one of most predictive well-being measures for such effects. There is also evidence to suggest that vitality has important self-regulatory functions. In a longitudinal examination of more than 1,000 smokers, individuals with increases in vitality were more likely to abstain from tobacco at 24 months (Niemic, Ryan, Patrick, Deci, & Williams, 2010). In entrepreneurship, Hahn et al. (2012) found that subjective vitality was positively, strongly, and significantly associated with both task-oriented and relationship-oriented personal initiative, while the effects of life satisfaction, taken as a measure of hedonic well-being, were non-significant. This is largely supported by the functional analysis of hedonic and eudaimonic feelings as serving distinct regulatory functions in human systems (Vittersø, Søholt,

Hetland, Thoresen, & Røysamb, 2010). Accordingly, while hedonic feelings serve an adaptive role in the regulation of stability and homeostasis in human systems, eudaimonic feelings serve to regulate change and growth, and are produced to motivate behavior in challenging environments where a quick return to equilibrium would be dysfunctional.

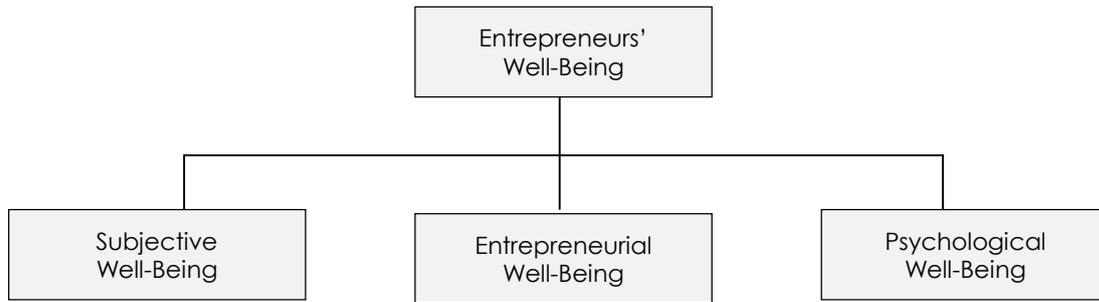
Whereas we find more and more studies looking to investigate the relationships between entrepreneurship and subjective well-being (see GEM 2013), there is a great scarcity of studies looking at the broader well-being construct with its inclusion of psychological well-being variables and measures. While the study by Hahn et al. (2012) is one of the few studies in the entrepreneurship literature to employ a broader psychological well-being framework, it focuses on the effects of vitality on personal initiative in the process of entrepreneurship, and not on how entrepreneurship as a self-organized goal pursuit impacts individuals' positive psychological functioning and experienced vitality. The link between entrepreneurship and well-being from this perspective has so far not been established; neither in the field of entrepreneurship studies nor in the extant literature on well-being, and the few studies that investigate the relationship between entrepreneurship and psychological well-being seem difficult to reconcile into a coherent picture of that relationship (see chapter 6 for a review).

## A General Conceptualization of Entrepreneurs' Well-Being

Drawing on Keyes's definition of well-being as the presence of mental health, and on the context-specific concept of entrepreneurial well-being which will be developed in the next chapter, the model below represents a general picture of entrepreneurs' well-being. Specifically, I suggest that entrepreneurs' well-being should be studied and measured through subjective well-being (reflected by life and domain satisfactions, positive and negative affect), psychological well-being (reflected by positive psychological functionings and eudaimonic feelings such as subjective vitality), and entrepreneurial well-being (conceptualized in the next chapter to reflect both entrepreneurial-related affect and entrepreneurial satisfaction). Taken to-

gether, these components constitute an entrepreneurs' overall well-being or mental health.<sup>28</sup>

Figure 4.1. Entrepreneurs' well-being



Entrepreneurs' well-being consists of three core components: subjective well-being, psychological well-being, and entrepreneurial well-being. It is likely that these components affect each other through complex patterns of interrelatedness. For instance, whereas individuals' more general subjective and psychological well-being can be thought to infect (psychologically or indirectly, by resulting in well-being enhancing behavior) the context-specific phenomenon of entrepreneurial well-being, I will argue that experiencing the latter provides important nourishments for individuals' general well-being and has direct effects on their psychology, behavior, and performance. However, despite this interrelatedness, each of these three dimensions is conceptually and empirically separate, and each explains an important and unique portion of entrepreneurs' overall well-being.

In drawing the conceptual boundaries of entrepreneurs' well-being I define it as a formative, as opposed to reflective, construct (Coltman, Devinney, Midgley, & Venaik, 2008; Jarvis, MacKenzie, & Podsakoff, 2003), in which the order of causality is assumed to flow from the lower-order components of subjective, psychological, and entrepreneurial well-being rather than in the other direction. In other words, for a formative construct such as this, the lower-order constructs "form" the higher-order construct, while for more reflective constructs, such as subjective, psychological, and entrepre-

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<sup>28</sup> I use the terms well-being and mental health to denote the higher-order construct, which combines aspects of both subjective and psychological well-being. Although entrepreneurial well-being is an important component of the overall concept of entrepreneurs' well-being, it constitutes a context-specific measure of subjective well-being in entrepreneurship, and thus differs conceptually from the overall construct.

neurial well-being, the lower-order components are supposed to “reflect” the upper-order construct, such as when life satisfaction cognitively reflects the existence of subjective well-being.<sup>29</sup>

In the next chapter (chapter 5), the psychological construct of entrepreneurial well-being (EWB), defined as *context-specific subjective well-being* in entrepreneurship, will be conceptually developed and distinguished from other related concepts of well-being in entrepreneurship, in order to provide better understanding and examinations of entrepreneurs’ mental health. Later in the thesis, a careful development of its effects in entrepreneurship (chapter 7) and validation of the Entrepreneurial Satisfaction Scale (ESS) used to measure this construct will be offered in a separate empirical study (chapter 16). While the conceptually developed construct of EWB and the empirically validated scale are largely based on the subjective well-being approach, the various domains of the psychological well-being construct could surely be contextually fulfilled in entrepreneurship as well (rather than generally, as is assumed by figure 4.1). For example, applying Ryff’s (1989) psychological well-being approach to also reflect the underlying psychological well-being dimensions of the *entrepreneurial well-being* construct (e.g., by considering one’s sense of mastery and meaningfulness in and with respect to entrepreneurship, positive relations with external stakeholders and business partners, etc.) would be an effort of unquestionable value. However, it would entail much conceptual work and empirical validation, and is beyond the scope of this thesis.

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<sup>29</sup> This also suggests that the lower-level components specified in the figure 4.1 as subjective, psychological, and entrepreneurial well-being are essential features of the construct, and may therefore be independent of each other (MacKenzie et al., 2005).

# Chapter 5

## Entrepreneurial Well-Being

Recent years have seen an increase in research on positive affect and subjective well-being in entrepreneurship. Although several assessments of affect have been proposed in entrepreneurship, the measurement and conceptualization of entrepreneurial well-being as a distinctive phenomenon has received no attention so far, despite decades of research on well-being in life as well as in work-related settings. The aim of this chapter is to develop the concept of entrepreneurial well-being (EWB), so as to distinguish it from other related concepts in entrepreneurship. I argue that EWB is a distinctive cognitive-affective phenomenon which plays a crucial role in entrepreneurship. However, theoretical understanding of what it is, what it does, and how it differs from general subjective well-being and positive affect is lacking. I build on a fragmented and disparate extant body of work in psychology and organizational studies in conceptualizing the nature of EWB. Specifically, building on the subjective well-being approach, I will suggest that EWB is a distinctive and important entrepreneurial outcome; a state of positive mental wellness emanating from the process of venture creation, with the potential to strongly impact individuals' psychology, behavior, and performance in entrepreneurship. In subsequent chapters, I will develop these arguments at length as I build a comprehensive framework around the concept in order to study its effects and antecedents. Here, I will focus mainly on its ontological basis.

## The Theoretical Foundation and Conceptualization of EWB

In a recent article, Morris and colleagues (2012) articulate, on the basis of affective event theory (Weiss & Beal, 2005; Weiss & Cropanzano, 1996) and Reuber & Fischer's (1999) intriguing paper on the dynamic experience of the venture creation process, an experiential perspective for framing and studying the entrepreneurial process. In particular, they call into attention what they refer to as the general stock and stream of peoples' affective experience of engagement in entrepreneurship:

“When referring to one’s cumulative experience of a given type, all events and streams of that type are melded to become what might be termed a stock (Reuber & Fischer, 1999). When people are asked how much entrepreneurial experience they have, they are being asked to add up the various temporal streams of experience of which they have been a part. When asked how they feel about being an entrepreneur, the individual again combines these streams, either conjunctively or disjunctively, to arrive at a stock assessment.” Morris et al. (2012: 20)

Morris and colleagues go on to give a rich and detailed account of the affective experiential nature of entrepreneurship in terms of one’s accumulated stock of affective experience, but they do not offer a more detailed description of that experience or its theoretical underpinning. Building on Morris et al. (2012), and more broadly on the subjective well-being approach described in the previous chapter, I give the following definition of entrepreneurial well-being:

- EWB: *a positive and distinctive mental state, which reflects entrepreneurs’ affective and cognitive experiences of engagement in entrepreneurship as the process of venture creation. These experiences are characterized by positive judgments of the entrepreneurial life and good feelings about it.*

Building on the subjective well-being approach, I differentiate between four separable components of EWB. These are entrepreneurial satisfaction in

general (global judgments of satisfaction with one's life as an entrepreneur), satisfaction in important entrepreneurial domains (e.g., profit, growth, work balance, business performance), and positive and negative affective experiences in relation to entrepreneurship (e.g., entrepreneurial passion). Each of these specific components should be viewed in their own right, but the fact that they are most likely to be significantly correlated indicates the existence of a higher-order construct. Thus, much as in the case of subjective well-being, EWB is considered here to be both a general domain of entrepreneurial inquiry and an important psychological (experiential) variable in entrepreneurship.

Broadly speaking, EWB represents an overall judgment of the entrepreneurial life, and draws on two sources of information: cognitive comparisons with standards of the good entrepreneurial life (contentment), by which people assess the extent to which their life as entrepreneurs so far measures up to their expectations and their envisioned 'ideal' entrepreneurial life, and affective information concerning the way one feels in entrepreneurship most of the time (guided by emotions and feelings). Such conceptualization does not limit itself to specific affective experiences in entrepreneurship, and does not confound the subjective experience with its possible causes. It holds individuals to be the single best judges of their own mental wellness arising from participation in entrepreneurship. Despite this, it is very likely that those who strive to create new ventures will apply similar standards when thinking about their lives as entrepreneurs in positive terms, as well as encounter similar affective events. Examples of such standards are the following: to successfully establish my own company, to become my own boss, to become the boss of others, to contribute to the well-being of my customers and my employees, etc.

Positive affective experiences in entrepreneurship may also influence judgment of the personal experience of entrepreneurial life in similar ways. For instance, accumulated positive affective experiences in entrepreneurship may include reactions to the following: the successful launch of a product, achieving successful patent protection, partnering with a high potential partner, being recognized for innovation and social contribution, achieving company growth, preventing competitors from entry, raising financial investments, helping an employee, etc. When these dominate over

the negative affective experiences along the process of venture development, people are more likely to feel happy and satisfied with their entrepreneurship.

Thus, EWB constitutes a broader yet more contextually specific core experience in entrepreneurship than any previously suggested experiential variables in entrepreneurship research. For example, while entrepreneurial passion (Cardon et al., 2009) captures an intensive affective experience that individuals have for various entrepreneurial activities, it does not capture the overall cognitive and long-term affective experiences that people derive from engaging in entrepreneurship as a distinct experiential phenomenon. Since entrepreneurship constitutes a major domain in the lives of entrepreneurs, EWB represents an important component of their subjective well-being and mental health (defined in chapter 4), that has so far been ignored not just by economists and entrepreneurship scholars, but also by organizational psychologists, who have traditionally looked to work satisfaction as a measure of well-being in work. In fact, the emerging evidence in support of the idea that active engagement in entrepreneurial activities leads to greater well-being has so far not led to the discovery of this context-specific experience and source of well-being as an important mediator of the link between entrepreneurship and well-being.

Finally, the introduction of EWB is an important advancement in entrepreneurship research. EWB provides entrepreneurs with affective resources and cognitive information about their preferences, expectations, and progress in entrepreneurship, and hence represents an important antecedent variable in the entrepreneurial process rather than being simply an important outcome of entrepreneurial success. Such information serves as an important reference criterion, affecting both actual motivation and the processes and outcomes of goal setting and goal striving (Oettingen & Gollwitzer, 2007). This is especially important for the setting of and striving for long-term goals requiring the planning and mobilization of both psychological and social resources. Since entrepreneurs' motivation is goal-directed and occurs within the context of self-regulation, this means that EWB is an important variable in the self-regulation of entrepreneurs. In chapter 7, I develop these arguments in greater length in presenting the *entrepreneurial well-being as resource perspective*, which complements the discussion

in this chapter by theorizing on the role played by EWB in promoting entrepreneurial performance.

## Do we Really Need to Differentiate EWB?

Yes we do! EWB is an entrepreneurial phenomenon, and as such it is much more proximal than other well-being measures to key elements of the entrepreneurial process, where it is also more likely to produce accurate predictions. According to the Abstract-Specific Hypothesis, what respondents will attend to when responding to questions concerning the quality of their lives depends on how abstract or specific the mode of measurement is (Cummins, Gullone, & Lau, 2002; Davern, Cummins, & Stokes, 2007; Schwarz & Strack, 1999). For instance, when answering global or abstract questions about their lives (such as ‘How content are you with your life as a whole?’) people do not methodically appraise all aspects of their life before producing a response. Instead, they tend to evaluate their responses quickly, via cognitive shortcuts called heuristics (Tversky & Kahneman, 1974), or otherwise tend to rely on their current mood (Schwarz & Strack 1991). On the other hand, as the specificity of the questions increases, individuals will attend more specifically to the domain in question, and rely less on heuristic judgments, such as their current mood. For example, “How happy or satisfied are you with your life as an entrepreneur?” is much more specific, and hence more likely to result in a more accurate assessment.

Furthermore, context-specific measures of well-being in work have long been considered adequate and separate measures of well-being in the psychology and organizational work literature (c.f., Cotton & Hart, 2003; Daniels, 2000; Page & Vella-Brodrick, 2009; Warr, 1990; Wright & Cropanzano, 1997). For instance, work satisfaction, or people’s satisfaction with their jobs, has long been studied by psychologists as an important cognitive-affective precursor of overall well-being and life satisfaction, and by organizational scholars as an important motivational antecedent in the organizational context. While the different theoretical approaches regard the causal ordering of these two constructs in opposing ways (Rode, 2004), both intuition and existent work lend support to the assertion that overall

well-being is not an adequate representation of well-being in work settings (Page & Vella-Brodrick, 2009).

Intuitively, we may all agree that one might experience lower well-being in life in general while nonetheless being happy in creating and establishing one's own business (ask all those new divorcees whose jobs provide a happy shelter from their everyday misery), or vice versa (how many lead happy lives but are dissatisfied with their jobs?). This is made evident by empirical findings showing the relatively modest correlation between life satisfaction and work satisfaction (Judge & Watanabe, 1993; Rice, Near, & Hunt, 1980; Rode, 2004), which lend support to my assertion that context-specific measures of well-being are necessary for capturing the intricacies and fluctuations of entrepreneurs' cognitive and affective experiences in entrepreneurship. Finally, specific measures of well-being in entrepreneurship are likely to be more variable than global measures of well-being, which tend to also capture individuals' affective predispositions. Hence, utilizing measures of both entrepreneurial and general well-being is likely to result in more complete and precise estimations of entrepreneurs' well-being than the use of general well-being measures alone.

## Why is EWB Worthy of Consideration?

Previous research on positive affect in entrepreneurship is limited to a few publications, and focuses primarily on more general and highly activated modes of positive affect (e.g., feelings of excitement, elation, and alertness). While these are no doubt relevant for those involved in developing new ventures (Baron, 2008), focusing on them exclusively threatens to limit the scope of our understanding of the relevant affective phenomena in entrepreneurship.

First, an emphasis on short-term and more intense affective experiences runs the risk of ignoring the essential role played by more moderated and enduring affective experiences. In light of the fact that judgments of well-being are more likely to be based on the frequency than on the intensity of positive experiences (Diener et al., 1991b), it seems that entrepreneurs' more enduring experiences of well-being deserves more rigorous examination. Moreover, short-term and intense positive emotions are often attend-

ed by heightened unpleasant affect (Diener, Colvin, Pavot, & Allman, 1991a; Larsen & Diener, 1987), while the existence of more moderated and stable forms of affect can in fact act as important buffer against these potential negative influences.

Second, most of the theoretical and empirical work on affect in entrepreneurship has not located any relevant affective experiences within the domain of entrepreneurship, with the exception of entrepreneurial passion, which is defined as a positive and intense entrepreneurial affective experience. This is important, because the magnitude of the effects on entrepreneurship of a particular affective experience is likely to depend on its proximity to entrepreneurship.

All in all, while the current body of evidence and theory is informative, it has not to any appreciable extent theorized and tested the effects of entrepreneurs' well-being. And although several scales for the assessment of affect in entrepreneurship exist (e.g., Cardon, Gregoire, Stevens, & Patel, 2013; Watson, Clark, & Tellegen, 1988), the measurement of entrepreneurial well-being – which constitutes a broader, but contextually closer affective experience in entrepreneurship – has to the best of my knowledge received no attention. This is an important issue because research findings indicate that the well-being of individuals influence many aspects of their cognition and behavior, and may have distinct self-regulatory functions that are important for goal commitment and persistence (Vittersø, et al., 2010). Extending these findings to entrepreneurship, I suggest that entrepreneurial well-being is an important state of mental wellness, which greatly affects individuals' cognition, motivation, and self-regulation along the process of venture creation.

Conceptualizing EWB thus also contributes more generally to efforts by well-being psychologists aimed at unpacking the distinct effects of localized or context-specific well-being phenomena. As noted in chapter 7, entrepreneurial well-being – unlike more general modes of affect – has both informational and motivational peculiarities that are of significant value to entrepreneurs in their strivings to establish and grow their businesses. Future empirical examinations of the proposed mechanisms may indeed verify some of these propositions, and practitioners may thus find considering entrepreneurial well-being to be a useful approach to work and sustainable

entrepreneurship. Arguably, promoting and preserving a subjectively rewarding entrepreneurial life may lead to marked improvement of entrepreneurs' abilities and overall mental health, and cause a positive affective-behavioral loop which results in better entrepreneurial performance (see chapter 7 for a full elaboration of this idea).

## Contrasting EWB with Other Related Constructs

Over the past two decades, scholars of entrepreneurship have made surprisingly meager progress towards incorporating the concept of well-being into their theories and empirical investigations. Perhaps the reason for this has been an implicit assumption that entrepreneurial well-being is similar in kind to various measures of affect and satisfaction in work. Alternatively, the reason might be that the criteria for or the object of well-being in the entrepreneurial context were not sufficiently clearly defined. The definition of entrepreneurship as a self-organized goal process of venture creation and growth, which was outlined in chapter 3, allows for the conceptualization of EWB as a context-specific construct of well-being in entrepreneurship, incorporating a variety of affective and cognitive experiences such as the affective construct of entrepreneurial passion (Cardon et al., 2009), the cognitive construct of business satisfaction (Cooper & Artz, 1995), and general satisfaction with entrepreneurship.

Yet, as argued above, EWB is not limited to these experiences, and while it does share important similarities with them it also differs from and interacts with them in a variety of ways. Below, I briefly summarize a few of the most important differences and similarities (along with some potential interactions) between EWB and these related constructs of well-being in entrepreneurship, and contrast EWB with the more general construct of entrepreneurs' well-being which was outlined in the previous chapter.

I do not include more general and global constructs of well-being such as life-satisfaction, happiness and positive affect, subjective vitality, or the psychological well-being and basic need satisfaction constructs. These constructs share several similarities and a range of differences with EWB, but they are not context-specific experiences of entrepreneurship, and were discussed at length in the previous chapter. Certainly, these core dimen-

sions of well-being are important experiences that entrepreneurship is likely to affect and be affected by in turn, but they do not constitute entrepreneurial phenomena per se.

### Entrepreneurial Passion

Similarities and differences between entrepreneurial passion and EWB encompass both phenomenological and causal concerns. Starting with the phenomena, both of these constructs are considered context-specific entrepreneurial experiences with underlying positive affective tones, but whereas entrepreneurial passion is conceived as a specific, more intense, and highly activated feeling *for* entrepreneurial activities, EWB is a broader, more balanced, and less invigorated state of mind expressed in positive evaluation of and feeling of wellness *from* entrepreneurship. Relatedly, whereas entrepreneurial passion is identity-dependent and task-oriented, EWB is goal and activity-dependent and preservation-oriented (i.e., towards the maintenance of active entrepreneurship as such). This also means that entrepreneurial passion can be experienced by any individuals, while the experience of EWB is contingent upon engagement in entrepreneurship.<sup>30</sup>

Surely, specific positive entrepreneurial outcomes may support one's identity as an entrepreneur, and by so doing invigorate entrepreneurial passion as well as cause greater contentedness and happiness in entrepreneurship. But again, the experience of passion and well-being in entrepreneurship can result in very different motivational and self-regulatory consequences. Thus, although we may expect some similarities between these constructs in regards to their effects on commitment and persistence towards entrepreneurial activities and their supply of motivational resources, the level of activities, the functional properties and mechanisms involved, and some of their consequences may nonetheless be dissimilar (e.g., entrepreneurial passion is experienced more narrowly towards distinctive roles in entrepreneurship).

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<sup>30</sup> Although active engagement in entrepreneurial activities is the main source of EWB, EWB may be further experienced before active engagement started (i.e., in the planning phase), although to a limited degree, and after entrepreneurship comes to its natural end, as the memory of established business owners may sustain the feeling over time.

Aside from these similarities and differences, the two constructs are further likely to interact in a variety of ways, some of which are mutually supportive and some of which are not. For example, while entrepreneurial passion can result in EWB by causing the accomplishment of more goals in entrepreneurship, strong feelings of passion towards a particular entrepreneurial role may also distract from and otherwise be an obstacle to sustainable EWB. Furthermore, while EWB is an important precursor of continuous passion for entrepreneurship, high EWB can also constitute a buffer against the negative consequences of extreme passion, by diverting the entrepreneur's attention towards preservation of entrepreneurship as such rather than any particular entrepreneurial role.

All in all, while the experience of entrepreneurial passion feeds into the affective component of EWB, the two are largely separate constructs. Entrepreneurial passion captures an important affective experience that entrepreneurs have *for* entrepreneurship, but does not capture the overall affective experience that they receive *from* entrepreneurship as a distinct experiential phenomenon. More specifically, it lacks information concerning the likelihood that further engagement will result in stronger positive affective experiences.

### Entrepreneurs' Business Satisfaction

Aside from Cardon and colleagues' work on entrepreneurial passion, the study by Cooper and Artz remains to this day the single most important contribution to the research topic of entrepreneurial well-being. Cooper and Artz were concerned with measuring entrepreneurs' satisfaction with their businesses as an indication of venture success. Since the business as such is an important domain in entrepreneurship, it constitutes an important component of EWB. In other words, entrepreneurs are likely to draw on the experience of business satisfaction, such as seeing one's venture take form and develop, when evaluating their overall EWB.<sup>31</sup>

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<sup>31</sup> EWB, on the other hand, can also be thought to influence judgments of business satisfaction (which can be considered a type of progress judgment). When EWB is high, entrepreneurs' satisfaction with their businesses may be judged more positively than when EWB is low, so that one is likely to be

However, despite this link between the two constructs, business satisfaction is a fundamentally different theoretical and psychological concept. Most importantly, whereas business satisfaction is judged with respect to certain fixed standards such as sales and profit, EWB is a broader affective-cognitive phenomenon which relates to the entire experience of enterprising. In that sense, business satisfaction is a subjective performance indicator of success which focuses on the business as its criteria for evaluation, whereas EWB reflects one's life as an entrepreneur overall, and focuses on the self. Even if both constructs are considered context-specific experiences in entrepreneurship involving a positive cognitive evaluation process, business satisfaction as such is not entrepreneurial, but rather something that could also be experienced by the self-employed, as well as by managers of existing firms (this is also the case for work and job satisfaction).

### Entrepreneurial Satisfaction

Aside from domain-specific satisfactions such as business satisfaction, EWB also encompasses the entrepreneurial satisfaction construct (developed and validated in chapter 16). Unlike the business satisfaction construct, entrepreneurial satisfaction is not a measure of business performance, but a context-specific individual measure of well-being in entrepreneurship. Without fixing a certain domain or standard, it captures how individuals come to think about their lives as entrepreneurs as good and fulfilling, rather than their satisfaction with the (specific) venture per se, which is but one of many domains of satisfaction in entrepreneurship.<sup>32</sup> Furthermore, unlike business satisfaction, but similar to EWB, entrepreneurial satisfaction is an exclusively *entrepreneurial* experience involving an underlying cognitive process of positive evaluation with respect to one's life as an entrepreneur.

However, EWB is not entrepreneurial satisfaction. EWB is construed as a higher-order phenomenon which involves not only thinking about the

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more satisfied with the progress of the business (see chapter 7 for detailed analysis of the effects of EWB on progress judgments).

<sup>32</sup> In chapter 16, I empirically examine the relation between these two concepts, demonstrating convincingly that although the two are significantly correlated, they represent two different phenomena.

entrepreneurial life as good, but also experiencing it as affectively good. Thus it is phenomenologically different to entrepreneurial satisfaction, which cognitively reflects the presence of EWB as the higher-order construct. In other words, entrepreneurial satisfaction is a constituent cognitive dimension and measure of EWB in terms of overall satisfaction. To be sure, the two are closely linked, since the experience of EWB draws on judgments of overall entrepreneurial satisfaction, while the higher-order construct of EWB can simultaneously inform judgments of satisfaction. But they do not constitute one and the same phenomenon.

### Entrepreneurs' Well-Being

Finally, EWB should also be briefly contrasted to the more general construct of entrepreneurs' well-being, which was developed in the previous chapter. Much like EWB, this more general construct has affective as well as cognitive dimensions, and both constructs are entrepreneurial in the sense that acts of entrepreneurship, as well as some of their related conditions, influence its experiential nature. Notwithstanding these similarities, the construct of entrepreneurs' well-being is experienced and judged on a higher level than EWB, as a formative rather than reflective construct, in which causality flows from its lower-order components. In other words, entrepreneurs' well-being designates the overall mental health of entrepreneurs as such, rather than the context-specific positive feelings and self-evaluations that people derive from their entrepreneurship. Additionally, as EWB is conceptualized as one of the core components forming the overall phenomenon of entrepreneurs' well-being, it is assumed to have a significant and substantial influence in nourishing and sustaining entrepreneurs' general state of wellness; an assumption based on the centrality of entrepreneurship in the lives of those who perform it.<sup>33</sup>

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<sup>33</sup> Surely, since entrepreneurs' overall well-being also includes the components of subjective and psychological well-being, some of the constituents of general well-being are likely to affect and be affected by EWB.

## Chapter 6

# Entrepreneurship and Determinants of Well-Being

Early philosophers were among the first to hypothesize on the behavioral and psychological influences of well-being. Notably, Plato was famous for his spiritual exercises and for seeing in the philosophical life – a life of choice and dedication to good judgment – *the* way to attain meaning, joy, and the calmness of soul (Hadot, Davidson, & Chase, 1995). In this regard, his teachings had a far-ranging influence on ancient philosophers, although different traditions adhered to different notions of the good life and the ways to attain it. For instance, while early hedonists such as the Cyrenaics advocated indulgence in pleasure, the ascetics advocated detachment from the world as means to well-being. Later writings on this issue were the products of philosophers and writers who more directly addressed and hypothesized on the various causes of happiness and the good life. For instance, Frankl (1985) maintained that excessive orientation towards the happy life causes unhappiness, or otherwise indicates the existence of inner frustration, while overall well-being is the product of attaining meaning in life by striving after activities which one values and has good reason to value, or otherwise by showing responsibility for and taking a stance towards the internal and external conditions one faces.

More recently, dealing with this issue as their theories and empirical methods lend themselves to it, researchers from a broad array of scholarly domains have looked into a large variety of antecedents in order to unpack

the causal structure of well-being. Sociologists, when looking at social conditions as antecedents of well-being, often tend to study the characteristics of a society, such as its level of industrial development and model of state organization. Sociologists have also studied conditions for well-being within societies, such as people's demographics and positions on the social ladder, participation in public institutions, and embedding in private networks (Veenhoven). Economists, on the other hand, have looked particularly at economic and socio-economic conditions such as the effects of income, income inequalities, and employment status (e.g., Blanchflower, Benz, and Frey), but have also studied psychological or pro-level conditions such as domain satisfactions, levels of aspirations, and processes of well-being adaptation (Easterlin) and decision making (Kahneman). By and large, psychologists from various subdisciplines have made the greatest contributions to the study of well-being, and of its antecedents in particular. Psychological theories and research on well-being have looked into a wide range of both personal and social factors, as well as a host of interactive conditions and processes.

In this chapter my objective is to review and summarize some of the most important theories and recent theoretical advancements in the field of well-being determinants, as well as to review the empirical evidence concerning the relationship between entrepreneurship and well-being. This is intended to lay the groundwork for the theoretical development and empirical examinations that will follow in the upcoming chapters. For other relevant and more comprehensive, although non-exhaustive, theoretical reviews, the reader is referred to the works of Diener (1984), Diener et al. (1999), Ryan and Deci (2001), and Lyubomirsky (2001). Here, the various theoretical approaches will be described and reviewed in brief, and these descriptions accompanied by paragraphs in which I pose relevant questions regarding the link between entrepreneurship and well-being. Thus, although I will reflect on some key propositions here, they will be nested within the text rather than explicitly stated.

The review and general inquiry in this chapter will provide a more general readership with an abundance of perspectives and open avenues for research. These theoretical approaches illuminate not only the factors and processes that determine well-being in entrepreneurship (mainly evident in

the phenomenon of EWB) but also, and importantly from the perspective of this thesis, how and why engagement in entrepreneurship impacts the well-being of working individuals overall. As my thesis mainly pertains to the latter, the reflections that follow will reflect this bias of curiosity.

## Relevant Theoretical Approaches to Explaining Well-Being

### Teleological Approaches

Most telic theories suggest that individuals' well-being is best understood by examining their needs and goals (Diener, 1984). According to both need and goal theories, needs and standards of behavior such as values, aspirations, and goals, as well as the actual processes of goal pursuit, are all strongly related to individuals' well-being.<sup>34</sup> Both need and goal theories generally maintain that well-being is a function of people engaging and fulfilling their needs, desires, and goals. Goals and needs are conceptually related in that needs may be translated down the line into specific personal goals, or, in other words, goals may reflect the strength and character of their underlying needs. According to Deci and Ryan (2000), the dramatic shift towards cognitive theories of motivation has resulted in goals replacing needs as the dominant motivational forces or concepts. Thus, most of the recent theoretical developments within telic theories have examined the concept of goals in general, and the processes of goal setting and goal pursuit in particular.

Goal researchers, and more broadly, socio-psychologists who study human motivation and self-regulation, have made several observations with respect to the setting of and striving for individual goals, and the well-being effects that ensue from setting, progressing towards, and attaining these goals. According to this body of research, merely having (or being committed to) and pursuing personal goals is, in and of itself, related to well-being (Cantor & Sanderson, 2003; Emmons, 1996; Hsee & Abelson, 1991), and

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<sup>34</sup> Although values and aspirations are also important as "origins of the striving" (Diener, 1984), they are usually conceptualized by goal system theories as of a higher order than (life) goals or standards.

that relation is stronger the more intrinsically valued (Dweck & Leggett, 1988; Kasser & Ryan, 1993, 1996), meaningful (Brunstein, 1993; Sheldon & Elliot, 1999), and optimally challenging the goals are (Csikszentmihalyi, 2014; Csikszentmihalyi & Csikszentmihalyi, 1992). Also, pro-active and continuous setting of goals has been identified as a strong marker of well-being. Goals have further been found to be related to increased motivation and effort, which are in return associated with greater personal achievements across life domains. On the other hand, experiencing a mismatch between their goals and the immediate environment within which they are pursued (Edwards, 1991; Higgins, 1987, 2000; Sagiv & Schwartz, 2000), as well as experiencing conflicts between goals (Emmons, King, & Sheldon, 1993; Locke, Smith, Erez, Chah, & Schaffer, 1994), has been previously shown to diminish individuals' well-being in organizations as well as in the laboratory. Finally, research on goal regulation and goal pursuit from an action phase perspective (Gollwitzer, 1990) found that while several sub-processes of goal setting, such as deliberation, are associated with negative affect, processes of goal striving, such as planning and implementation, are linked to heightened positive affect (e.g., Taylor & Gollwitzer, 1995).

As entrepreneurship involves a very complex and demanding goal system, setting the goal to create a venture may not simply imply a clear and smooth transition into implementing it, but may rather entail a continuous stream of deliberations, and hence a deterioration of the well-being of potential and intended entrepreneurs. However, once entrepreneurship begins, it entails a continuous and active pursuit of a major and meaningful personal goal. As entrepreneurs self-organize their approach to work and working relationships, they are more likely than non-entrepreneurial workers to feel strongly committed to their work and pro-actively engage in the continuous setting of challenging goals. Furthermore, since entrepreneurship inherently entails risk-taking, entrepreneurs might display more approach tendencies, and less avoidance tendencies, than the average employee, and otherwise frame their goals more positively, which could result in higher levels of well-being, as has been previously shown by research in other domains.

Surely, starting up a new business requires a lot of any entrepreneur, and is in most circumstances more challenging than the activities undertak-

en by the average employee. Hence, the extent to which individual entrepreneurs set and strive after meaningful goals in their entrepreneurship is a likely predictor of their EWB.

However, as a meaningful goal pursuit, entrepreneurship is also likely to support opportunities for well-being and human flourishing. Thus, entrepreneurship offers interesting tensions between empirical realities and theoretical predictions, which calls for deeper theorization and systematic examination of the link between entrepreneurship as a goal-directed phenomenon and well-being. The most pertinent questions addressed and developed in this thesis concern whether entrepreneurship, as a self-organized form of goal-directed behavior, results in higher well-being than non-entrepreneurial work alternatives, and the theorization and exploration of the mechanisms involved.

### Activity-Based Approaches

Whereas, according to telic theories, well-being is the result of needs and goals being met and satisfied, activity-based theories maintain that well-being is generated by the activity or the process itself. From that perspective, starting up a business may bring greater experiences of well-being than achieving the goal of establishing one's business. The most notable formulations about the effects of activities on well-being can be found in the theory of flow (Csikszentmihalyi, 2000, 2014; Csikszentmihalyi & Csikszentmihalyi, 1992) and in the theory of self-determination (Deci & Ryan, 2000), which will be reviewed more extensively in a separate section below. Among other things, these two different approaches share a common assumption about humans' innate drive for curiosity, challenge, and learning (this familiar motivational interpretation has also been referred to as the principle of mastery: White, 1959).

According to the theory of flow, people attain greater well-being when engaged in activities that interest them and match their skill levels. If an activity is experienced as monotonous or too easy to master, it soon becomes dull, and if it is experienced as too complex and difficult, it will cause unease and apprehension. In other words, an optimal balance between one's skills and the challenges of a task gives rise to feelings of flow

– an innately pleasurable state characterized by intense feelings of involvement. Csikszentmihalyi's theory is also reminiscent of (or draws on similar insights as) Atkinson's (1957) theory of motivation or risk-taking behavior, which maintains that the motivational force of engagement is a function of one's expectations regarding the probability of successfully performing a certain task and one's incentive value for the task. If the task is expected to be either very easy or very difficult, this impacts the incentive value of engagement in such a way that the resultant motivational force is the greatest in the mid-range of difficulty.<sup>35</sup>

Csikszentmihalyi's flow theory also aligns with the concept of intrinsic motivation, which is the most important theoretical concept within the theory of self-determination. According to the core predictions of the theory of self-determination, activities that generate intrinsic motivation (e.g., self-chosen behaviors, hobbies, social interaction, and play) promise the greatest levels of well-being. In fact, self-determination theory combines elements of both need-based and activity-based theories. Accordingly, when basic psychological needs are satisfied, individuals are more likely to derive intrinsic motivation (procedural enjoyment) from the activities they undertake, and this may partly mediate the effects of basic needs satisfaction on well-being. In as much as entrepreneurship entails an active pursuit to create new business activities, there are several interesting and relevant questions to be formulated on the basis of activity theory.

More specifically, entrepreneurship as a goal-directed behavior is complex, difficult, and uncertain, and involves continuous learning because of the way it unfolds over time. This means that whereas entrepreneurship may result in flow, playfulness, and intrinsic motivation on the grounds that it involves a meaningful goal pursuit and is otherwise supportive of indi-

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<sup>35</sup> According to Atkinson, individuals that score highly on need for achievement are more likely to be attracted to activities and tasks near the middle, while those high on fear of failure will choose either a very non-challenging activity (because the probability of failure is very low) or an extremely difficult activity (because then there is a justifiable excuse for failure). Similar predictions can be made using Dweck and Leggett's (1988) model of implicit personal theories (i.e., holding an incremental self-theory vs. holding a non-incremental or entity self-theory). Indeed, McClelland (1965, 1987) found that individuals high on need for achievement are more likely to engage in entrepreneurial professions and activities. Since these individuals are overrepresented in entrepreneurship, mean levels of well-being for entrepreneurs may be higher as a result of their pursuit of appropriately challenging activities (or flow-encouraging undertakings) that enhance their learning and well-being.

viduals' freedom of self-organization, the initial and post-decisional phases of the process may fail to engender these positive mental states due to difficulties in pursuing activities which reflect an optimal balance between one's skills and the challenges of the ensuing process. Also, as entrepreneurship requires legitimacy from external stakeholders in its initial planning phase (e.g., fundraising) many of the activities undertaken at its inception are likely to be extrinsically motivated rather than emanating intrinsically from the self. Once again, entrepreneurship offers challenging tensions between different theories and empirical expectations regarding its well-being effects, which call for a deeper examination of its relationship to individuals' mental health. As previously discussed, I theorize on these issues in the later sections of the thesis.

Finally, predictions made by the activity-based approach are also relevant for inquiring into variations in EWB. Although entrepreneurship may engender greater flow and intrinsic motivation than employment, we may still expect internal variations in that individual entrepreneurs experience the process of business creation as more or less interesting and intrinsically rewarding. Accordingly, not every entrepreneur will experience high EWB in entrepreneurship, as different classes of entrepreneurs may pursue different entrepreneurial opportunities, and may have different reasons and expectations for their entrepreneurship, leading them to set more or less challenging goals. This implies that they will differ in how well they achieve the required balance between their skills and tasks, and thus to what degree they experience entrepreneurial well-being.

### Top-Down and Bottom-Up Theories

The distinction between bottom-up and top-down approaches to well-being has lain at the core of well-being research throughout its history (mainly within the study area of subjective well-being, but also as a general concern of researchers studying positive affect). According to the bottom-up approach, well-being results from a continuous stream of positive and negative experiences, i.e., a happy person is one with many happy moments. In support of this idea, early research by socio-psychologists, sociologists, and economists into the correlates and circumstances of well-being

have demonstrated the long-lasting effects of objective conditions on individuals' levels of well-being (e.g., the existence of political institutions protecting human rights, the effects of widowhood or changes in marital status, to mention but a couple). In contrast, top-down theories, which are mostly associated with the work of personality psychologists and biologists, postulate that well-being is the result of a global propensity to experience things in a positive way. This is partly made evident by the stable and long-term effects of temperaments, traits, and personality dispositions indicated by a variety of measures related to well-being, and partly by the phenomenon of adaptation, which seeks to explain the ephemeral effects of some events and circumstances on well-being (Headey, 2008).

The distinction between top-down and bottom-up theories is tightly coupled with the distinction between conceptions of well-being as a trait-like or state-like construct and ideas concerning the active roles that positive events and experiences play in generating each other (Diener, 1984; Headey, Veenhoven, & Wearing, 1991). However, the relationship between these two approaches has not been fully understood, and seems to involve intricacies that make the distinction between the two problematic (Schimmack, 2008). For instance, some top-down influences such as personality traits may impact individuals' disposition to engage in certain activities, or otherwise lead to certain life circumstances which in themselves, being bottom-up factors, impact well-being. Moreover, the effects of personality may interact in various ways with the effects of the environment or non-personality factors, and the interaction between these may have additional explanatory value. Lastly, while personality traits are assumed for the most part to be stable (often innate) features of human beings, more and more evidence suggest that personality traits can change over time.

On reflection, both approaches seem highly important for exploration of the entrepreneurship/well-being nexus and for providing interesting and relevant questions for future research.

The top-down approach is especially important for understanding the role of well-being in entrepreneurship, but also for examining the importance of top-down processes and factors involved in the (otherwise bottom-up) effects of entrepreneurship on well-being. With respect to adaptation processes, a few questions that may be raised are as follows: Are

the effects of entrepreneurship on well-being temporary or long-lasting? How (and when) do entrepreneurs adapt to positive and negative affective events and circumstances related to their entrepreneurship? Do they adjust their strategies, goals, and aspirations, or otherwise experience a more automatic habituation? When and why do they not fully adapt? Does adaptation occur in relation to both the extrinsic and intrinsic returns one experiences from entrepreneurship? Does adaptation occur equally for gains (e.g., establishing a successful startup) and for losses (e.g., failing to realize the opportunity)? Can we speed up adaptation to unavoidable bad conditions and outcomes (e.g., a failure to secure funds) and slow down adaptation to good conditions and outcomes (e.g., successfully launching a new product)? Do rates of adaptation differ depending on factors such as personality and social support? Do entrepreneurs adapt in response to conflicting goals or standards, and if so, when and how do they do so?

Other questions raised by the top-down approach include whether there is a selection bias such that mentally healthier individuals are more pre-disposed to enter into entrepreneurship and derive greater well-being from it, or, alternatively, if (and if so, how and why) the effects of entrepreneurship on well-being are moderated by various personality variables. For example, the extent to which well-being is produced in entrepreneurship may be a function of a person's underlying beliefs with respect to her ability to master the demands of entrepreneurship. Accordingly, one might suspect that entrepreneurs holding an incremental theory of the self (Dweck & Leggett, 1988), who believe that their reality and current conditions are amendable with effort, will exhibit greater competence and better learning-oriented patterns in entrepreneurship, and hence derive greater EWB relative to other entrepreneurs.

On the other hand, the bottom-up approach is especially important for determining whether, how, and why entrepreneurship impacts well-being. Some of the more provocative questions that can be posed in this complicated terrain include whether entrepreneurship impacts personality variables, and if so, how and why. Does engagement in entrepreneurship impact individual traits and dispositions, beliefs, expectations, values, and goals? Recent studies by organizational psychologists indicate that, contrary to our beliefs, our careers shape us continuously and dynamically (Wille, Beyers, &

De Fruyt, 2012). In the light of these findings, it might seem logical that people who are initially introverted and take on entrepreneurial career paths will eventually become more extroverted, self-confident, or communicative as a result of the demands of the entrepreneurial process. One might also expect that people who are initially not self-determined, and/or do not have a high locus of control, who take on entrepreneurial career paths would become more self-determined and confident through this process, thanks to its self-organizing features and goal-directedness.

Finally, entrepreneurship may be uniquely positioned to support individuals' basic psychological needs, some of which are directly connected to important personality variables which thereby affect their overall well-being. At the same time, the extent to which entrepreneurs' psychological needs are satisfied in entrepreneurship is a likely precursor of EWB, which in itself feeds into the more general phenomenon of well-being.

These are very speculative questions, but they are important for exploring the payoff structure of entrepreneurship in terms of well-being, since individuals' personality profiles seem to be one of the most important and stable predictors of well-being.

### Judgment-Based Theories of Well-Being

Some of the aspects associated with judgment-based theories were highlighted in the discussion of the notion of subjective well-being in chapter 4. The core idea of judgmental theories is that well-being results from a judgment-based cognitive process of comparison between current conditions (e.g., objective circumstances such as income or psychological conditions) and some standard (e.g., aspiration) used for evaluation (Diener, 1984). When one's judgment of present conditions exceeds one's standards, well-being is assumed to follow, and vice versa when the reverse is true. Thus, judgmental theories of well-being are a form of discrepancy-based theories (Michalos, 1986), in that well-being depends on the discrepancy in a person's life between actual conditions (i.e., attainments) and some standards or other. Such an approach combines the psychologists' tradition and their

work on subjective phenomena (e.g., aspirations) with economists' and sociologists' work on objective (circumstantial) conditions (Easterlin, 2010).<sup>36</sup>

But what are the standards involved in these judgments, where do they come from, and how can they elucidate the well-being effects of entrepreneurship? Michalos' (1986) multiple discrepancy theory of satisfaction espouses that individuals compare themselves to multiple standards, such as past experiences (adaptation level theory: Brickman & Campbell, 1971; Brickman, Coates, & Janoff-Bulman, 1978; Helson, 1948, 1964), other people (social comparison theory: Diener, 1984; Diener & Fujita, 1997), and aspirations (aspiration level theory: Campbell et al., 1976). Judgmental theories of well-being can thus shed light on the ways in which entrepreneurship influences individuals' well-being by categorizing the standards used in them and illuminating the mechanisms involved.

In adaptation level theory, if a person judges his current experiences to exceed the mean level of his past experiences, which is used to set the standard, that person will be happy and psychologically well. While adaptation theory connects standards to previous experiences, according to social comparison theory standards originate in focusing on others. That is, if a person judges herself to be better off than others, she will be satisfied or happy. Social comparison theories have usually maintained that proximal others are weighted more heavily in people's judgments because of their immediate presence and relevance.<sup>37</sup> Finally, according to aspiration-level

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<sup>36</sup> According to Diener (1984), judgments can occur both consciously and outside of awareness; the former is more likely in relation to measures of satisfaction and the latter in relation to more affect-based measures of well-being.

<sup>37</sup> As an example, Easterlin (2010) argued persuasively that as individuals grow older, the amount of income that will satisfy them depends on the income of others in their status-cohort rather than in society at large, which is the source of standards earlier in life due to the greater interaction across social backgrounds in youth. However, with the increased access of individuals all around the world, from very early age, to TV and social media, which are dominated by western TV production companies and internet operators, individuals may be gradually adopting transnational standards and norms with regards to their material conditions and aspirations. And since the content on TV and social media provides extensive information about material comforts in the most economically developed nations, people may know as much about the material lives of individuals in wealthy nations, as portrayed in the media, as they do about their neighbors. It is perhaps not surprising, then, that people now judge their own incomes in reference to a world standard (Diener, 2012) which renders the proximity-sensitivity hypothesis obsolete today. In support of this, Ryff et al. (1999) found that individuals' position on the socio-economic ladder was strongly associated with psychological well-being (in particular the dimensions of mastery, growth,

theory, if a person judges his or her actual conditions to exceed his/her aspirations in certain domains (e.g., work, family, financial, and self-related domains) that person is likely to be satisfied and happy. Aspiration level theory is founded on the idea that well-being is dependent on the extent to which one's desires and aspirations are met and attained. Thus, an inevitable implication of aspiration theory is that high aspirations are as much of a threat to well-being as bad conditions.<sup>38</sup>

For a number of reasons, each one of these theories seems to be relevant for investigating the effects of entrepreneurship on well-being as well as the antecedents of EWB. As I have previously touched on adaptation processes and aspiration levels in my discussion of top-down and bottom up theories, I will focus my analysis here on consequences emanating from processes of social comparison.

Social comparison processes are very likely to play a significant role in making engagement in entrepreneurship subjectively rewarding and motivating relative to regular employment options. The increasingly positive portrayals of entrepreneurs in the media, along with the increase in the spread of western autonomy-related norms and values via TV and social media, may serve as a boost to entrepreneurs in this respect, as they compare themselves to other professions. Furthermore, in line with the view (and the emerging empirical results) that entrepreneurship offers different institutional (procedural) returns by virtue of its autonomous character, we

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purpose, and self-acceptance), and that this was the result of social comparison processes in which poorer individuals compared themselves unfavorably with other richer individuals.

<sup>38</sup> Diener et al. (1999) note however that both very high and very low aspiration levels pose a threat to sustainable well-being; leading to anxiety or boredom, respectively. Diener et al. thus conclude that one's aspiration levels per se are not very good indicators of well-being, and that what is relevant is whether one's aspirations are set realistically and are congruent with one's resources and goals. Significantly, aspiration theory in itself does not indicate how aspirations come to be. That is, it cannot state whether they are the products of personal experiences and values, social comparison (Easterlin, 2010), fantasies and dreams (Oettingen et al., 2001), or adaptation and/or self-regulative strategic behavior. Furthermore, the theory does not elaborate on the differences between, and the consequences of, the types of aspirations that are pursued (Kasser & Ryan, 1993). These are interesting and very relevant questions; especially since they promise insight into how subjective well-being is (or could be) experienced – as well as into subsequent decision making and strategic behavior. One should also take note of the tensions that such an approach invigorates in its relation to the study of entrepreneurship and well-being. For, while entrepreneurship may satisfy and result in positive psychological functioning in some life domains (e.g., work) it can lead to complications in other domains (e.g., family and leisure). This makes clear the necessity to also adopt a domain-specific approach to the study of EWB, as discussed in the previous chapter.

would also expect that the more valued independence is in a certain context, the more likely it should be that engagement in entrepreneurship will have a positive impact on evaluations of well-being through social comparison processes. Thus, some of the most intriguing questions that may be raised by the social comparison theory are the following: Is entrepreneurship socially valued, and does this cause entrepreneurs to judge their own well-being more favorably? If so, when or where does entrepreneurship lead to states of improved well-being, and when or where does it not? Do increasing instances of entrepreneurship impact the prevailing standards of independence and autonomy? Do people now employ global standards of independence and autonomy, rather than standards of income and other areas of life such as education, human and democratic rights, or housing?

These and other questions are of obvious interest to practitioners, researchers, and policymakers seeking to promote entrepreneurship. But what about the effects on well-being of comparison within entrepreneurship, i.e., do entrepreneurs compare their standards and achievements between themselves, and by so doing affect each other's EWB and motivation? It is likely that for entrepreneurs who share similar features of engagement and/or operate in relatively close proximity, this is a fairly realistic assumption. Many incoming entrepreneurs today look towards more serial entrepreneurs and established business owners as role models. Also the relatively close communities and competitive environments in the high-tech sectors suggest that processes of social comparison may partially explain the well-being that entrepreneurs derive from their entrepreneurship. Again, we need to incorporate a variety of perspectives and theories in order to explore the link between entrepreneurship and well-being more in depth.

### Attributional Theory

A second body of cognitive theories on the causal chain of well-being, termed "associationistic" by Diener (1984), rests on the attributions that people make to the events that happen to them (e.g., Dweck & Leggett, 1988; Weiner, 1985).<sup>39</sup> According to Weiner (1985), at its theoretical core,

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<sup>39</sup> At the time Diener published his seminal review, cognitive approaches to well-being were markedly underdeveloped in general, and this was particularly true of the associationistic approach. By the time

the attribution approach relates the structure of thinking about the causes of our success and failure to the dynamics of feelings and subsequent behavior, so that the effects on well-being arising from peoples' experiences of entrepreneurship, and of goal progression and goal attainment in entrepreneurship, rest in part on the causal ascriptions that they make in regards to them.

Specifically, Weiner (1974, 1985) draws distinctions between internal/external, stable/unstable, and controllable/uncontrollable, in categorizing attributions with regards to success and failure, and modelling their affective and motivational consequences in achievement contexts (such as sport). In line with the attribution approach, following success at goal progress and goal attainment, it is likely that the internal, variable, and controllable determinants will result in positive and immediate changes in well-being. For example, entrepreneurs who believe that their positive performance outcomes are the result of their own effort and commitment are more likely to derive higher EWB from entrepreneurship.<sup>40</sup>

My previous conceptualization of entrepreneurship as an achievement (i.e., goal-directed) context also lends credence to the extension of Weiner's theory into a theory of entrepreneurial well-being. For instance, a variety of factors that may influence EWB following failure and success at goal striving are external (e.g., the political environment and the availability of financial resources), whereas other factors are internal (e.g., health and effort). Also, some of these factors can either change or be changed readily (e.g., effort), but other factors may be more resistant to change (e.g., health). Fi-

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Diener et al., (1999) published their review this type of approach was, surprisingly, omitted altogether. Nevertheless, one of the antecedent processes involved in forming judgments of well-being is a causal attribution process, and as such it is further developed here.

<sup>40</sup> This is quite straightforward. It is sufficient to imagine two different entrepreneurs, A and B, pursuing an identical opportunity with equal and positive success. Now, while entrepreneur A ascribes her success to her good luck in raising funds or to the failure of a competitor, entrepreneur B ascribes his success to his own effort and commitment. Who is likely to enjoy the success more? Intuitively, entrepreneur B is more likely to derive happiness (pride and self-esteem) from success, by identifying internal and variable sources as its causes, than entrepreneur A, who is likely to experience the ephemeral consequences of surprise instead. Emotions such as surprise and happiness are attribution-dependent to the extent that they are determined by the perceived cause of the outcome that generated them. In other words, entrepreneurial success which is perceived to be caused by good luck produces surprise, whereas success following a long-term period of effort expenditure – which is likely to be the case for most entrepreneurs – results in feelings of accomplishment and happiness.

nally, some factors are more or less under the control of the person (e.g., effort and commitment), while some are largely controlled by the environment (e.g., the availability of financial resources), and some may be uncontrollable altogether (e.g., weather, temporary illness).<sup>41</sup>

Aside from being helpful for categorizing the causes of EWB in entrepreneurship, the above dimensions are useful for categorizing the different causal attributions that individuals make in regards to their progress towards and attainment of their entrepreneurial goals, and ultimately for enjoying higher well-being in entrepreneurship. Drawing on Weiner, it's not just the antecedents themselves that are of importance, but also the way that we perceive them along these dimensions. For example, ability might matter objectively for generating and supporting successful processes and outcomes in entrepreneurship, which should in turn result in higher EWB. However, the perception of ability as a fixed trait or a malleable one (i.e., both variable and controllable) may have a separate impact on EWB in various situations. For instance, according to Dweck and Legget (1988), those

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<sup>41</sup> Aside from the three dimensions of locus, stability, and controllability, at least four other central dimensions come to mind: globality/specificity (e.g., context-specific business performance vs. general socio-economic conditions), intentionality (e.g., deliberate and planned behavior vs. non-intentional, improvisational, and/or automatic responses), objectivity (e.g., actual business performance vs. subjective aspirations), and procedurality (e.g., performance outcomes vs. intrinsic motivation). Together, these seven dimensions can be used to categorize and form a variety of taxonomies over a large pool of likely antecedents, as well as function as a guiding scheme for sorting and employing a variety of relevant theories that may shed light on the causal structure and malleability of well-being in entrepreneurship; more specifically, theories that take one or several of these dimensions as their focal theoretical point. For example, affective event theory (Weiss & Cropanzano, 1996), when applied to entrepreneurship, may postulate that environmental conditions, both internal and external to the entrepreneurial process, which are perceived to promote (provide an opportunity to improve) or impede (threaten to reduce) personal well-being and progress towards individual entrepreneurial goals are what determine the occurrence of discrete affective events causing affective responses, which in turn influence entrepreneurs' well-being over time. Note that based on the categorization above, which focuses on the individual rather than on the entrepreneurial process, both of these conditions are external to the individual, but differ in the dimension of globality and specificity. Thus, context-specific stressful events and adverse conditions (role conflicts, time pressure, cognitive strain, noise, etc.), financial constraints, interpersonal conditions (emotion contagion and negotiation with other employees), goal progress, and rewards, are all considered "internal" causes. On the other hand, more general or "external" causes include: social, legal, and political change, market and industry change (competitor moves), and economic fluctuations. Affective event theory is thus built solely on the locus of causality in identifying factors that elicit affective responses in the entrepreneurial process. Since it is a theory of organizational affect, it is mainly suited for analysis of antecedents at the level of the organization, or as considered here, at the level of the entire process of venture creation. From an individual point of view, its causes are also internal and external to the person.

who attribute failure to their own ability may experience different affective and cognitive reactions depending on whether they perceive ability as a fixed or malleable attribute; with stronger negative effects for those who perceive ability to be set in stone.<sup>42</sup>

Consequently, in line with the attribution approach, the degree of change that might be expected in entrepreneurs' EWB is partly a function of the variability, locus, and controllability of its determinants. It is likely that causal ascriptions to internal, variable, and controllable determinants following success at goal progress and goal attainment will result in positive immediate changes to EWB. Once again, entrepreneurs who believe that their positive performance outcomes are the result of their own effort and commitment rather than of luck or a competitor's failure are likely to derive higher well-being from entrepreneurship. In general, attribution theories suggest that attribution of one's positive performance to self-determination, effort and commitment is more likely to lead to positive affective reactions, thus establishing the importance of seeing our actions as emanating from the self, as supported by the SDT framework (see below).

Finally, attribution theory has much relevance, not only for elucidating the causal ascriptions that may lead to EWB, but also for shedding light on some of the empirical evidence indicating that entrepreneurship results in greater overall well-being than non-entrepreneurial employment alternatives. As income and success from entrepreneurship are more likely to be attributed to internal and variable factors of the self, owing to its self-organizing and goal-directed features, entrepreneurs are more likely to ascribe their success and career engagement to their own effort and motivation, which is then likely to result in higher well-being than that of the average non-entrepreneurial employee. In other words, entrepreneurship may be more positively associated overall with attributions of internality, intentionality, and controllability – which may also explain the great benefits following success and the deep slumps following failure.

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<sup>42</sup> Note that Weiner often talks of ability as something relatively stable, and hence not readily changeable. Finally, it should be noted that although the interpretation of specific causal inferences can vary over time, and between different people and situations, the underlying dimensions on which causes are "understood" or given meaning remain constant. That is, dimensions are conceived of as invariant, whereas the location of any specific cause on a dimension is variable.

Before reviewing the empirical evidence regarding the effects of entrepreneurship on individuals' well-being, I wish to briefly introduce the theory of self-determination; an approach that brings together four of the five theoretical approaches reviewed above (the exception being judgment-based theories, which are more homeostatic in nature).

### Self-Determination Theory

The theory of self-determination (SDT) is not a single theory, but rather an overall humanistic approach to motivation, personality development, and well-being (Ryan, 1995; Ryan & Deci, 2001; Deci & Ryan, 2000), which is largely inspired by the early work of both clinical and humanistic psychologists (Frankl, 1985; Rogers, 1961, 1962, 1969; Maslow, 1943, 1968).<sup>43</sup> SDT's theoretical umbrella includes a variety of theories with distinctive elements of telic theory, activity theory, bottom-up and top-down theories, and attributional theory.

As an overall approach, SDT is based on an organismic and naturalistic set of assumptions regarding the nature of human psychology. SDT is centered on the belief that human nature displays persistent positive features, and that human beings repeatedly display effort, agency, and commitment in their lives; in SDT, these positive features are referred to as "inherent growth tendencies" (Deci & Ryan, 2000). Thus, underlying SDT is an "organismic psychology" (Ryan, 1995) in which three central assumptions are made concerning human nature:

1. Humans are taken to be naturally proactive, growth-oriented organisms – rather than reactive individuals oriented towards equilibrium, as postulated by outcome-utility and drive theories (e.g.,

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<sup>43</sup> SDT was discussed in chapter 4 as a theoretical approach to understanding the ontological basis of the well-being concept. Here, it is discussed more generally, as a key theoretical approach for understanding some of the causes of well-being. In chapters 8-11, which constitute my main theoretical contributions, the theory is first applied to the case of entrepreneurship as an antecedent of well-being in general: i.e., as a self-deterministic approach to organizing work, which is beneficial to individuals' well-being relative to non-entrepreneurial work alternatives, and then more specifically applied in the domain of entrepreneurship; thus focusing on how SDT can illuminate differences in well-being at the within level of analysis, i.e., within a group of entrepreneurs.

traditional economics, aspiration-level theories). This (pro)active aspect of human nature is clearly evident in the phenomenon of *intrinsic motivation* – the natural tendency manifest from birth to seek out activities, challenges, novelty, and opportunities to learn because they are interesting, stimulating, and satisfying in themselves.

2. Humans are assumed to be naturally inclined towards personal and social integration of their psyche into a unified sense of self and social structures. This is evident in the phenomenon of internalization, i.e., the lifelong propensity of individuals to adopt and attempt to integrate and transform an extrinsic motive or a social condition into their personally endorsed values, and thus assimilate behavioral regulations that were originally external.
3. Human beings are naturally oriented towards well-being. This is evident from the first two growth tendencies and the life goals or aspirations that people pursue.

In sharp contrast to drive theories, and to the mono-motivational economic logic underlying much theorizing in economics and entrepreneurship theory, the assumption that people are oriented towards maximizing their well-being, which gives rise to the maximization problem in contemporary theories of entrepreneurship, is not made here. The assumptions required for SDT state only that people are oriented towards well-being, which is not the same thing as maximizing well-being. This is also a critical point against theories of entrepreneurial decision making which center on the belief that entrepreneurial activities are undertaken in order to maximize well-being (Kato & Wiklund, 2011). It also has profound methodological implications, as the focus shifts from quantifying to qualifying. For instance, instead of studying what people are trying to maximize, the focus shifts to what impedes or supports individuals' well-being. For, according to SDT, even though these growth tendencies are evolved, and therefore 'natural', this does not imply that they operate optimally in all conditions. Rather, these inherent tendencies require specific support and nutrients provided by

one's own psychological reserves (from early socialization) and one's current social environment.

On this basis, SDT postulates a set of three basic psychological needs, namely those for autonomy, competence and relatedness, the fulfillment of which are considered necessary and essential for vital and healthy human functioning and well-being. Stated differently, SDT posits that individuals have basic needs to feel free and uncoerced in their behavior, to feel effective and competent in their behavior, and to feel close and connected to others through their behavior (Deci & Ryan, 1991). These needs are considered innate (e.g., Maslow, 1943) as opposed to learned (e.g., McClelland, 1965), as they are viewed as elements of a person's universal psychological profile. More specifically:<sup>44</sup>

1. Autonomy refers to volition – the organismic need to self-organize experience and behavior, and to perceive an activity as concordant with one's integrated sense of self. Autonomy fulfillment is manifested by the feeling that one's behavior is self-chosen and meaningful, as opposed to the result of external coercion or pressure (deCharms, 1981).
2. Competence refers to the need for affirmation that one is dealing effectively with the environment, and achieving valued outcomes. Competence fulfillment is manifested by the feeling that one is effective and able in one's behavior, rather than being ineffectual and inept (White, 1959).<sup>45</sup>

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<sup>44</sup> Within SDT, needs are regarded as qualities of experience universally required by humans in order to thrive. Another way of conceiving psychological needs is as acquired individual differences in social motives such as intimacy, achievement, and power (e.g., McClelland, 1965, 1970). Earlier in the thesis (see chapter 4), SDT's ontological stance with respect to well-being was discussed, and it was made clear that SDT distinguishes positive functionings as need satisfaction from positive hedonic and eudemonic feelings as actual well-being. Hence, in later theorization (chapters 8-11) the term well-being will be reserved for the latter case, although it is acknowledged that in the general model of well-being outlined previously, positive functionings constitute a separate dimension of well-being as an overall phenomenon of mental health.

<sup>45</sup> From *Why We Do What We Do: Understanding Self-Motivation* (Deci & Flaste, 1996: 66): "The feeling of competence results when a person takes on and, in his or her own view, meets optimal chal-

3. Relatedness refers to the need to interact with and feel connected to others – to love and care, and to be loved and cared for. Relatedness fulfillment is manifested by the feeling that one is connected to or in harmony with others, rather than alienated or marginalized (Baumeister & Leary, 1995).

Each of these types of experience provides distinct “psychological nutrients” (Ryan, 1995) which sustain human natural tendencies and well-being. SDT posits that all three of these needs serve as foundations for self-motivation and personality integration. Stated differently, the greater the extent to which these needs are satisfied within a certain activity or social context, the more people can be expected to be intrinsically oriented in their behavior, and the greater their sense of ownership will be, as well as their sense of *internalization* of and *integration* with the activities undertaken and the motives for pursuing their goals; all of which result in improved vitality, self-motivation, and well-being (Deci & Ryan, 2000). Conversely, the thwarting or frustration of these basic needs leads to diminished self-motivation and greater ill-being (Ryan, Deci, Grolnick, & La Guardia, 2006) by causing the individual to adopt well-being incongruent behaviors and extrinsic (maladaptive) rather than intrinsic (adaptive) aspirations.

To conclude, at its theoretical core, the theory postulates that while our tendency towards well-being is innate, whether we attain well-being or not has to do with our environment and early socialization, which determine whether our basic psychological needs will be satisfied or not. Thus, SDT mainly addresses the environmental conditions and the socio-psychological processes underlying human motivation for growth and well-being. In general, SDT predicts, and evidence from various domains and empirical examinations also shows, that well-being results from individuals’ engagement in intrinsically rewarding activities, from their degree of autonomous self-regulation in personal goal pursuits, and from their embracing of life styles

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enges. An optimal challenge is a key concept here. Being able to do something that is trivially easy does not lead to perceived competence, for the feeling of being effective occurs spontaneously only when one has worked towards accomplishment. Like the children... [with their] spontaneous, inner desire to test themselves and the environment, all of us are striving for mastery, for affirmation of our own competence. One does not have to be the best or first, or to get an 'A' to feel competent; one need only take on a meaningful personal challenge and give it one's best.”

(life goals) that are intrinsic in nature rather than materialistic and extrinsic. Each of these factors supports, and is in turn supported by, the continuous satisfaction of peoples' basic psychological needs for autonomy, relatedness, and competence.

SDT constitutes a bedrock for my theoretical development of the link between entrepreneurship and well-being. It was first introduced in chapter 4 as a psychological approach to well-being broader and more inclusive than the psychological and subjective well-being approaches. Here, it has been outlined as a theoretical approach in the causal chain of well-being, but it will be revisited at much greater length in the *fourth* and *sixth* sections of this thesis as an overall approach for theorizing and examining the effects of entrepreneurship on individuals' well-being, and as a theoretical approach for examining the causes of well-being *in* entrepreneurship. In short, I will develop the argument that entrepreneurship is better suited than non-entrepreneurial work alternatives for supporting individuals' psychological needs and mental health because it allows people to self-organize their own approach to work, and thereby transform the process of wage earning into a meaningful goal pursuit. Individual volition is of course a decisive factor for reaping the benefits of engagement in terms of EWB and overall well-being. I propose that individual life goals and entrepreneurial motives, and their patterned interrelationships, matter greatly for peoples' outcomes of mental health as they advance their entrepreneurial goals.

Having reviewed the basic theoretical foundation of the causal structure of well-being in and with respect to entrepreneurship, in the following sections I give a comprehensive review of the relevant literature, in order to identify key empirical studies which match this scope to some degree.<sup>46</sup> I begin by briefly reviewing the empirical evidence regarding various effects on well-being in entrepreneurship; specifically those associated with the

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<sup>46</sup> I say to some degree as there are very few studies that have investigated the link between well-being and entrepreneurship (defined in behavioral terms as in chapter 2), and many more that have explored the link between self-employment and some facets of well-being. Thus, although I do not equate self-employment and entrepreneurship, and since self-employment has been extensively used as a proxy for entrepreneurship both in economics and in the entrepreneurship literature, I have decided to include studies which examine self-employment and well-being in the review to follow.

concept of EWB.<sup>47</sup> After that, I will explore in greater depth the effects of entrepreneurship on peoples' well-being in general.

## Determinants of Well-Being in Entrepreneurship: An Empirical Overview

Although much research has been conducted on the antecedents of individuals' well-being, the field of entrepreneurship shows a great lack of contributions looking into the causes and correlates of well-being among entrepreneurs. Nevertheless, interest in entrepreneurially related satisfaction has recently boomed, and a number of interesting new findings have been presented.

Some of these findings suggest that engagement in entrepreneurship due to intrinsic motives or reasons (Carree & Verheul, 2012) and opportunity-driven engagement (Block & Koellinger, 2009; Kautonen & Palmroos, 2010), as well as financial success, result in higher satisfaction (job, startup or business satisfaction). Also, experiencing the venture creation process as more demanding (Bradley & Roberts, 2004) and entering the process with greater initial expectations or efficacy beliefs was found to be positively associated with satisfaction (Cooper & Artz, 1995), although having both higher efficacy and acting improvisationally (Hmieleski & Corbett, 2008) was found to be negatively related to satisfaction, as was having low career anchors (Feldman & Bolino, 2000) and lower dispositional positive affect (Delgado-García et al., 2012).

The (perceived) presence of autonomy, variety, task identity, and feedback, conceptualized as the four core job characteristics (Hackman & Oldham, 1976, 1980), has been found to be positively related to job satisfaction in entrepreneurship (Schjoedt, 2009). Women also seem to be more satisfied with their entrepreneurship, even when they receive lower incomes (Carree & Verheul, 2012). Also, in family based businesses, the entrepreneur's identification with the business, the extent of the family's social in-

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<sup>47</sup> As evident from the empirical overview below, measures and concepts that are included in the proposed definition of EWB as context-specific subjective well-being in entrepreneurship, such as job, startup, and business satisfaction, constitute the absolute majority of well-being studies in entrepreneurship.

teraction, and the family's commitment to the business were all found to be positively related to the financial satisfaction experienced by family owners.

Previous studies into the causes of well-being in entrepreneurship were essentially empirical, and mainly focused on circumstantial and psychological factors and their effects on job and business satisfaction; albeit to a limiting degree. Surely, aside from circumstantial and psychological factors, a focus on entrepreneurs' intentional and goal-directed behavior is likely to yield promising findings in both theoretical and practical terms, although this has not been implemented in previous research. Thus, for instance, how entrepreneurship is experienced (Schindehutte et al., 2006; Morris et al., 2012) throughout the various phases of the venture creation process remains unexplored. To conclude, both theoretical and empirical examination of entrepreneurs' work and life circumstances, psychology, and intended behavior are desperately needed if we wish to better understand the entrepreneurial pay-off structure. In particular, the potential of goal-directed behavior in entrepreneurship for sustainable positive changes in well-being should be evaluated and implemented in theory building.

## An Empirical Review of the Effects on Well-Being of Entrepreneurship and Self-employment

To date, the most significant research that explicitly investigated the effects of entrepreneurship on peoples' well-being was undertaken by economists, in particular by happiness and labor economists, who have consistently noted the potential non-material benefits of being self-employed. Some of the most important contributions and contributors include: Benz and Frey (2003, 2004, 2008ab), Bianchi (2012), Blanchflower (2000, 2004), Blanchflower and Oswald (1990), Blanchflower, Oswald, and Stutzer (2001), Finnie and Laporte (2003), Fuchs-Schündeln (2009), Hamilton (2000), Hundley (2001), Kawaguchi (2002), and Van Praag & Versloot (2007), who recently offered a brief review of the topic. The empirical evidence emerging from this body of research indicates that engagement in self-employment is beneficial for individuals' well-being, although there are a few exceptions to this rule (Blanchflower, 2004; Dolan, Peasgood, & White,

2008; Rietveld, Kippersluis, & Thurik, 2014). In general, the results show that self-employed individuals are considerably more satisfied with their jobs and lives than employed individuals are.

Also, organizational psychologists, entrepreneurship scholars, and entrepreneurial or small business economists, who have only very recently taken an interest in these matters, have recently made some interesting observations that point towards various ways that starting and running a business may benefit people's well-being (e.g., Alvarez & Sinde-Cantorna, 2014; Andersson, 2008; Binder & Coad, 2013; Block & Koellinger, 2009; Bradley & Roberts, 2004; Schjoedt & Shaver, 2007). A recent global report conducted by Global Entrepreneurship Monitor (GEM 2013), which covers more than 50 countries, supports the entrepreneurship-life satisfaction hypothesis, indicating that entrepreneurs achieve long-lasting upward changes in well-being compared to the average employee. This suggests that entrepreneurship may indeed have universal effects on the well-being of individuals, something that has also been observed in clinical settings in comparisons between disabled self-employed and disabled wage-earners (Pagán, 2009).<sup>48</sup>

This is an important and puzzling observation, since the self-employed often reports lower mean salaries (Hamilton, 2000; Van Praag & Versloot, 2007), lower returns on investments (Moskowitz & Vissing-Jorgensen, 2002), and higher income fluctuations (Carrington, McCue, & Pierce, 1996). Moreover, those who start-up and run their own ventures frequently report high levels of stress, demanding working conditions, high perceived uncertainty in their work, and conflict between demands of work and leisure (Blanchflower, 2004; Jamal, 1997). In fact, the relationship between entrepreneurship and well-being, in particular for other measures than job and life satisfaction, seems to be much more complex than previously believed, and some of the few studies that do exist suggest a variety of concerns (Cardon & Patel, 2013; Dolinsky & Caputo, 2003; Jamal & Badawi, 1995;

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<sup>48</sup> It should be cautioned that whereas emerging evidence suggest some cross-cultural support for the correlation between entrepreneurship and well-being, cross country surveying and situational concerns (including cultural and physical) may distort peoples' responses or otherwise render them incomparable. Moreover, even if such universal effects are not only found in developed countries, their causes might be very different nonetheless.

Lewin-Epstein & Yuchtman-Yaar, 1991; Parasuraman & Simmers, 2001; Schjoedt, 2009).

Previous research has not systematically and comprehensively examined the effects of entrepreneurship on well-being. Although there is an emerging line of cross-disciplinary integration and validation of the positive link between self-employment and satisfaction (Binder & Coad, 2013), there is very little evidence or theory linking entrepreneurship to individuals' well-being in a comprehensive and systematic fashion. If anything, the few studies that have incorporated other measures of well-being than satisfaction have returned highly uncertain results. Further to this, recent publications point towards the possibility of reverse causation, which would imply that physically and mentally healthy individuals pre-select into entrepreneurship (Rietveld et al., 2014).

Consequently, while previous results generally support the link between entrepreneurship and well-being, there are several major qualifications that must be addressed before we can arrive at any strong conclusions on the matter.

First, since most studies have been conducted by happiness and labor economists, they address a status variable of self-employment, and do not address the behavioral facets of engagement with entrepreneurship per se, thus failing to recognize the heterogeneity of entrepreneurial undertakings and the procedural and temporal nature of the establishment process. Second, most of the previous literature, both by economists and entrepreneurship researchers, has focused on measures of satisfaction, in particular job satisfaction, often measuring them with a single-item question. Hence, systematic examinations of well-being as the presence of positive feelings and positive functionings are largely absent (notable exceptions include various studies by clinical researchers and organizational health psychologists: Pagán, 2009; Parasuraman, Purohit, Godshalk, & Beutell, 1996; Parasuraman & Simmers, 2001; Prottas & Thompson, 2006; Stephan & Roesler, 2010; Tetrick, Slack, Da Silva, & Sinclair, 2000). Third, most of the literature examining the link between entrepreneurship and well-being does so directly, without mediation or moderation of relevant theoretical variables, and is mainly empirically driven (e.g., Bradley & Roberts, 2004, reports that

hours worked and work demands positively moderate the effects of self-employment on job satisfaction).

The most important theoretically informed studies were conducted by Benz, Frey, and Stutzer (e.g., Benz, 2005; Benz, 2009; Frey, Benz, & Stutzer, 2004), who also developed the procedural utility theory (Sen, 1995, 1997) in order to explain, among other things, the differences in satisfaction between self-employed and employees. Verifying previous observations (Blanchflower & Oswald, 1990; Hundley, 2001) in a later study, Benz and Frey (2008b) demonstrated rigorously, with samples from 23 countries, that individuals' evaluation of job content (i.e., the nature of work tasks) and autonomy are two important factors which mediate the positive effect of self-employment on job satisfaction. Nevertheless, the majority of explanations regarding the positive impact of entrepreneurship on well-being are still inferential, and treat the individual's desire for independence as the most important source of procedural utility, but in most cases no mediating factor has been proposed, and the effects of other explanatory mechanisms have not been further explored.

Finally, while the positive association between self-employment and satisfaction outcomes may be consistent, there are still open questions regarding the causal structures between the two (Blanchflower & Oswald, 1990; Lange, 2012). Except for Benz and Frey (2003) and more recently Lange (2012), no study has seriously and systematically addressed the problem of reversed causality or selection bias. Frey and Benz did this by studying fluctuations in satisfaction levels of individuals who have moved in and out of self-employment in both the UK and in Western Germany, and their work largely supports the hypothesis that self-employment results in greater satisfaction. Lange, utilizing a large dataset derived from the 2006 European Social Survey, performed a complementary analysis by taking personality traits, personal values and indicators of workers' autonomy explicitly into account, lending "further strength to economists' argument that the net of values and personality traits, autonomy and independence are the mechanisms by which self-employment leads to higher levels of job satisfaction."<sup>49</sup>

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<sup>49</sup> Bradley and Roberts (2004) have also aimed, as have other studies, at correcting for this selection problem. However, there are several concerns regarding the procedures they employ. While Bradley and

To sum up, entrepreneurship does seem to be related to well-being, though this relation requires much more systematic and comprehensive investigation, as well as the guidance of freshly developed theoretical perspectives. Economists – who have more systematically investigated how self-employment impacts individuals' work satisfaction – have not considered the ephemeral and goal-directed aspects of entrepreneurship per se, and have not studied other measures of well-being than satisfaction. On top of that, as we just saw, there are several studies that fail to find a significant difference in well-being between self-employed and employees, and, as previously mentioned, others have indicated that the positive effects of self-employment and entrepreneurship on well-being are limited to the rich (Alesina, Di Tella, & MacCulloch, 2004) or to those who did not enter self-employment out of necessity (Block & Koellinger, 2009; Feldman & Bolino, 2000). Finally, most of the studies linking self-employment and entrepreneurship to well-being take the procedural utility approach, and assume that individuals have a preference for independence from the constraints of the employment hierarchy, and that this is what drives the difference in job satisfaction and subjective well-being between the employed and the self-employed. This has, however, been only partially grounded in theory and direct measurement.

Given the likely positive effects of entrepreneurship on peoples' well-being, I wish to conclude this chapter by summarizing, on the basis of the reviewed theoretical approaches above and my discussion following each subsection, four general and distinctive rationales for why entrepreneurship is relevant to well-being, and a causal framework through which to investigate entrepreneurs' well-being.

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Roberts find that both depression and self-efficacy mediate in part the relation between self-employment and job satisfaction, infusing this into the model detracts from the likely effects that self-employment may have on individuals' psychology. That is, self-employment is likely to lead to both increased self-efficacy and reduced depression. Thus, controlling for more trait-like personality factors and for values shows more promise (Lange, 2012).

## Why is Entrepreneurship Relevant to Well-Being?

Entrepreneurship, as a social phenomenon, and as a major attempt at personal goal pursuit, entails a unique circumstance, psychology, and behavior with potential positive effects on the well-being of working individuals. Indeed, while there is some evidence that entrepreneurship is positively associated with individuals' well-being, theory that guides empirical examination by linking the two together is habitually underdeveloped; as if the matter were purely empirical, or simply a 'no brainer'. But given the importance of entrepreneurship to the individual and to society, this is an area which requires further theoretical investigation. The following four rationales built upon the different theoretical approaches reviewed and discussed in this chapter provide a good start for moving in this direction. In the fourth section of this thesis (chapters 8-10), these rationales will be refined and developed.

1. On the basis of my discussion of telic and activity based theories (including SDT), I suggest that entrepreneurship, when enacted, has a positive effect on individuals' well-being by virtue of its self-organizational and goal-directed features. Entrepreneurs are constantly striving after a major and meaningful pursuit of a personal goal in their working lives. By creating and facilitating challenging work conditions and positive opportunities to establish meaningful relationships, to learn and develop, and to engage in self-chosen behaviors, entrepreneurship is likely to offer benefits in term of mental health. Entrepreneurs are hence more likely to feel committed to progressing and attaining their goals, which may in itself help to boost their well-being. Since entrepreneurship also entails a pro-active orientation, entrepreneurs might further display more approach tendencies, and frame their goals more positively due to this, which may in turn result in greater experienced well-being.
2. Also some of the intricacies between the top-down and bottom up processes may indicate the likely positive effects of entrepre-

neurship on well-being. On the basis of my previous discussion I propose that entrepreneurship is likely to affect aspects of individuals' psychology and personality in ways which result in positive functionings and feelings of well-being. For instance, we know on the basis of personality research that extroversion and pro-sociality is strongly associated with dispositional positive affect and well-being. As previously mentioned, it seems certain that people who aren't particularly extroverted and social will become more extroverted, social, self-confident, and communicative if they take on entrepreneurial career paths, as a result of the demands of the entrepreneurial process. Additionally, as this thesis is intended to investigate, entrepreneurship may be uniquely positioned to support individuals' basic psychological needs, which are directly connected to personality variables which support well-being, such as perceived autonomy, core efficacy, and belongingness.<sup>50</sup>

3. Entrepreneurship may further positively impact well-being through favorable judgmental processes which are likely to play a significant role in making engagement in entrepreneurship subjectively rewarding. As discussed above, the increasing positive portrayals of entrepreneurs in the media, along with the increase in spreading of western (autonomy-related) norms and values via TV and social media may be favorable for entrepreneurs judging their own stance vis-a-vis others and the valued (i.e., aspired to) social standards and achievements in the particular context. In line with the view (and empiric results) that entrepreneurship offers different institutional (procedural) returns thanks to its autonomous character, we would thus expect that the more valued individuals' independence is in a certain context, the more likely

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<sup>50</sup> Nevertheless, the moderating effect of relevant personality variables needs to be accounted for. For instance, since individuals high on need for achievement are more likely to be overrepresented in entrepreneurship (McClelland, 1965, 1987), mean levels of well-being for entrepreneurs may be higher as a result of these individuals pursuing challenging activities (or flow-encouraging undertakings) which enhance their learning and well-being.

it should be that engagement in entrepreneurship will positively impact one's own evaluation of well-being.<sup>51</sup>

4. The fourth rationale, built upon my discussion of attributional theory, argues that entrepreneurship is more likely than other work engagements to involve positive well-being enhancing attributions. For example, income and success gained from engagement in entrepreneurship may weigh differently in terms of their effects on people's well-being. Since entrepreneurship is a clear case of personal engagement, effortful progression, and attainment of meaningful personal goals, it is more likely for positive outcomes such as income and performance to be attributed to internal and variable factors of the self, which in turn results in stronger and more stable feelings of well-being.

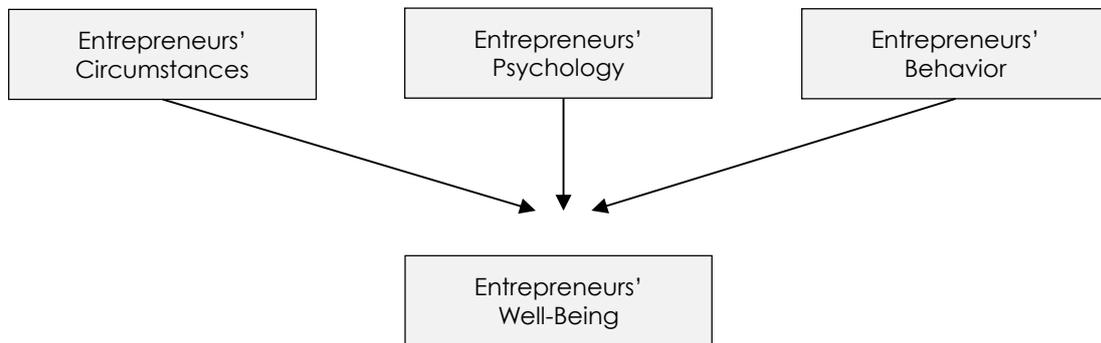
## A Causal Model of Entrepreneurs' Well-Being

The four rationales outlined above suggest that entrepreneurship may impact peoples' well-being through circumstantial, psychological, and behavioral mechanisms that unfold and interact as individuals go through the entrepreneurial process. On this basis, figure 6.1 presents a general causal model of entrepreneurs' well-being as derived from these three general sources of variance: entrepreneurs' (life) circumstances (e.g., entrepreneurial events and individual demographics), personality and psychological states and processes (e.g., attributional and social comparison process), and engagement in personal goals and intentional activities (e.g., general and more specific entrepreneurial behaviors). Each of these three categories can thus be seen as a set of general antecedents, moderating conditions (or potential contingencies), and potential mediators in the link between entrepreneurship and well-being. They also capture a variety of theories that either take one of these three categories as their main focus, or otherwise integrate these domains into their theoretical predictions.

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<sup>51</sup> As noted by Hume: "...tho' fame in general be agreeable, yet we receive a much greater satisfaction from the approbation of those, whom we ourselves esteem and approve of, than those, whom we hate and despise." David Hume (1739, book II, part I, sect. XI)

Figure 6.1. A general model of entrepreneurs' well-being antecedents



The model guides, although in a most general way, investigation both into the distinctive effects of entrepreneurship on well-being (i.e., effects on individuals' well-being *from* engagement in entrepreneurship – between level analysis), as well as the effects on well-being *in* entrepreneurship (i.e., effects on the well-being of entrepreneurs *inside* the entrepreneurial process – within level analysis) which are mainly evidenced by, though not restricted to, EWB.

The first invites theoretical and empirical examination into the effects that engagement in entrepreneurship has on individuals' well-being, with each of the three categories acting either as a mediator or as a moderator. For instance, psychological processes such as attributional processes are likely to be affected by entrepreneurship – as discussed in the fourth rationale above – because of its unique self-organizational and goal-related features. Or, to put it differently: entrepreneurship is likely to moderate their impact on the well-being of working individuals.<sup>52</sup>

The second invites narrower theoretical and empirical investigation into the factors that affect well-being among entrepreneurs themselves, rather than in comparison to some outside group such as regular employees. For example, as discussed above, attributional processes themselves may impact the EWB of enterprising individuals in response to differences in the psy-

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<sup>52</sup> We should always keep in mind and include in the actual empirical analysis the fact that various antecedents may actually lead to entrepreneurship, so that the differences between entrepreneurs' and non-entrepreneurs' well-being could simply reflect a selection bias and not be due to the effects of entrepreneurship on the lives of (working) individuals.

chology, behavior, and performance of entrepreneurs. In this case we are not interested in the effects of entrepreneurship as such on attribution processes, but rather in the effects that attribution processes have on EWB among enterprising individuals themselves, and in interaction with the unique circumstances, psychology, and behaviors of different entrepreneurs.

All in all, entrepreneurship can be regarded as an antecedent to various conditions underlying these three categories (in this way, the categories are considered mediators rather than moderators), the outcome of several of these conditions, and a moderating and/or interacting condition for various links between these sets of conditions and well-being. In the next and final chapter of this section, I complement my background theoretical discussion by theorizing more specifically on the effects of EWB on entrepreneurs' psychology, behavior, and performance in entrepreneurship. In fact, while there is an abundance of perspectives on what determines well-being, there is a lack of theoretical perspectives that take into account the subsequent effects of well-being on individuals' psychology and behavior, and very little integration with any theories that actually do look to explain the effects of well-being phenomena.

# Chapter 7

## The Entrepreneurial Well-Being as Resource Perspective

So far in this section, I have outlined a model of entrepreneurs' well-being and reviewed and discussed the theoretical and empirical literature on some of its more important antecedents. The aim of this chapter will be to complement that picture by developing a comprehensive framework for studying the *effects* of well-being states generated through engagement in entrepreneurship on people who are pursuing entrepreneurial goals, with less interest paid to whether well-being explains variations in people's selection into entrepreneurship. I focus on the construct of EWB, rather than on the more general construct of entrepreneurs' well-being, because its specificity and contextual conditioning is likely to allow for stronger and more specific predictions regarding its effects in entrepreneurship. The *entrepreneurial well-being as resource perspective* is so named in order to emphasize the role that EWB plays in entrepreneurship. I am mainly interested in the effects that EWB has on the variety of cognitive and motivational mechanisms through which it influences key processes of entrepreneurship.

### The Consequences of Positive Feelings and Positive Psychological Functionings

While the topic of well-being has found some popularity over the past decades, it is only recently that empirical and theoretical advancements have

been dedicated to deciphering its effects, both in general (e.g., Fredrickson, 2001; Fredrickson, 2004; Veenhoven, 1988) and in a variety of specific contexts such as entrepreneurship and organizational work (e.g., Baron, 2008; Seo, Barrett, & Bartunek, 2004).<sup>53</sup> In particular, while there is a lack of theoretical work on the subject, more empirical findings are continuously emerging in relation to the potential causal effects of well-being on personality traits, cognitive and behavioral processes, and successful individual outcomes. In general, this line of research indicates that well-being is associated with a wide range of benefits, both in life and in a variety of work settings (for some of the more extensive reviews see Huppert, 2009; Kaplan et al., 2009; Keyes, 2010; Lyubomirsky et al., 2005a).

Some of the most consistently mentioned effects include improved cognitive functionings such as heightened flexibility, elaboration, and problem solving (Isen & Daubman, 1984; Isen, Daubman, & Nowicki, 1987), greater confidence and self-efficacy (Baron, 1990), adoption of efficient self-regulatory and decision-making strategies (Aspinwall, 1998), increased pro-social attitudes and intrinsic motivation (Isen & Reeve, 2005), greater self-regulatory strength (Ryan & Deci, 2008), improved ability to cope with stress and adversity (Fredrickson, Mancuso, Branigan, & Tugade, 2000; Fredrickson, Tugade, Waugh, & Larkin, 2003), better personal health and longevity (Koivumaa-Honkanen, Kaprio, Honkanen, Viinamäki, & Koskenvuo, 2004), and higher quality of social relationships (Isen, 1999 in Dalglish & Power, 1999). The evidence coming out of work settings further suggests that positive affective experiences at work improve creativity and generation of new ideas, citizenship (pro-social behavior), a higher

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<sup>53</sup> Existing theories include the broaden-and-build theory (Fredrickson, 2001), affect-as-information theory (Schwarz & Clore, 1983), and the neuropsychological theory of positive affect and its influence on cognition (Ashby & Isen, 1999). Aside from these fully developed theories, there is a great abundance of perspectives emerging from the work of psychologists on the effects of positive affect on people's psychology, behavior, and performance. Some of the most provocative perspectives include the cognitive elaboration and flexibility hypotheses (Isen et al., 1987; Isen, 2001), the affect or mood maintenance hypothesis (Isen, 2000b), the intrinsic motivation hypothesis (Isen & Reeve, 2005), the self-regulation as limited resource approach (Muraven & Baumeister, 2000; Vohs & Heatherton, 2000), the pro-social or "warm glow" hypothesis (Isen & Levin, 1972), the accessibility hypothesis (Isen et al., 1978), spreading-activation theory (e.g., Anderson, 1983), the comparable affect priming theory (Bower & Forgas, 2000), the generative orientation hypothesis (Seo et al., 2004), the affect infusion model (Forgas, 1995), the risk-as-feelings hypothesis (Loewenstein et al., 2001), and finally the hedonic tone, activation, and regulatory focus hypotheses which concern the effects of positive affect on creativity (Baas et al., 2008).

probability of career success and otherwise improved performance in a variety of tasks (Baas et al., 2008).

Notwithstanding this emerging evidence, several studies have called attention to some potential detrimental effects that can result from excessive levels of positive affect. Findings relevant to this suggestion are varied in scope, but in most cases involve specific detrimental effects of high levels of activated positive affect on cognition, perception, task-directed motivation, and self-regulation (Baumeister & Heatherton, 1996; Clore & Huntsinger, 2007; Isen, 2000a). Recently, these potential negative effects have also been attended to by entrepreneurship researchers. For example, Baron and colleagues (Baron, Hmieleski, & Henry, 2012) have argued persuasively that there may be upper limits to the benefits of positive affect in entrepreneurship, and that beyond them it could impair effective psychological and behavioral functions. Cardon and colleagues (Cardon et al., 2009) also made similar remarks to the effect that very high levels of passion can severely impede people in striving for their stated entrepreneurial goals.

Outside of entrepreneurship, other researchers have recently suggested that the sustainable positive effects of positive affect are not so much the result of appropriate experiential intensity as that of an appropriate ratio of frequently experienced positive and negative affect. Accordingly, too much positive affect can be costly, and a more balanced ratio between the two has been found to be necessary for sustainable well-being (Fredrickson & Losada, 2005; Grant & Schwartz, 2011; Oishi et al., 2007). In general, however, there seems to be sufficient evidence to conclude that well-being either produces or is associated with a wide range of beneficial effects, both in life and in work. Furthermore, this appears to be true both for the state-like portion of well-being (i.e., well-being generated by one's circumstances and behavior) and its trait-like portion (i.e., a steady tendency to experience well-being). Moreover, most, if not all, of the existent evidence which suggests some detrimental effects from positive well-being experiences seem to

be the result of highly activated forms of positive affect (e.g., Vallerand et al., 2003), rather than of mental wellness *per se*.<sup>54</sup>

## Emerging Findings on the Role of Positive Emotions in Entrepreneurship

In recent years, research on well-being and positive affect has also found a warm home in the fields of management and entrepreneurship. Two notable theoretical contributions analyzing the effects of phenomena related to well-being on a variety of entrepreneurial factors are Baron and colleagues' work on the role of affect in entrepreneurship and Cardon and colleagues' work on entrepreneurial passion.

In his review of key theories and empirical findings concerning the role of affect in the psychology literature, Baron (2008) indicates that the feelings and moods that individuals experience may influence many aspects of cognition relevant to entrepreneurship (such as opportunity recognition). In their theoretical work, Cardon et al. (2009) conceptualized the nature of entrepreneurial passion and how it is associated with goal-directed cognitions and behavior. On the empirical side, initial evidence concerning entrepreneurship, much like evidence reported in other fields, suggests that positive affective experiences are linked to favorable outcomes such as greater focus and effort on future-oriented tasks (Foo, Uy, & Baron, 2009), increased creativity (Baron & Tang, 2011), resilience after failure (Hayward, Forster, Sarasvathy, & Fredrickson, 2010), proactivity (Hahn et al., 2012), goal setting and satisfaction (Delgado-García et al., 2012), and persistence (Cardon & Kirk, 2013).

Notwithstanding this development, previous research on positive affect and well-being in entrepreneurship has been rather focused on high-activation forms of positive affect (e.g., feelings of excitement, elation, and alertness), and has ignored the more subtle yet enduring aspects of individuals' well-being. While such a focus is no doubt of great relevance to those

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<sup>54</sup> Thus, I will not examine the nature of these detrimental effects in this chapter, because EWB doesn't seem to be nourished by short-term highly activated positive affective experiences (see chapter 5 for an extended discussion).

involved in developing new ventures, there are still two main concerns with such an outlook.

First, such an emphasis puts extra focus on short-term and intense affective experiences, and a long research tradition seems to indicate that intense positive emotions are often followed by increased negative affect (Larsen & Diener 1987) in such a way that the benefits of positive affect may very soon be balanced out. Judgments of well-being are also more likely to be based on the frequency, rather than the intensity, of positive experiences, and thus display greater stability (Diener et al., 1991b). This means that entrepreneurs' more enduring experiences of well-being have not been appropriately examined.

Second, most of the theoretical and empirical work on affect in entrepreneurship has not located the relevant affective experiences within the domain of entrepreneurship, with the exception of entrepreneurial passion, which is defined as a positive and intense entrepreneurial affective experience. This is important because the extent to which an affective experience impacts entrepreneurship is likely to depend on how proximal or distal it is from entrepreneurship; the more proximal it is to the activity being undertaken, the stronger the effect will be. The significance of the proximity of experienced positive affect to the undertaken activity was mentioned previously.

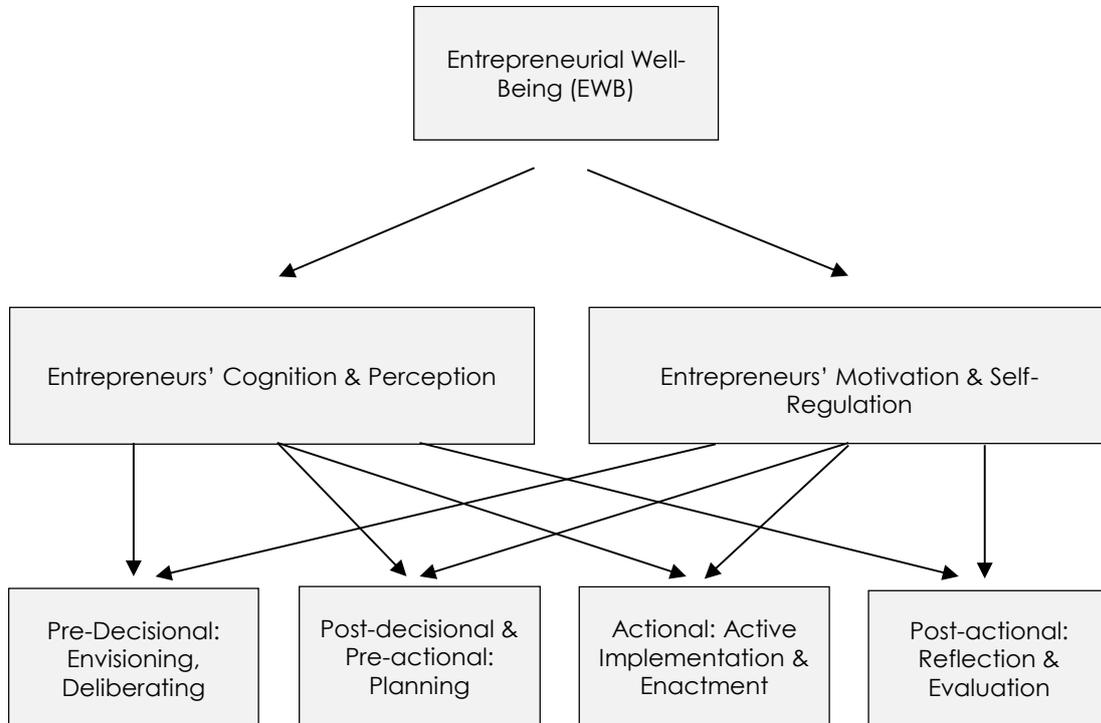
Consequently, while Baron (2008) notes that "affect can influence judgments and decisions even when the affect does not stem in any way from the objects, persons, or events being evaluated", it is likely that a more proximal measure like EWB will result in better and more accurate information, which will in turn allow more accurate modeling and better opportunities for theorizing.

In sum, while this emerging body of evidence and theory is informative, it has not yet to any appreciable extent theorized or tested the effects of well-being in general, or that of EWB in particular. This is an important issue, because theory and research findings indicate that positive feelings and evaluations, as well as positive psychological functionings, influence many aspects of peoples' cognition and behavior, and may have distinct self-regulatory functions important for goal commitment and persistence (Vittersø, et al., 2010).

## Effects of EWB in Entrepreneurship

Figure 7.1 depicts a combined variance and process framework for studying the effects of EWB on the venture creation process. It is suggested that EWB is an important experiential phenomenon with potential positive effects on key aspects of the entrepreneurial goal striving process, which is mediated by entrepreneurs' cognition (as well as perception) and motivation (including self-regulation). While EWB affects each of these psychological systems directly, it also affects them indirectly through its influence on the other system. For instance, EWB may impact motivation and self-regulation not only directly, via affective and somatic processes, but also indirectly, by cognitively informing the individual of the progress being made in entrepreneurship and of the great motivational resources available to her.

Figure 7.1. A combined variance and process model of the effects of EWB on the venture creation process.



The model depicts the impact of EWB on the goal process of venture creation via cognitive and motivational processes. Arrows extending from each of the psychological components to each of the entrepreneurial processes suggest that each psychological system is relevant to each of the stages in the action phase model of venture creation (which was developed in chapter 3).

Below, I explain how EWB, through its influence on these systems, is relevant to important activities performed by entrepreneurs as they progress towards their goals, and is hence ultimately relevant to entrepreneurial and firm-level performance. Since my analysis focuses on the implications of EWB on selection, planning, and implementation of new entrepreneurial activities, it will be mainly concerned with motivational and self-regulatory processes. However, as cognition plays an important role in these processes, I will start by briefly analyzing the more basic effects of EWB on cognitive processes.

## Effects of EWB on Cognitive Processes

Over the past two decades, research in various fields of psychology has reflected an increasing interest in the influence of positive affect on cognitive processes. Much of this work indicates that moderate levels of positive emotions and moods improve accurate perception, memory, decision making, problem solving, and creativity, all of which result in enhanced performance, even when the goals pursued are complex, difficult, and important. In line with this assertion, I suggest that positive well-being experiences in entrepreneurship broaden the scope of entrepreneurs' cognition (e.g., perception and attention) towards information, situations, and activities relevant to their goal pursuit in ways that go beyond mere or general positive affect.

First, EWB is a more readily accessible and accurate informational unit than positive affect when deliberating on how to act in entrepreneurship. For instance, entrepreneurs are more likely to attribute the causes of their current positive affect to the entrepreneurial processes if EWB is higher, which thus promotes a cognitive positive loop between affect and continuous entrepreneurship. Moreover, EWB can also be seen and used as an internal barometer for the relative success entrepreneurs enjoy in their entrepreneurship. By affecting individuals' judgments of their progress, as well as their efficacy in entrepreneurship, EWB provides unique information about where they stand in the entrepreneurial process. All of this is less clear when considering mere affect.<sup>55</sup>

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<sup>55</sup> The motivational consequences of these cognitive effects will be discussed in a separate subsection below. Briefly stated, EWB is likely to impact entrepreneurs' cognition both in the goal setting and in the goal striving processes. Particularly relevant is the likely positive impact of EWB on judgments of feasibility and desirability. Positive EWB, unlike positive affect in general, is a direct indicator and a signal of a high incentive value for one's entrepreneurial engagement. If engagement in entrepreneurship is positively experienced by the entrepreneur, this is likely to affect the perceived attractiveness of further engagement in subsequent rounds. In other words, people scoring high on EWB are likely to display very positive desirability judgments for continued entrepreneurship. EWB is also an important and obvious source of information regarding one's expectations of success in entrepreneurship. Since EWB relies on cognitive and affective judgments of the subjectively rewarding entrepreneurial life, a positive evaluation implies that the standards are being met, and hence that continued entrepreneurship is likely to be deemed rewarding.

Second, since EWB represents a stock of affective experiences in entrepreneurship, it captures an aggregate of positive and negative affective experiences. Thus, unlike other positive affective experiences, EWB is more likely to be experienced in the long-term, and with more moderate levels of arousal than high positive affect.<sup>56</sup> Therefore, it is likely to help restrain the negative effects of high positive affect by softening its detrimental effects on cognition, as well as by moderating its intensity. In other words, when individuals experience wellness from entrepreneurship, they are more likely to be in balance, and will hence be more likely to process information critically, in ways that promote sound judgment and engagement when deciding whether or not to embark on new entrepreneurial activities, planning the implementation of these activities, or deciding to disengage from a particular entrepreneurial project.

Finally, when entrepreneurs experience EWB, they are likely to organize incoming stimuli more efficiently than in more general affective states. In this sense EWB directs the individuals' attention to matters more relevant to their ventures, which causes them to perceive a wider range of factors and possibilities. In a sense, positive EWB assists entrepreneurs by helping them to "see" more in a given situation than would otherwise be the case – an enhanced capacity often associated with developing expertise in a given domain (Ericsson, Charness, Feltovich, & Hoffman, 2006). This heightened and more directed attention helps entrepreneurs not only when deliberating about new engagements with entrepreneurial activities or evaluating their position in the process of venture creation, but most importantly during times of planning and implementation, in which an appropriate and timely response is crucial.<sup>57</sup>

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<sup>56</sup> Indeed, some research has indicated that high positive affect may result in biases and heuristics that can impede sound decision making (e.g., over-optimism, planning fallacy, the halo effect), and may even reduce attention to, and processing of, negative information. However, in the majority of these studies, positive affect is measured in a way that captures both the dimensions of positive valence (hedonic tone) and level of activation (arousal) (Russell, 1980). For instance, PANAS, a popular measure of affect (Watson et al., 1988), assesses positive affect through self-reports involving terms such as "alert", "excited", "enthusiastic", "strong", and "active" – all reflective of elevated levels of activation.

<sup>57</sup> Moving from the individual level to that of the team, EWB may have positive cognitive interpersonal effects that facilitate the building and maintaining of effective entrepreneurial teams. When EWB is high, the individual's behavior will signal to the rest of the team that things are proceeding according to plan, that the person enjoys her work, and that commitment is likely to ensue. I suggest that EWB is

## Effects of EWB on Motivational and Self-Regulatory Processes

Psychologists studying the effects of well-being and positive affect have been mainly concerned with their effects on cognitive processes, and little attention has been paid to the influence of positive emotions and moods on motivational and self-regulatory phenomena. Some of the more notable contributions in this respect touch on the formation and regulation of affect-related goals such as positive affect maintenance or negative affect repair (Isen, 2000b). Recently, however, attention has begun to turn to the potential influences of positive affect on a variety of motivational processes (e.g., Erez & Isen, 2002; Forgas, 2008). And yet, despite increasing interest from psychologists, positive emotions and moods are still largely neglected in existing organizational theories and studies of work motivation (Seo et al., 2004).

This is in particular true in the field of entrepreneurship, in which the motivational explanations of why and how individuals behave are of great relevance. Fortunately, the significance of positive emotions for motivation and behavior in entrepreneurship has not gone completely unnoticed by entrepreneurship scholars (e.g., Cardon, 2008; Cardon et al., 2009; Cardon, Zietsma, Saporito, Matherne, & Davis, 2005; Foo et al., 2009; Hahn et al., 2012; Hayton & Cholakova, 2012), although the theoretical and empirical basis is still very limited. Most importantly, and as previously discussed, existing studies are concerned with either relatively intense and highly activated forms of positive affect or with general, rather than context-dependent, affective experiences. Therefore, the purpose of the following discussion is to further explore the link between positive affect and motivation in entrepreneurship by discussing the role and relevance of EWB.

In order to accomplish this objective I adopt a self-regulatory framework for theorizing the effects of EWB on key motivational processes and the outcomes of entrepreneurial performance. Self-regulation offers an important link through which motivation and well-being can be conceptually combined in entrepreneurship. In fact, affective phenomena have been

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especially distinct in this regard from general well-being or positive affect, and will provide more specific predictions. For instance, a happy entrepreneur in an otherwise alarming progress of venture creation might emit the wrong response from others in the team, and cause them to take the situation too lightly.

long understood as fundamental processes of self-regulation, which assist human beings in successfully managing their environments (Damasio, 2008; Damasio, 2000). Thus, several researchers call attention to the important role played by human emotions in self-regulation (e.g., Cacioppo, Gardner, & Berntson, 1999; Gollwitzer & Bayer, 1999), and a number of organizational scholars have recently adopted self-regulation as an overarching framework for studying the effects of positive affect on the motivation to engage in work-relevant activities (e.g., Seo et al., 2004).

This makes perfect sense, of course. Every day, entrepreneurs regulate their own behavior, cognition, and emotions in order to move towards or attain important goals and standards. Thus, I take as a starting point the idea that entrepreneurial motivation occurs within the context of self-regulation; the important thing being the setting of and striving after relevant goals (Lewin et al., 1944; Oettingen & Gollwitzer, 2007).<sup>58</sup> As they move along the entrepreneurial goal-directed process, people develop and manage a set of hierarchically organized goals; from the central and abstract (e.g., to become a successful entrepreneur) to the peripheral and concrete (e.g., to develop a product) (Bandura, 1991; Cropanzano, James, & Citera, 1993). Moreover, while some of these goals are conscious ones (e.g., to grow the venture), others may operate on a level below ordinary consciousness (e.g., to be regarded as successful entrepreneur).

Within this broader perspective, I now turn to the conceptual relationships between EWB, key components of self-regulation underlying entrepreneurial motivation, and three behavioral outcomes of entrepreneurial motivation and performance: (1) direction (what an entrepreneur does, or how she acts to fulfil the goal of business creation/behavioral choice formations), (2) intensity (how hard an entrepreneur works/amount of effort), and (3) persistence (whether an entrepreneur changes or maintains the initially chosen behavior/duration of action). Intensity, often measured as task

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<sup>58</sup> On the basis of a socio-psychological conceptualization of motivation, I consider motivation a general tendency to do something. Motivation is thus seen as an inferred process within a person that helps to initiate, activate, and maintain the individual's movement towards a goal or away from an unpleasant situation, and is behaviorally evident in the direction, intensity, and persistence of motion (Bandura, 1991). I thus refer to entrepreneurial motivation as an action tendency that initiates, activates, and maintains movement towards a goal to establish a venture, to grow an existing venture, and/or more broadly, the personal identity goal to become a successful entrepreneur.

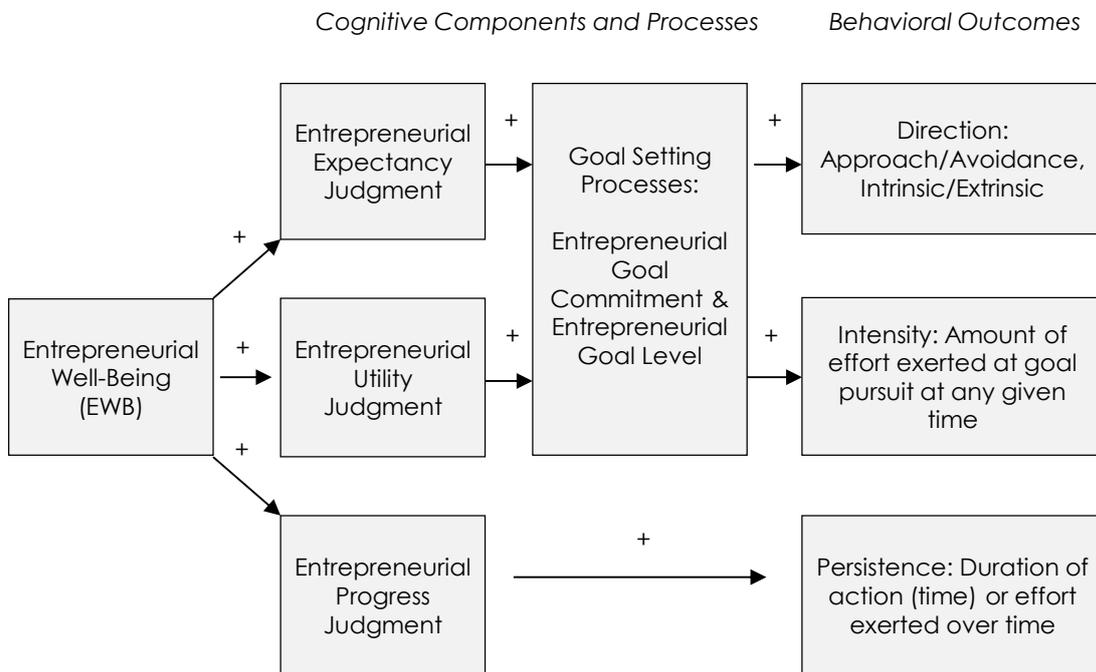
effort or task performance, has been explored mainly by organizational researchers, and only recently been explored in the context of entrepreneurship (e.g., Foo et al., 2009). The direction and persistence dimensions are also important, but due to conceptual challenges they have been left unattended by organizational and entrepreneurship researchers.

Building on previous theorizing on work motivation (Seo et al., 2004), figure 7.2 depicts a conceptual model of entrepreneurial motivation and EWB. I distinguish between the direct influences of EWB on each of these three behavioral outcomes, and the indirect influences, which impact the outcomes via EWB's effects on cognitive processing.<sup>59</sup>

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<sup>59</sup> Note that there is a tight correspondence between this model and the more horizontal goal-directed (action phase) model portrayed and developed in chapter 3. More specifically, entrepreneurial commitment corresponds to the formation of entrepreneurial goal intentions, while the behavioral outcomes correspond to the motivational and self-regulatory aspects underlying the goal striving process. Intensity or activation and persistence are especially important in the goal striving process, for activating, realizing and maintaining goal-directed behavior. The difference lies, of course, in that this model elaborates on the problem of motivation rather than the temporal sequence of the goal-directed process. Furthermore, since the focus here is on EWB rather than on well-being in general, the analysis thus concerns itself with the psychology and behavior of current entrepreneurs, rather than of intended entrepreneurs.

Figure 7.2. A motivational model of entrepreneurial well-being



The model is inspired by previous theorizing on the role of affect in work motivation (Seo et al., 2004). The model depicts the relation between entrepreneurial well-being and various facets of entrepreneurs' motivation to establish and/or grow with their ventures. For aesthetical reasons the direct arrows between EWB and each of the three behavioral outcomes are not drawn in the figure.

### **Direction, Intensity, and Persistence: Indirect Effects of EWB**

The model depicted in figure 7.2 outlines the indirect cognitive mechanisms through which EWB influences the direction, intensity, and persistence of entrepreneurs in their efforts to reach their goals. It acknowledges five distinct cognitions, each mediating with its own effects the impact of EWB on performance. While the first three are judgments of expectancy, utility, and progress, which all hold crucial importance for entrepreneurs' goal pursuit, the two last, entrepreneurial commitment and level of goal difficulty, refer to the choices made by entrepreneurs, and are thus considered motivational. Commitment concerns the choice of whether to (continue to) engage in entrepreneurship or not, and to what extent, and thus reflects one's deter-

mination in doing so (c.f., Hollenbeck & Klein, 1987), while the level of goal difficulty refers to the particular engagement option selected (in no specific temporal order). In other words, the first choice concerns that of forming entrepreneurial goal intentions (both global as well as lower order), whereas the second choice is related to, though not equal to, the structure and content of the goals selected in terms of level of aspiration or targeted performance (other features are also likely to play a role).

Both commitment and goal difficulty have been shown to be related to greater effort, persistence, and success in goal pursuit, or in other words, to be direct antecedents of direction, intensity, and persistence in the goal striving process. In the model, these two cognitive processes mediate the effects that EWB exerts on performance both directly and indirectly through two of the three aforementioned judgmental cognitions; expectancy and utility judgments, for which commitment and goal difficulty also serve as outcomes.

When deliberating, people need to make judgments at least on (1) the expectancy that certain actions will lead to certain outcomes (expectancy judgment) and (2) the attractiveness of the outcomes (utility judgment). Applied to entrepreneurship in this way, expectancy theory (Vroom, 1964) predicts that the extent to which people will commit to establishing (or growing) their ventures depends on the strength of their expectations to succeed and the extent to which they judge such success to be rewarding or attractive. These judgments are combined to generate the resultant tendency or motivational force in entrepreneurship (e.g., Krueger, 1993, 2007; Krueger & Brazeal, 1994; Shane, Locke, & Collins, 2003).

Furthermore, studies conducted on the conceptual and empirical links between expectancy theory and goal setting theory (e.g., Klein, 1991; Klein, Wesson, Hollenbeck, & Alge, 1999) have generally found that while expectancy judgments relate positively to the level of goal difficulty, utility judgments positively affect goal commitment. These, in turn, affect the amount of effort expended (e.g., Locke & Latham, 1990, 2002). In general, the more feasible and attractive an option to engage in entrepreneurship seems, the greater the commitment displayed, the challenges accepted in constructing the venture establishment, and the effort and persistence exhibited will be. But what is the role of EWB in this process?

If anything, EWB is likely to affect positively one's utility judgments (i.e., the incentive value) concerning engaging in entrepreneurship. This rather obvious observation is less so when general modes of affect are considered. In such contexts, the assumption is made that general positive affect influences utility judgments through some process of affect infusion (Forgas, 1995). However, if one's current positive affect is not attributed to the task to be undertaken, the infusion effect is likely to be minor or non-existent. On the other hand, positive EWB signals to the individual that the engagement is fruitful and enjoyable, and hence that continuing it is desirable (Carver, 2003; Schwarz & Clore, 1983). This cognitive affect maintenance hypothesis manifests itself as an internal dialog, in which the individual says more or less the following: "since I feel good about engagement, let's keep going with it".

EWB is also likely to positively influence expectancy judgments over and beyond the reported effects of general positive affect. According to social cognitive theory (Bandura, 1991), the most important antecedent of efficacy beliefs is a relevant history of successful experiences. EWB represents the most readily available resource of such relevant experience. Thus, if the behavioral option is related to previous successes in entrepreneurship, positive EWB will enhance expectancy judgments. According to the affect congruence theory (Forgas, 1995), affect impacts the content of expectancy through two complementary mechanisms: inferential processes and memory processes. When affect is integral to the activity, as it is in the case of entrepreneurship and EWB, the inferential model suggests a direct and automatic process of affect congruence. Thus, the reaction response is greater for EWB than for one's general mood. My assertion is further supported by affect priming (Isen et al., 1987; Isen, Johnson, Mertz, & Robinson, 1985), in that EWB is more likely to result in stronger enhancements of the function of working memory due to its proximity to the behavioral options considered.

These propositions are supported by a considerable body of literature demonstrating the effects of affective experiences on both expectancy and utility judgments (e.g., Erez & Isen, 2002; Forgas, 1995, 2001). Evidence suggests that when people experience positive affect, they tend to better recall and be more attentive to potential positive effects at the moment

when they envision alternative actions, and in general also expect to achieve these to a higher degree (e.g., Mayer, Gaschke, Braverman, & Evans, 1992). Contrary to that, people who experience negative affect tend to better recall and pay greater attention to potential negative effects when considering behavioral options, and generally have stronger expectations concerning those negative effects (e.g., Johnson & Tversky, 1983). In a similar fashion, Erez and Isen (2002) noted that mildly induced positive affective states increase the number and variety of relevant aspects retrieved from memory, and increase the attractiveness of a variety of objects or outcomes, such as task outcomes, task variety, and product variety.

Finally, I predict that entrepreneurs high on EWB are more likely to set lower-order goals (e.g., new recruitment) when they envision alternative action plans, by directing their attention towards potential positive outcomes for their businesses (e.g., new product development), whereas those in low EWB states are more likely to direct their attention towards negative potential outcomes for their businesses (e.g., not getting funds) when they envision alternative action plans, leading them to abstain from more proactive setting of business goals (e.g., shutting down a high risk project). In other words, these psychological processes are likely to result in either generative or defensive orientations (Seo et al., 2004), respectively. Similarly, based on the intrinsic motivation hypothesis (Isen & Reeve, 2005), I predict that entrepreneurs high on EWB are likely to exhibit an intrinsic behavioral orientation, by focusing more on meaningful and enjoyable outcomes in generating behavioral options that meet their more general entrepreneurial goals, while those in low EWB states are likely to focus more on extrinsic outcomes in generating behavioral options. This is especially relevant when low EWB states are directly related to poor firm performance.

To sum up, EWB is associated with greater commitment and a greater level of goal challenge, which in turn leads indirectly to greater effort and persistence in entrepreneurship, as well as to both generative and intrinsic goal orientations.

Aside from the indirect paths of utility and expectancy judgments, as well as those of commitment (entrepreneurial intention) and level of goal difficulty, there is an additional cognition which may provide important links between EWB and motivational outcomes: entrepreneurial progress

judgment. Progress judgments (Seo et al., 2004) may depend among other things on affective and cognitive information about progress towards and attainment of one's standards in entrepreneurship. Since entrepreneurship is usually conducted in situations where goal attainment requires a multifaceted sequence of action phases, assessing one's current state of progress towards a given goal has important self-regulatory advantages, in particular for decisions about whether or not to continue one's efforts towards the goal. In this context, EWB should influence the duration of entrepreneurs' action – the persistence aspect of entrepreneurial motivation – by affecting their judgments of their progress.

Since one of the core components of EWB is general satisfaction with entrepreneurship, high EWB may translate into positive progress judgments. From that perspective, EWB constitutes a kind of cognitive-affective barometer, which suggests that people in high EWB states may have greater expectations that their current courses of action will result in successful goal attainment, while people in low EWB states may have greater expectations that their current courses of action will fail to achieve their goals. This means that entrepreneurs high on EWB may make more favorable progress judgments regarding their entrepreneurial goals, which makes them more likely to maintain their current course of action.

Moreover, in cases of high EWB states which are also characterized by strong positive affective experiences, entrepreneurs may tend to focus less on their progress and be less attentive to relevant feedback information, which may indirectly lead to greater persistence. Seo et al., on the basis of previous research, report that markedly high positive affect results in more cursory and unstructured information processing. On the other hand, states of negative affect have been found to foster more systematic and careful information processing. Thus, in contrast with high EWB states, low EWB may result in less persistence in goal-directed behavior, via greater awareness and attention to negative progress evaluations.<sup>60</sup>

**Conclusion.** EWB indirectly influences the direction, intensity, and persistence of entrepreneurs in their pursuit of entrepreneurial goals, via its

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<sup>60</sup> These hypothesized effects are most likely to occur in very high states of EWB, and may in fact lead to negative outcomes by interfering with sound judgment and decision making, which as stated previously are otherwise supported by EWB.

influence on a variety of relevant cognitive processes involved in conscious behavioral choices such as goal setting and goal pursuit. In particular, EWB may figure as a vital ingredient in the formation of goal commitment in entrepreneurship via its effects on the perceived desirability and expectancy of goal attainment. These effects are likely to be especially potent when the behavioral outcome or goal considered is related to some previous goal pursuit from which EWB has been generated by goal accomplishment. This may indicate that proximal affective phenomena such as EWB serve as important carriers of relevant information concerning potential means-ends combinations. This is supported by social cognitive learning theory, which posits that the most important antecedent of efficacy expectations is previous experience of success. Following similar logic, EWB may also have a strong effect on utility judgment, and hence on entrepreneurs' goal commitment.

#### **Direction, Intensity, and Persistence: Direct Effects of EWB**

While traditional theories of motivation, such as expectancy theory (Vroom, 1964) and the theory of planned behavior (Ajzen, 1991), typically focus on people's cognitions in explaining motivational processes in entrepreneurship, the fact that they routinely underestimate the effects of affective processes limits the scope of the understanding they can offer. This is largely due to their common yet unspoken assumption that motivation is mainly the result of evaluative and deliberative processes. As a result, entrepreneurship researchers fail to explain motivational phenomena in entrepreneurship that are not based on individuals' conscious decision-making processes.

As simple reflection on everyday life confirms, entrepreneurs often devise action plans and engage in them first, and think about or justify them later. This may be particularly common when they lack experience and a priori understanding of alternative action plans and their consequences, or when the entrepreneurial setting is uncertain but calls for immediate action, conditions that are encountered at some point or other by most entrepreneurs. In these situations, conscious deliberation is neither feasible nor valuable. On the other hand, affective experiences seem to play a central role in such motivational phenomena (Damasio, 2000; Zajonc, 1980).

For instance, variability in EWB states may directly impact individuals' action tendencies to approach or avoid their action plans (Cacioppo et al., 1999; Watson, Wiese, Vaidya, & Tellegen, 1999). Furthermore, variability in EWB may also influence individuals' dispositions to broaden or narrow their current thought-action repertoires (Fredrickson, 2001). Since positive EWB is partially the result of previous and current successful progress towards and/or attainment of goals, it may have an inherent promotive focus that is more likely to cause orientation towards pro-active behavior, even when such orientations are not mediated or controlled by discrete and conscious choice processes.

Moreover, EWB is likely to impact the effort expended on a given task, independently of current goal level or goal commitment. EWB captures an important aspect of the mental wellness of entrepreneurs, and thus, even if it does not involve an activated or highly aroused motivational state, it provides important energetic nutriment for recovery and coping. In support of this, recent studies indicate that experiences of positive affect can indeed restore or enhance the psychological resources needed for self-regulation (Tice, Baumeister, Shmueli, & Muraven, 2007).

Finally, EWB may offer self-regulatory benefits for persistence in entrepreneurial motivation. When entrepreneurs experience positive EWB from engagement in entrepreneurship, these affective experiences promote further commitment and engagement without requiring conscious awareness or control (e.g., Wegener & Petty, 1996). I call this extension of the affect or mood maintenance hypothesis into entrepreneurship the *entrepreneurial well-being maintenance hypothesis* (c.f., Isen, 2000b). Accordingly, once entrepreneurs experience positive affect from entrepreneurship, they will also tend to strive for this experience, and thus protect and maintain it by setting new goals and maintaining their efforts towards their long-term goals. EWB may thus operate as commitment device, helping entrepreneurs to sustain long-term strategies against superficially attractive short-term rewards (Frank, 1988). This also implies that: 1) in safe environments and situations, EWB will engender flexibility and open-mindedness, broadening the scope of attention and generating new goals; 2) in risky and dangerous situations, EWB will promote risk avoidance when the risk of loss is real and significant.

What this means is that entrepreneurs' efficacy expectations moderate, rather than mediate, the link between EWB and motivation. Accordingly, when efficacy expectations are high, the effect of EWB on expansive entrepreneurial motivation will increase. When efficacy is low, EWB will have a negative effect on expansive motivation. In sum, EWB creates motivational impulses that maintain or alter the course of action in order to maintain or achieve higher EWB, and this does not require any conscious awareness or control. In that sense, EWB may be the most fundamental activating and preserving factor fueling the entire entrepreneurial process, in that entry into new entrepreneurial activities may be triggered by entrepreneurs' attempts to maintain their current mental states of well-being. In other words, entrepreneurs, like all humans, are fundamentally striving for well-being and to continuously amend or maintain their well-being (Deci & Ryan, 2000). Once entrepreneurs have experienced well-being from engagement in entrepreneurial activities, they also tend to strive for this experience, and protect and maintain it whenever they judge this to be feasible.

#### EWB and Entrepreneurial Motivation: Cognitive and Affective Correlates

As a human disposition, motivation involves two dimensions or action tendencies: an intentional (cognitive) as well as an aroused and non-informative (affective and behavioral) motive (McClelland, 1985) to achieve a goal. In the realm of entrepreneurship, this translates into the forming of intentions and the activation of one's efforts towards 1) becoming an entrepreneur – entrepreneurship as a personal identity goal, 2) creating or growing a venture on the basis of a particular business opportunity, and 3) engaging in a distinctive set of entrepreneurial activities or lower-level behavioral goals which serve the two overarching goals above.

In the literature to date, entrepreneurial motivation has been commonly described and measured, rather than narrowly defined, as the intention or willingness to be(come) an entrepreneur, or self-employed (e.g., Bird, 1988;

Segal, Borgia, & Schoenfeld, 2005).<sup>61</sup> This has been considered from an institutional and socio-economic point of view (i.e., entrepreneurship and self-employment as a preferred career option). Although this definition is cognitively appealing, especially for the analysis of employment alternatives, it ignores a crucial phenomenological element of motivation: its energetic, activating, and procedural or enduring character. Only recently have entrepreneurship scholars begun to investigate motivation at the level of activity (i.e., entrepreneurship as a set of distinctive activities; Cardon et al., 2009). As a result, researchers have neither sampled relevant data nor made use of such data in measuring motivation in entrepreneurship.

The affective element of entrepreneurial motivation is conceptually imperative for our understanding of intended and actively engaged entrepreneurs' behavior and motivation. Aside from being an important indicator of the extent to which people have integrated into their psyche the entrepreneurial role and its associated behaviors, it captures more credibly their readiness to initiate and go through with their intended behavior. As such, it may be especially vital for our understanding and analysis of why some persist in entrepreneurship despite their (intentional) reluctance to do so, and why some, despite their good intentions, never actually activate their intended behavior.

But what does all this have to do with EWB? As I just proposed, EWB may impact entrepreneurial motivation both indirectly and directly, through cognitive as well as affective processes. As one might expect, the cognitive component of EWB, entrepreneurial satisfaction, is more likely to correlate with measures of entrepreneurial intention, which are more cognitive in nature, than with more affect-based measures of entrepreneurial motivation. However, motivation, which is likely to correlate strongly with the affective component of EWB, does not only rely on cognitive assessments. The wishes, desires, and interests of entrepreneurs are not constant, or always accessible for cognitive judgment. Often, they fluctuate from one moment to the next, as entrepreneurs succumb to an assortment of distract-

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<sup>61</sup> Entrepreneurial motivation has often been taken to be a single self-report measure of one's intention to engage in entrepreneurship, determined by attitudinal assessments of the desirability and feasibility of such engagement.

tions, temptations, and digressions. In all respects, EWB is predicted to positively correlate with affective and intentional measures of motivation.

### Conclusion: Effects of EWB on Cognitive and Motivational Processes

EWB provides both motivational nutriments for and important information about goal pursuit in entrepreneurship. Aside from its direct motivational consequences, one could say that EWB constitutes an affective and cognitive goal barometer for people to draw on in striving to achieve their entrepreneurial goals. For instance, when high, it may alert the entrepreneur to the fact that things are going well, and that the future looks promising. In turn, this both enables and motivates entrepreneurs to remain in entrepreneurship and enter into new entrepreneurial activities. On the other hand, when expectations to successfully accomplish future entrepreneurial goals are low, high EWB is likely to result in more cautious goal setting in relation to new entrepreneurial activities. Hence, such information serves as an important reference criterion which affects both actual motivation and the processes and outcomes of goal setting and goal striving in entrepreneurship. This can result either in conscious strategic behavior aimed at maintaining or amending well-being by engaging (or not) in such activities or opportunities, or cause entrepreneurs to be unconsciously and naturally oriented towards such activities or opportunities. Finally, EWB is likely to strengthen entrepreneurs' perceptual maps, and hence the resources and opportunities perceived by the entrepreneur. This is especially important for the setting of and striving towards long-term goals, which requires planning and mobilization of both psychological and social resources.

Section IV:  
Entrepreneurship and Well-Being:  
Perspectives and Theoretical  
Development



# Chapter 8

## Two Economic Approaches

The most serious attempts to theorize and investigate the link between entrepreneurship and well-being have been made by economists, not by entrepreneurship scholars. This is perhaps no surprise, given that entrepreneurship is an economic phenomenon, and that economists' focal point of observation is individuals' utility. Nevertheless, utility is not well-being, and entrepreneurship is still a relatively underdeveloped concept and research area in economics, even if it is gaining ground rapidly (Minniti & Lévesque, 2008; Parker, 2004, 2009). In fact, the entrepreneurship phenomenon has been studied by economists for several decades now, although their object of research has not been the (behavioral) process of new venture creation, but the more socio-economic concept of self-employment. The main purpose of this chapter is to review the two prevailing economic approaches to well-being and discuss their predictions with respect to entrepreneurship: the standard or instrumental economic approach and the institutional or procedural utility approach. These theories still represent the most comprehensive attempts to explain the well-being effects of entrepreneurship, and as such they constitute an important basis for comparison and further theoretical development of the link between entrepreneurship and well-being.

## A Standard Instrumental Approach

“Political economy or economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being. Thus it is on the one side a study of wealth; and on the other, and more important side, a part of the study of man. For man's character has been moulded by his every-day work, and the material resources which he thereby procures, more than by any other influence unless it be that of his religious ideals.” (Principles of Economics: by Alfred Marshall, 1890 [2004]: 13).

The great significance of entrepreneurship for the creation of national wealth was first formally recognized by Marshall in 1890. In his famous treatise *Principles of Economics*, Marshall asserts that there are four factors of production: land, labor, capital, and organization. Marshall believed that entrepreneurship was the driving force behind organization. By creatively organizing, entrepreneurs either create new offerings or amend "the plan of producing an old commodity". In order to do this, Marshall believed that entrepreneurs must thoroughly know their industries, and further be extraordinary leaders of their own organizations. Additionally, Marshall's entrepreneurs must have the ability to foretell market dynamics in supply and demand and the fortitude to act on such risky predictions even in the face of incomplete information. Like Mill, but unlike Baumol, Marshall proposes that the abilities of the entrepreneur are exceptional and scarce in society.

What we know today as neo-classic economics, the standard approach to economics, emerged around the turn of the century through the work of Alfred Marshall. Although the great significance of entrepreneurship for the creation of national wealth was first formally recognized by Marshall in 1890, he viewed entrepreneurship as synonymous with business management, and suggested that payment for this function could be seen as rent on ability (Swedberg, 2000). Marshall thus had little to say about entrepreneurship and the entrepreneur; but the fact that he considered economics to be a psychological science (Simon, 1979) is made evident by the opening words of his *Principles of Economics*, which are cited above. Marshall saw not only wealth but also man as the focal theoretical point of economics.

Interestingly, Marshall also considered both work (“his every-day work”) and wealth to be forces that shape a man’s character.

This makes it somewhat surprising that developments in economics since then have mainly focused on a single aspect of man: reason, in particular the application of reason to problems of wealth (Simon, 1979). As a result, traditional economic models based on the neo-classic approach, have come to take an all too simplistic and instrumental (i.e., outcome-oriented) approach to human well-being by equating it with individual utility conceived of as the net result of benefits and costs associated with instrumental outcomes and consequences. This standard approach suggests that people have preferences regarding various outcomes, and that these preferences are instrumental in the sense that people expect beneficial outcomes from their realization. Furthermore, while Marshall considers well-being to be the end of economic action, his concern with wealth attainment as the principal instrument to that end has had important implications for the relationship between economics and well-being. For example, many economists still make use of various wealth measures as an indicator for personal and societal well-being (e.g., GDP seen as global utility).

Following this line, traditional theories of entrepreneurial behavior have been primarily framed in terms of economic rationality, and the dominant definitions in the field of entrepreneurship are centered on the profit motive as the driver of entrepreneurial behavior (Casson, 1982; Shane & Venkataraman, 2000; Venkataraman, 1997). For example, according to the theory of opportunity recognition (Shane, 2000; Shane & Venkataraman, 2000), the entrepreneurial process begins with the perception of an objective opportunity, or a situation in which resources can be recombined through a new means-ends framework at a potential profit, and where profit is defined as the difference between the ex-post valued outcome of resource combination and the ex-ante cost of obtaining the resources. This notion of value has been recently complemented to encompass all sorts of preferences in terms of psychic income (Gimeno et al., 1997), but the underlying outcome perspective of utility maximization remains unchallenged. As a result, when these theories are applied to the decision to start up a new venture, people are assumed to make the decision to enter entrepre-

neurship when the sum of the expected *outcomes* weighted by their probabilities is larger than those of any available paid job.

There are two factors here that limit our understanding of the entrepreneurial payoff structure:

1. The assumption that individuals are both reactive and rational, in that they judge the consequences (i.e., the outcomes) of engaging in entrepreneurship as beneficial and act on their evaluation, does not match what we know about human nature as proactive and as at least rationally bounded. Problems concerning this assumption about individuals' rationality also relate to methodological problems in measuring individuals' motives and values, a process that relies almost exclusively on self-report surveys. These have been shown time and again to suffer from a number of methodological problems, particularly social desirability bias and extreme sensitivity to fluctuating circumstances (Bertrand & Mullainathan, 2001; Clarke, Kornberg, McIntyre, Bauer-Kaase, & Kaase, 1999; Maseland & Van Hoorn, 2009). Furthermore, this reliance on outcome-based measures overlooks people's appreciation of processes, thus:
2. The absence of any theoretical decoupling between outcomes and processes and between different classes of motives excludes the important differentiation between utility generated through conscious pursuit of various ends through the process of entrepreneurship, and utility generated by engagement in the process itself. Entrepreneurship is not only a vehicle *through* which one (rationally) fulfills one's aspirations and attains well-being. Regardless of the outcomes pursued, entrepreneurship is also a process in which one's intrinsic aspirations and well-being are met and built up. These issues will be discussed next.

## An Institutional Procedural Approach

“In judging what kind of a deal a person has in terms of the opportunity to pursue his or her own well-being, the concept of *well-being freedom* is, therefore, necessary, and its role cannot be subsumed by the observation of actual achievements of well-being. The autonomy of the agency aspect of a person, which has the effect of making WAIF [well-being attainments as informational foundation = i.e., an outcome-oriented conceptualization of utility] an inadequate basis for substantive moral reasoning, also has the result that the well-being aspect of a person must be seen in terms of freedom as well as actual achievement.” (Well-Being, Agency and Freedom: The Dewey Lectures: Amartya Sen, 1985: 203)

Happiness economists and economic philosophers have recently extended the notion of outcome utility to make it also encompass utility derived from processes (Benz & Frey, 2003, 2004, 2008ab; Sen, 1993, 1995, 1999; Nussbaum & Sen, 1993). In contrast to outcome utility, procedural utility centers upon the non-instrumental pleasures and displeasures of processes and is related to the process aspects of *well-being freedom*; the value that people derive from voluntarily engaging in a process in which they have meaningful choices (Sen, 1995). This kind of utility has, until very recently, hardly been included in economic and entrepreneurship theory or empirical research. Of course, individuals care greatly about attaining their desired outcomes; economics has produced a powerful theory to understand and predict human behavior on the basis of this observation. However, the idea and realization that attained outcomes may not be the only source of individuals' pleasure and satisfaction, and in turn not the only motivational mechanism determining peoples' choices and actions, was practically absent from any major analysis in the history of economic thought (Sen, 1995, 1997). This is unfortunate, and seems surprising given that Marshall himself mentioned the nature of “every-day work” as an important precursor of a man's character and psychology.

Aside from Sen's theoretical work on the capability approach, which centers on the idea that utility is also derived from individuals' freedom of choice, rather than merely from the actual attainments of their choices, research on the intrinsic value of processes has mainly been carried out in

other social sciences, especially by psychologists.<sup>62</sup> There, it has been observed that individuals experience the utility of their decisions (mainly in terms of positive affect) not only based on *what* the outcomes are or turn out to be, but also on *how* these outcomes were reached (e.g., Higgins, 2000, Kruglanski et al., 2002). For instance, regulatory focus theory (Higgins, 1998) suggestively postulates that another source of value or utility derives from the relationship or match between a person's orientation to an activity and the means used to strive for achievement in that activity, regardless of actual achievement. Also, the appreciation that people attach to fairness, or in other words to justice of procedures, valued as such, has been studied by Lind and Tyler (1988), Tyler (1990), and Tyler and Blader (2000). Most importantly, extensive theoretical and empirical research by positive (Csikszentmihalyi, Sheldon, Lyubomirsky, Seligman), humanistic (Rogers, Maslow, Goldstein), and social psychologists (Deci and Ryan) suggests that individuals thrive on processes and prefer independence over being subject to hierarchical decision making. For example, Ryan and Deci (2000) attribute an intrinsic value to doing things self-deterministically. Similar approaches attach utility to the actualization of human potential (Ryff & Singer, 2008) or to personal control (Grob, 2000; Peterson, 1999; Seligman, 1992). These approaches regard the possibility to progress and act independently as valuable in itself, in the sense that individuals valuing it do not necessarily expect better instrumental outcomes from it.

In line with Sen (1995, 1997), who has repeatedly argued that economic choice models should combine preferences for outcomes with those for processes, and that the notion of well-being freedom should complement the outcome-oriented approach to well-being as actual achievements, Benz and Frey were the first to empirically test whether individuals attach intrinsic value to processes and independence. Taking self-employment as an important case of independence, they showed that the self-employed do indeed derive more utility from their work than people employed by organ-

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<sup>62</sup> The earliest evidence for the phenomenon of pleasure from engagement was first acknowledged within experimental studies of animal behavior, where it was discovered that many organisms engage in exploratory, playful, and curiosity-driven behaviors even in the absence of reinforcement or reward (White, 1959). These spontaneous behaviors, although clearly bestowing adaptive benefits to the organism, appear not to be exhibited for any such instrumental reason, but rather for the positive experiences associated with exercising and extending one's capacities.

izations, irrespective of income gained or hours worked. This is an initial piece of evidence for procedural utility from engagement in entrepreneurship: people do not only value the outcomes achieved through their work, but also the (entrepreneurial) conditions and processes which lead to these outcomes.

However, Frey and Benz only provide indirect evidence for individuals' preference for self-determination, which is inferred from the observed differences in subjective well-being between self-employed and employees. In performing this work, they did not employ, nor did they fully investigate, the theory of self-determination upon which they draw their conclusions. Procedural utility does indeed represent a completely different approach to human well-being than the standard approach applied in economics, but we still need to know how entrepreneurship per se drives it (i.e., which entrepreneurial conditions and processes lead to procedural utility, aside from the value of independence).

There are at least four major issues here that directly limit our understanding of the entrepreneurial payoff structure:

1. The procedural approach as an economic theory equates well-being with global (life) or local (job) utility (i.e., satisfaction), but well-being as the presence of mental health is not simply utility as conceived by economists (Kahneman & Krueger, 2006; Kimball & Willis, 2006) although measures of it can give us valuable information about individual preferences.<sup>63</sup>

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<sup>63</sup> Evidently, the two concepts, although linked in understandable ways, are not one and the same concept; neither in the logical nor in the empirical sense. Utility as an economic concept is based on meeting one's preferences over other alternatives, and hence reflects people's choices, while well-being in the psychological sense involves having positive sensations, and thus reflects people's feelings. Of course, there is an important and illuminating connection between the two, as sudden positive or negative changes in feelings give pretty good indications as to what people might like or dislike. Furthermore, data on well-being can also be credibly and creatively used to reveal inconsistent preferences, such as when people choose to engage in activities that are inconsistent with some of their higher-order goals (e.g., the story of addiction). However, while the two are strongly related, in that meeting our needs, values, and goals, or in short, our preferences, is satisfying, individuals will often engage in dissatisfying arrangements for the sake of attaining some other, typically higher-order (e.g., moral) goals. This is not the same thing as being addicted, since in that case people come to regret their behavior in the long-run, whereas here people do not come to regret their choices (e.g., bringing their children into the world and rearing them). In fact, some

2. On the procedural approach, differences in well-being are assumed to be solely due to individuals' preferences for independence from employment hierarchy. Thus, the assumption that people are rational in that they judge the consequences (i.e., the processes as well as the outcomes) of engaging in entrepreneurship as beneficial and act on this evaluation remains unchallenged. Also, the procedural approach remains silent to the fact that many enter entrepreneurship not out of "choice" but due to necessity.
3. The procedural approach focuses on self-employment, and not on entrepreneurship; attaching value to being independent from an employment hierarchy rather than to the process of being self-organized in one's work. Indeed, many entrepreneurs work in organizations as employees (intrapreneurs), and are thus not considered self-employed. The procedural utility approach hence paradoxically attaches value to the entrepreneurship outcome of being independent rather than to the processes of entrepreneurship per se.
4. The procedural approach emphasizes a negative preference for employment rather than delving into the positive aspects of entrepreneurial engagement. While being free from limitations is valued in itself, entrepreneurship also allows one the freedom *to pursue, organize* and *do* things that would otherwise not be possi-

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of the problems involved in distinguishing between utility and well-being can be resolved by keeping the well-being concepts of satisfaction and affect separate (Weiss, 2002). Empirically, satisfaction and utility, unlike affective measures of well-being, are both cognitive measures that draw on similar information regarding individuals' choices (judgments about individual choices vs. judgments about meeting one's goals). However, since satisfaction is infected with positive affect (in that positive affect is likely to influence satisfaction reports), controlling for affect is one good method for using the concept of satisfaction as a more credible proxy for utility. This thesis has conceptualized well-being on the basis of the literature in psychology, rather than narrowly as a concept of individual utility. Among other things, this is beneficial, in fact necessary, for understanding the effects of entrepreneurship, not only as a preference-generated institution but as a self-organized, goal-directed, and socially dependent phenomenon, on individuals' mental health in terms of positive feelings and evaluations, as well as in terms of positive psychological functionings.

ble. Thus, the procedural approach does not exhaust the concept of well-being freedom as conceptualized by Sen.

These issues will all be addressed in the next three chapters, where three complementing approaches to entrepreneurship and well-being are discussed from the point of view of entrepreneurship as a unique self-organizational and goal-directed phenomenon rather than an institution. Whereas the first approach, the *self-organizational approach*, theorizes and predicts the well-being effects of entrepreneurship, the second approach, the *action phase approach*, theorizes and predicts the evolution of well-being along the entrepreneurial process; from processes of goal setting to goal striving and accomplishment. In other words, while the first approach looks at the variations in well-being between actively engaged entrepreneurs and non-entrepreneurs, the latter also considers the variations in well-being along the process of venture creation. In the third approach, I go beyond economic theory, and develop the *life goal and motive approach* to the entrepreneurial pay-off structure, by investigating the role of the individual in deriving well-being from engagement in the entrepreneurial process. By focusing on people's general aspirations and reasons for establishing their ventures, this agent-based perspective complements the first two approaches by theorizing on the within-level variations in well-being as they relate to individual volition.



# Chapter 9

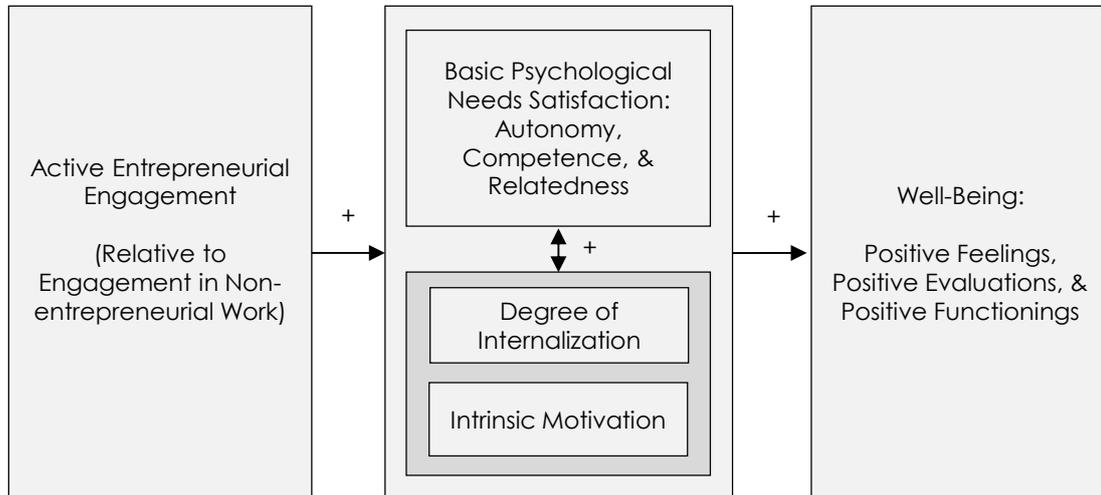
## The Self-Organizational Approach

The procedural approach presented in the previous chapter is inspired by the theory of self-determination (SDT) - reviewed in length in chapter 6 as an all-encompassing (macro) theory of human motivation, personality development, and well-being. However, by focusing on preferences and the self-employed, the procedural theory fails to integrate certain aspects of SDT that are relevant for understanding the link between entrepreneurship and well-being. To a significant extent, the procedural approach equates the sources of individuals' well-being with the *absence* of a condition, as differences in well-being are assumed to be solely caused by individuals' preferences for independence from employment hierarchies, rather than by the *presence* of opportunities to enjoy such freedom with psychological autonomy, competence, and relatedness, all of which are in turn supportive of overall mental health.

As a theoretical approach to entrepreneurship, SDT is especially suited to shed light on its payoff structure. Not every important pursuit in life or context of engagement promises optimal nutrients for individuals' innate tendencies and basic psychological needs. In that respect entrepreneurship, as a unique self-organized and goal-directed form of work (see chapters 2 and 3), is quite different from regular (i.e., non-entrepreneurial) employment in that it provides self-chosen activity-based experiences and continuous process-engagement, and puts particular emphasis on volitional and self-motivational behavior, which are need-satisfying to a greater extent than the activities of regular wage-taking. As predicted, this leads to greater intrinsic motivation from one's work engagement, greater internalization of

one's work into one's psychological profile, and greater well-being. This is illustrated in figure 9.1 below.<sup>64</sup>

Figure 9.1. A conceptual model of entrepreneurship and well-being



Since entrepreneurship is proposed to affect self-determination and basic psychological needs positively – compared to regular employment – entrepreneurs' are more likely to experience continuous well-being in their work than non-entrepreneurial employees.

In line with SDT, I develop these propositions below to argue that entrepreneurship, by virtue of being inherently a self-organized and goal-directed

<sup>64</sup> As we are dealing here with well-being effects from active entrepreneurship relative to engagement in non-entrepreneurial working alternatives, the well-being variable of concern here is *individuals'* overall well-being, composed of both subjective and psychological well-being, rather than entrepreneurs' well-being as such, which further includes the component of EWB. Intuitively, EWB may be a decisive factor underlying the proposed positive relationships between entrepreneurial engagement and well-being. Moreover, in agreement with SDT, I keep the three basic need satisfactions separated from the other measures of individuals' well-being (i.e., happiness or positive affective experiences, satisfaction, and subjective vitality), as discussed in chapter 4. Thus, although I consider satisfaction of the basic needs an important facet of individuals' overall well-being, I separate it from the other concepts in the overall causal structure of well-being. I will maintain this praxis in this chapter, when theorizing the well-being effects of entrepreneurship, and in chapter 11, which deals with the role of the individual in deriving these effects from the process of venture creation. Despite this separation, I still subscribe to the idea that the higher-order construct of well-being encompasses both the hedonic and the eudaimonic philosophies of well-being, by retaining the concept of subjective vitality as a positive psychological functioning and an affective measure of psychological well-being.

process, not only impacts individuals' well-being by entailing and satisfying freedom-value, as postulated by economists, but also, or perhaps mainly, by providing a meaningful and unique work-related context and opportunities to *actively* fulfill what SDT considers to be innate psychological needs. I postulate thereby, that entrepreneurship is more likely than regular employment to support and stimulate the fundamental need-satisfying experiences of self-organizing one's own approach to goal setting and goal striving, to learning and development, and to the formation of meaningful relationships at work, all of which positively affect individuals' well-being.

## The Self-Organizational Benefits of Entrepreneurship

### Effects on Psychological Autonomy

As mentioned in the previous chapter, research on the link between entrepreneurship and well-being within the procedural approach has traditionally taken a “negative” perspective, in which engagement in entrepreneurship (mostly considered as self-employment) is valued for its well-being freedom or procedural utility because it provides greater independence from managerial limitation and supervision, and respite from being constantly evaluated. However, the crucial difference which distinguishes entrepreneurship from regular employment is its emphasis on individual volition and self-organization (Frese, 2009; Shaver & Scott, 1991), rather than the fact that it doesn't subject the individual to any employment hierarchy.

Consequently, while the procedural approach is important in the way it reveals some of the benefits of entrepreneurship, it has nonetheless led to a narrow focus on autonomy, as an inferred preference or value in itself, rather than on feelings of freedom and subsequent need-satisfying behaviors. There is also still very little evidence beyond mere inference that entrepreneurship does indeed lead to well-being, and further that such an effect is mediated by feelings of personal autonomy, rather than by cognition as in the case of autonomy-based motives (e.g., Benz & Frey, 2003, 2008ab).

In sum, being free from employment constraints is one thing, but being free to do what one aspires to is another; entrepreneurship does not simply entail relative freedom from employment constraints, but more importantly, it gives people freedom of agency to begin with; the freedom to self-engage and further have feelings concerning other aspects of the human condition such as being competent and belonging.<sup>65</sup> Thus, I propose that the prevention of the former and the promotion of the latter makes entrepreneurship a unique human activity, which is likely to result in greater feelings of agency – of actions being experienced as self-chosen and meaningful, as opposed to as the results of coercion or pressure (deCharms, 1981).

### Effects on Psychological Competence

Aside from its effects on psychological autonomy, entrepreneurship is also more likely to lead to greater feelings of personal mastery and competence, or core self-efficacy, than regular wage-taking activities. By facilitating and encouraging the conditions for self-organized behavior, entrepreneurship results in more opportunities to learn and enhance one's competence and capabilities, and to utilize one's skills in a manner that suits one's own interests. On the other hand, the reality faced by most employees is one in which the breadth of and opportunities for such experiences are limited by the extent of instrumentality (extrinsic motivation), the scope, and routineness of their jobs.

Learning and developing capabilities (i.e., human capital) is a key process of entrepreneurship. However, researchers have predominantly studied the ways in which previous learning impacts entrepreneurship, e.g., through know-how and efficacy beliefs, without studying the bidirectional nature of this effect.

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<sup>65</sup> Indeed, even in situations where engagement in entrepreneurship is not strictly self-chosen such as when it is instructed by the upper management of an existing corporation, it nonetheless entails fundamental features of self-organization. The extent of delegation of discretionary power to entrepreneurial teams in existing organizations supports this postulation. In other words, entrepreneurship, which is uncertain and goal-directed by nature, necessitates active agency, whether it is strictly self-selected or not.

Entrepreneurship also entails active engagement in personal goal pursuit to an extent that regular employment does not. This alone explains why it offers meaningful mastery experiences more frequently. Furthermore, since it necessitates broader skill utilization and a continuous learning process, which are vital for feeling effective and able rather than ineffectual and inept (White, 1959), entrepreneurship is likely to result in greater feelings of competence. For instance, starting up a new business certainly entails engaging in a more challenging set of goals and activities than that typically encountered in the average employment situation. Thus, entrepreneurs, relative to non-entrepreneurs, seem more likely to continuously and pro-actively set and pursue moderate to high difficulty goals, to learn, and to develop their core competence and well-being.

In sum, the procedural, dynamic, and challenging nature of entrepreneurship causes it to impact well-being through its effects on psychological competence, which is directly connected to our innate need for mastery of the environment, as well as to well-being.<sup>66</sup>

### Effects on Psychological Relatedness

Finally, entrepreneurship is also likely to lead to a greater feeling of connectedness to or harmony with others, as opposed to alienation or marginalization (Baumeister & Leary, 1995). Perhaps the first to have made this connection in practice were the Muslims, who maintained that commerce was first and foremost a branch of sociability, conducted not mainly for monetary profit, but for the pleasures of human contact (Zeldin, 2012). While the previous two need-satisfying experiences have been discussed before, albeit mainly indirectly as mediators of the link between self-employment and work satisfaction, this third type of experience has neither been articulated in theory nor studied empirically. Thus, there is call for a more systematic and elaborative effort to outline the theoretical basis of the

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<sup>66</sup> Note that the self-efficacy theory (Bandura, 1977, 1982) stands in sharp contrast to the idea of a need for competence, which implies that the experience of competence in and of itself is a source of satisfaction and a contributor to well-being, over and above any satisfaction resulting from the outcomes that competence might yield (Deci & Ryan, 2000).

claim that entrepreneurship is better suited than regular employment for satisfying individuals' need to relate to others in a meaningful way.

Primarily, entrepreneurship entails a greater freedom to build up a social network and to interact with individuals that one chooses to have (or not have) around.<sup>67</sup> Irrespective of whether entrepreneurs choose the people who match their personalities the best or not, they make the choice themselves, and are hence more likely to be motivated to invest in and maintain the relationships that they form. Thus, the benefit is both attributional and factual, in that entrepreneurs are more likely to engage with people who are good fits for their personality profiles. Additionally, entrepreneurs are more likely to feel a sense of belonging and connectedness than the average non-entrepreneurial worker, as they have greater opportunities to impact the lives of others, and witness the effects of this. This is due firstly to the social-business aspect of venture creation, which entails meeting the needs of others; and secondly to the greater responsibility entrepreneurs assume for their co-workers and employees through their positions as leaders of organizations.

On the basis of these primary mechanisms, and due to the very nature of the venture creation process, entrepreneurs are more likely to receive and ask for the help of others when implementing and realizing their ventures. Indeed, most instances of entrepreneurship are produced by the efforts of teams. While many employees do perform work in teams, entrepreneurs are more likely to work in close and self-deterministic teams, in which success is strongly contingent on the work of the other members of the team. In contrast, employees in non-entrepreneurial positions are encouraged to assume both independence from and competitive attitudes towards others in many work settings. It is unfortunate that many organizations contribute to and sustain the habit of competitive thinking. Many positions and organizational rewards are only open to a few, so that any individual's success represents the failure of another. This can often result

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<sup>67</sup> Readers may ask "but how much are you relating to someone if you choose to not have them around?" In answering this one should bear in mind the relational costs that individuals can evade when they have the freedom to decide whom NOT to work with.

in envy, which is closely related to this sort of competition in the work place.<sup>68</sup>

This means that the autonomy of the entrepreneur leads to a positive state of inter-relatedness with others, but it seems likely that access to this state would be more limited for individuals entangled in the contortions of employment. Thus, the nature of entrepreneurship entails higher interdependence on other people, in the sense that entrepreneurs always need others to achieve their goals, but at the same time, it entails freedom from the scrutiny of others, and from competition and rivalry with one's co-workers.

Last but not least, the increasing number of positive portrayals of entrepreneurs in the media, along with the spread of western (autonomy-related) norms and values through TV and social media, may bode favorably for entrepreneurs; both for the actual formation of their relationships and for their perceived social standing. Entrepreneurs are likely to be most admired where freedom is most highly valued, because enterprising is an instrument of freedom that enables people to create and organize their own approach to work. To the extent that people also value other people's attempts at self-determination, entrepreneurship is likely to be more beneficial to relatedness than regular employment.

In sum, entrepreneurship involves activities and procedures with strong links to human beings' innate needs for competence, autonomy, and relatedness, and thus is likely, as hypothesized here, to promote a greater sense of intrinsic motivation and fulfillment of basic need satisfaction, which in turn results in greater well-being. And while entrepreneurs are subject to a variety of difficulties as they go through a demanding entrepreneurial process, both in the social context and in isolation, and in the temporal interactions between the two, entrepreneurship nonetheless involves volitional and self-organized processes that are beneficial for well-being, as well as the opportunity to transform the experience of wage-earning into a meaningful personal goal.

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<sup>68</sup> Both Robert Nozick (1974) and Bertrand Russell (1930) differentiate between jealousy and envy. While jealousy refers to desiring what another has because he has it, and being indifferent to the object if the other does not have it, envy entails the preference for neither person having the desired object over not having it while the other does! As such, envy is a destructive force, while jealousy can at times be a positive force that drives achievement.

## Final Comments and Propositions

Drawing on SDT, the self-organizational approach advanced here suggests that engagement in entrepreneurship impacts individual well-being not by meeting a preference, as postulated by the procedural approach, but by supporting psychological autonomy, competence, and relatedness. In other words, it provides opportunities and activities for self-determination and the experience of freedom, for learning and feeling competent, and for feelings of interrelatedness with others, all of which support continued well-being. In accordance with the *entrepreneurial well-being as a resource perspective* developed previously (see chapter 7), these progressive tendencies and this well-being reinforce entrepreneurs' motivational and cognitive resources, supporting and enabling persistent and pro-active entrepreneurial actions. This entrepreneurial theory of self-determination extends on previous results by proposing that the accumulation of these three types of experiences over time leads to an increase in longitudinal well-being.

In making this proposal, I assume that individuals assess their current well-being at least in part with reference to experiences that they can recall from the relevant past (Kahneman, 1997). If they have had a relatively large number of affectively positive experiences, then they will tend to give higher ratings of well-being than otherwise (Diener et al., 1991b). I further assume that experiences characterized by feelings of task competence, autonomy, and interpersonal relatedness are exactly the positive experiences on which people base their judgments of current well-being, because, as postulated by SDT, humans have innate needs for these sorts of experiences. According to SDT and a vast body of empirical work, greater satisfaction of basic psychological needs also incites *intrinsic motivation*, supports effective *internalization* and *integration* of activities and external motives into the self, and leads to the development of more *self-concordant behaviors* (Sheldon & Elliot, 1999) – all of which are beneficial for positive functionings and well-being. This implies, among other things, that entrepreneurs may be more passionate about their work-related engagement, more intrinsically motivated and committed, and generally more integrated in their endeavors. In my opinion there isn't just a narrative, but also the beginning of empiri-

cal evidence in support of this; however, no direct and systematic examination of this effect has been carried out so far.

To conclude, in developing the self-organizational approach, I claim that entrepreneurship, as an active pursuit of personal goals and a self-organized work-related phenomenon, supports to a greater extent the fulfillment of individuals' innate needs for competence, autonomy, and relatedness than regular employment. Each of these needs refers to a particular positive feeling. Competence refers to the feeling that one is able rather than inept (White, 1959); autonomy refers to the feeling that one's behavior is self-chosen and meaningful (deCharms, 1981); and finally, relatedness refers to the feeling that one is connected to or in harmony with others (Baumeister & Leary, 1995). Each of these types of experience provides distinct "psychological nutriment" (Ryan, 1995) that sustain human well-being. I propose that these effects are direct mediators of the link between entrepreneurship and well-being. I postulate the following propositions:

*Proposition 1:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' feelings of competence.

*Proposition 2:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' feelings of relatedness.

*Proposition 3:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' feelings of agency and freedom. Thus:

*Proposition 4:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' well-being. This is mediated by satisfaction of the three basic psychological needs.



# Chapter 10

## The Action Phase Approach

The self-organizational approach developed in the previous chapter examined specific positive features of entrepreneurship as active goal engagement, which, in line with the theory of self-determination, is argued to support individuals' basic psychological needs and well-being. However, the nature of entrepreneurship as unfolding over time, which is a crucial aspect of its payoff structure, remains unexplored. As a goal-directed process, entrepreneurship is a temporal and emotional experience of venture creation (Morris et al., 2012; Schindehutte et al., 2006). While contemporary entrepreneurship research is based on the process perspective (Baron & Shane, 2007; Davidsson, 2012b; Gartner, 1988; Shane & Venkataraman, 2000), relatively little is known about the emotional elements that come into play as the venture takes form and evolves. We know very little about how and why well-being evolves throughout the process of venture creation. What is it like to plan a venture, and to be on the verge of starting it up? What is it like to embark on the creation of a venture and to be in the moment as it takes shape? What is like to be a business owner running and developing an established venture? Next, informed by the work of Gollwitzer and colleagues, I theorize and suggest a set of propositions concerning how these different action phases of entrepreneurship impact the well-being of those involved in it, both relative to each other and to employees not engaged in any phase of the process.<sup>69</sup>

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<sup>69</sup> Also, in this chapter my focus is on *individuals'* overall well-being rather than on EWB. This is because my main interest here is not to investigate variations in EWB among actively engaged entrepre-

## Effects on Well-Being throughout the Process of Goal Striving

While there are no doubt a multitude of idiosyncrasies within the process of venture creation, the entrepreneurial experience shares a number of common characteristics with the way the venture creation unfolds and is experienced.<sup>70</sup> Below, informed by Gollwitzer's (1990) action phase model, subsequent research on self-regulation, and the theory of mindsets (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012; Gollwitzer & Bayer, 1999; Gollwitzer & Sheeran, 2006; Taylor & Gollwitzer, 1995), I will explore and propose ways in which the various goal striving phases of the venture creation process (see chapter 3) are associated with well-being experiences.

I start with the pre-decisional phase of goal setting, but quickly move on to predicting the well-being effects of the preparational phase of the process, in which individuals – intended entrepreneurs – have already formed (i.e., committed to) the goal of starting up their ventures.<sup>71</sup> This is equivalent to the pre-entry stage, in which individuals have set the goal of establishing their ventures in the relatively near future, have started planning how to do so, but have not yet begun to accomplish gestation activities or taken the final steps to create their venture.<sup>72</sup> Following this, I will discuss how well-being is affected by the actional startup phase of imple-

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neers, but rather the effects of entrepreneurship as a temporal and goal-directed process on working individuals' well-being in general. Surely, the role of EWB may be an important explanatory factor for the proposed effects of engagement on well-being.

<sup>70</sup> Research on affective event theory (Weiss & Cropanzano, 1996) refers to a stream as “a series of episodes that have a coherent thematic organization” (Beal et al., 2005). In an entrepreneurial context, streams could include the distinctive phases of venture creation; each involves unique activities, demands, and events. AET argues that events are the proximal causes of affective states, and these states have important outcomes, particularly in work contexts. Deliberation and planning to start up a new venture, embarking on the idea of creating a venture, and running and managing an established business all represent dominant and unique aspects of entrepreneurship.

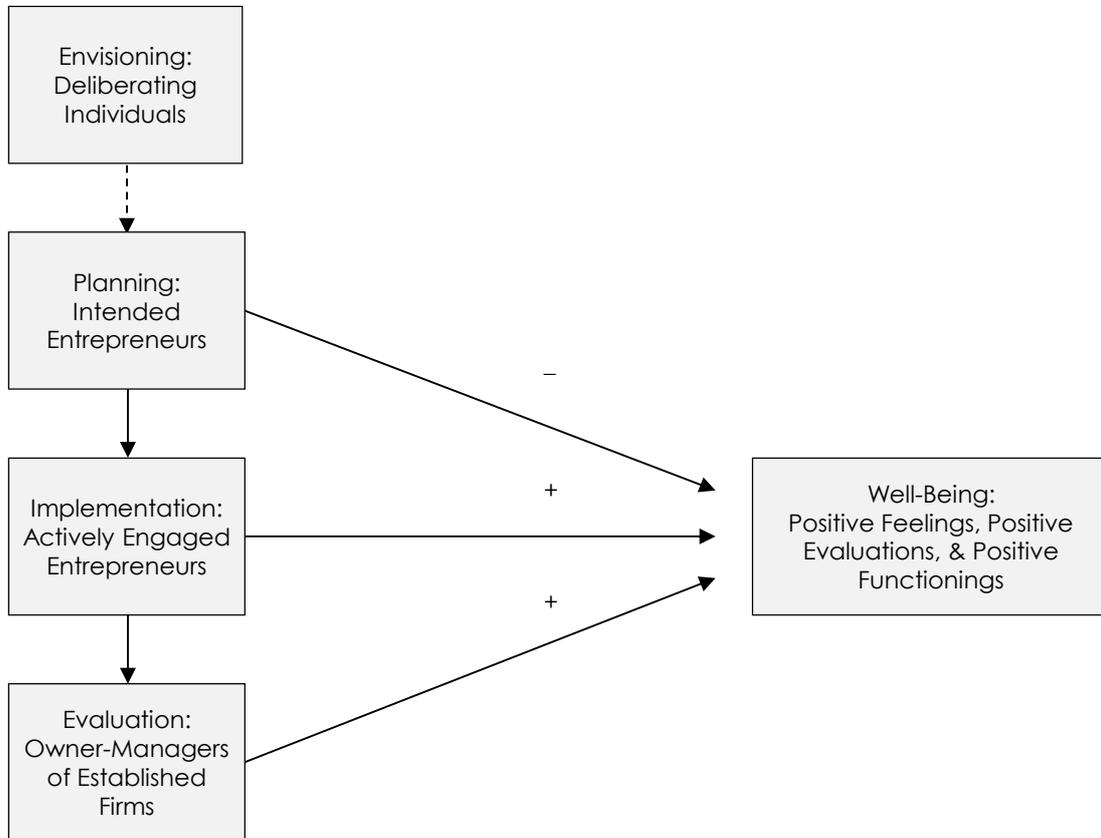
<sup>71</sup> This is in line with Katz and Gartner (1988), who proposed individuals' intentionality, evident by their stated goal to start up their venture, as the starting point for examining the venture creation process. In particular, the inclusion of intentionality is central for regarding the pre startup phase as an important element of the entrepreneurial process.

<sup>72</sup> Intended or future entrepreneurs are usually modelled as having the intention to start up a venture in the next three years, by reporting current plans to do so (Reynolds et al., 1999).

mentation, in which the enterprise is enacted and established, and the post-actional phase, which represents the end of the venture creation process.

Briefly stated, I argue that whereas active engagement and goal accomplishment in entrepreneurship are greatly supportive of well-being, although the underlying components of well-being may differ, the downside of entrepreneurship resides in its early inception in deliberation and planning. However, as deliberation may fail to be induced during the pre-decisional phase of envisioning, partly due to the complexity of assessing the entrepreneurial terrain, positive fantasies and illusions may be the driving mechanisms behind the formation of one's intention to enter entrepreneurship, and coupled with a lack of attention to potential obstacles. While that alleviates the cognitive load of deliberating endlessly before making one's choices, it is plausible that deliberation continues into or even starts in the planning phase, as individuals begin to realize what the actual demands of entrepreneurship are. This delay of the deliberative mindset into the goal striving process of planning (represented by the dashed line in figure 10.1) is likely to reduce intended entrepreneurs' well-being significantly. All in all, these rather general predictions are illustrated in figure 10.1 below (I will refrain from proposing any concrete relationships between envisioning the goal of venture creation and well-being).

Figure 10.1. Well-being along the venture creation process as a goal-directed behavior



When engaging in entrepreneurship, and when creating a venture, people usually go through the following processes: envisioning and evaluating the idea, planning and preparing for implementation, implementing and persisting until the goal is achieved, and reflecting over and evaluating their progress.

### The Pre-Decisional Phase: Envisioning and Deliberation

Early on in the development of the action phase model, Heckhausen and Gollwitzer (1987) found that intense involvement with the task of selecting among few major options, such as enrolling at graduate school or not, creates unique cognitive procedures (mindsets) which are necessary for successful completion of the task. Drawing on insights from the early 20th century German psychologists of the Wurzburg school, they demonstrated

that individuals who are engaged in active deliberation become more open-minded and receptive to diverse ideas and thoughts, which allows them to process information regarding feasibility and desirability more objectively and impartially. In support of this, in the same study, they found that relative to those who plan the implementation of the chosen option, people who deliberate over it also experience a reduced cognitive load, which allows them to be mindful about assessing their abilities and preferences. They called this cognitive characteristic (orientation) the *deliberative mindset*.

The effects of the deliberative mindset were further documented in a series of subsequent studies (Taylor & Gollwitzer 1995). Reduced self-impressions and optimism, and heightened vulnerability to risk and negative affect were all found to be associated with a deliberative mindset, arguably fostering non-illusory or more realistic estimations when attempting to decide whether a given action goal will be fruitful or likely to succeed.<sup>73</sup> In other words, by reducing positive affect and promoting non-illusory self-evaluations, the deliberative mindset optimally supported the transition from the pre-decisional action phase into the post-decisional phase of planning for action.

But do we have sufficient reasons to expect similar patterns to hold in the context of entrepreneurship? In my opinion, while we should expect something fairly similar from deliberation over engagement in entrepreneurship, this process of deliberation may not necessarily coincide with the process of envisioning and selecting into entrepreneurship. Due to the complexity and uncertainty of the entrepreneurial process, the deliberative mindset may fail to kick in during the pre-decisional phase, and individuals may prefer to follow their positive fantasies by focusing on the positive likely outcomes of their projected behaviors without properly contrasting them with realistic assessments of the requirements for bringing these outcomes about. Rather, I argue that deliberation over whether or not to engage is very likely to drag on into the planning process, where it can act as mental barrier towards effective implementation of the goals of intended entrepreneurs’.

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<sup>73</sup> Experiences of positive affect ought in theory to be supportive of more accurate, more elaborative, and more divergent thinking (Isen, 2000a, 2001), and several studies suggest that a similar function is performed by lower-activated negative affect (Bindl et al., 2012; Taylor & Gollwitzer, 1995).

Perhaps, a general failure to exit the deliberative mindset may be the explanation for why so many of those who have formed the intention to start up a venture end up never moving beyond this stage. This may be the rule rather than the exception, as it is in many other instances of goal pursuit and behavior in achievement contexts. As indicated by recent longitudinal efforts to examine these issues in entrepreneurship (e.g., Reynolds, 2000; Van Gelderen et al., 2015), the emergent evidence seems to indicate that it is equally true of this domain that a large portion of those who have reported being in the process of planning their upcoming startup will fail to move beyond these initial intentions.<sup>74</sup> This is also supported by evidence revealing the overoptimistic nature of those involved in entrepreneurship and the high failure rates of entrepreneurial projects. In the short run, these self-serving illusions may lead to positive affective experiences and the formation of goal intentions, but they may ultimately result in disappointment and failure to move beyond one's goal intention (Oettingen, Pak, & Schnetter, 2001). Also, and more severely, they can cause severe inertia in which doubt and deliberation haunts those who are planning to start up their ventures. The reason for this may, in part, be that entrepreneurship is complex and uncertain, but is portrayed as a lucrative work-related domain.

### The Post-Decisional but Pre-Actional Phase: Planning for Implementation

After forming their intention to enter entrepreneurship and create a venture, people move into the post-decisional but pre-actional phase of the process. The phenomenon associated with this phase is planning, and its task is to promote the initiation of the startup process by producing relevant plans for action. The entrepreneurial planning process usually involves answering fundamental questions such as when to start, where to start, how to start and with whom, and potentially, how long to act, but also other

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<sup>74</sup> This is something which I have documented myself in my longitudinal data collection. Surely, it is likely that some individuals will exhibit more chronic assessment or state orientations (Kruglanski et al., 2000; Kuhl, 1992) which aggravate the problem of continuous deliberation even after the goal has been set. Individual differences in self-regulatory orientation are thus likely moderators of the more general negative link between the post-decisional but pre-actional phase of planning and well-being.

more evolved questions such as what service and product to offer, where to find resources and how to assemble them, as well as a battery of if-then questions (Gollwitzer defines them as implementation intention questions).<sup>75</sup> Planning is fundamental to entrepreneurship, since venture creation typically cannot be achieved in a single step. It is complex, the opportunity and/or resources might not be available or sufficiently developed yet, and one is also very likely to be engaged in other activities that need to be completed first.<sup>76</sup>

In contrast with the deliberative mindset of the pre-decisional phase, Gollwitzer and colleagues found that the planning phase is typically characterized by a supportive *implemental mindset*. Unlike the deliberative mindset, the implemental mindset has been found to be associated with a cognitive orientation towards information that favors initiation of action on the one hand, and a reduced receptivity to irrelevant information on the other (Achtziger & Gollwitzer, 2008; Gollwitzer & Bayer, 1999; Taylor & Gollwitzer, 1995). In support of that, Gollwitzer and colleagues found that people in an implemental mindset were, as predicted, more close-minded to irrelevant information, and more attuned to information that favored action initiation and shielded against postponement. In facilitating these tendencies, some of the more notable observations include the positive effects that the implemental mindset had on individuals' self-assessment of invulnerability to risk, self-esteem, and positive illusions of control, which were in turn all associated with heightened positive affect.

Thus, optimistic judgments of feasibility and partial (i.e., positively biased) analyses of desirability information, as well as heightened positive affect and positive self-assessment in general, are beneficial and expected to follow from this mindset in fueling goal-directed motivation towards active initiation of the startup process.<sup>77</sup> However, while this local production of

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<sup>75</sup> Note that the extent to which one expects to accomplish all these relevant behaviors determines the outcome of the goal setting process. Thus, without the capacity to plan, reports of feasibility assessments such as self-efficacy are useless in that they draw on irrelevant information.

<sup>76</sup> Some will have formed their goal to enter entrepreneurship before any concrete opportunity to establish a venture has been created or discovered. To the extent that the opportunity is sufficiently envisioned, it will enable a more rigorous planning process that is more likely to result in implementation intentions (behavioral goals) and goal activation.

<sup>77</sup> In other words, intended entrepreneurs are likely to exhibit over-optimistic tendencies, something which has been previously demonstrated by entrepreneurship scholars (Baron, 1998), although it has been

positive affect and positive self-evaluations is essential for progress along the evolutionary nature of the goal process, this does not imply that entrepreneurial planning as such has any positive impact on individuals' overall well-being; only that it may be positively moderated by the likely effects of the implemental mindset on cognitions related to well-being, such as optimism and other self-impressions.<sup>78</sup> In fact, there are several reasons to expect planning to start a venture to have a negative overall influence on well-being; some of which involve a failure of the implemental mindset to dominate over continuous deliberation and high cognitive load.

Since venture creation is a major and complex personal goal, which entails evolving and dynamic decision making, deliberation is especially likely to occur during the planning process. As one becomes more and more familiar with the nature of the venture establishment process through planning, the goal set may be questioned and reexamined. In addition to this, the act of planning to start up a venture places the individual in a state of deliberation over a host of other necessary and complex lower-order goals (e.g., which opportunity to pursue in establishing the venture). Moreover, since venture creation is both demanding and uncertain, and rich in novel stimuli, the cognitive processes of planning for it and assessing its implementation might further result in greater cognitive load, and thereby lower well-being. This is in fact a unique marker of entrepreneurship as a personal goal involving great complexity and inherent uncertainty.

All in all, continuous deliberation over potential engagement is thus likely to have negative effects on well-being experiences, which may further be accompanied by strong approach/avoidance conflicts when the decision to commit is made. Given that most people who set the goal of starting up a venture are concurrently involved in alternative and competing activities, they are likely to experience recurrent deliberation, indecisiveness and tension, which may negatively affect their well-being. Moving on to the planning phase thus requires heavy deliberation. Even if people enter the planning phase with an identified or perceived opportunity in mind (this is

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regarded as more of a burden than a facilitating condition. The difference is that the current approach does not arrive at this conclusion through a trait-based explanation of selection bias.

<sup>78</sup> If this is true, individual assessments of optimism and self-efficacy would be expected to positively moderate the impact of planning on well-being.

likely to be the case, as having an opportunity settled in mind probably has a positive effect on the outcome of goal selection/setting), the tasks still facing the individual at this stage are converting this into a concrete venture idea, forming an entrepreneurial team, and more often than not, seeking the approval and resources of external stakeholders such as investors. It is therefore during this stage that intended entrepreneurs are likely to encounter demanding conditions and have to perform a series of deliberations.<sup>79</sup>

Mindset theory maintains the separation between the deliberative and implemental mindsets for good reason (see Gollwitzer & Bayer, 1999), but it remains likely, on the basis of this reasoning, that individual planners experience mental fluctuations between the two during the planning stage. This is because planning the intended execution of the venture creation process involves finding solutions for a wide set of concerns that impede positive affective experiences. In other words, the hierarchical nature of people's goal system is not being taken into consideration by action phase researchers, despite its seemingly crucial role in major personal strivings of this kind.

Moreover, as intended entrepreneurs have already set their goal, but have not yet actively started striving to meet it, they are more likely to experience lower levels of satisfaction as a result of the discrepancy between their actual conditions and their ideal aspirations or feelings of obligation and commitment to achieving the goal. In general, this negative association is likely to be moderated by the amount of time spent in a state of planning.<sup>80</sup> As a final point, the reality faced by many intended entrepreneurs is likely to involve strict limitations and constraints to their autonomy, as they need to raise capital to start up their ventures, and are otherwise dependent on their success in convincing others of the merit of their budding ventures. This is likely to result in lower measures of psychological well-being, as intended entrepreneurs are not as free to self-organize their own approach to work.

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<sup>79</sup> A potential remedy to this problem may be found in the “planning before committing” strategy.

<sup>80</sup> Indirectly, it is possible that intended entrepreneurs' lower well-being is reflective of their current position, indicative of their willingness to move into entrepreneurship in order to amend their well-being. If indeed entrepreneurship has such a pre-venture experiential impact on well-being, we would expect a reduced negative effect on well-being after controlling for both work status and satisfaction.

### The Actional Phase: Implementation and Enactment (Goal Progression)

Moving from the planning phase to the active challenge of building up one's venture entails a radical shift of context, and hence of cognitive, affective, and behavioral processes. The phenomenon associated with this phase of the process is enactment, and its task is to implement and bring one's action plans into completion. Fundamentally, it is in this stage of the venture creation process that individuals need to actively mobilize their mental, physical, and social resources in order to progress and accomplish their goal of establishing the business. Solving this task requires the individual not only to be pro-active but also persistent, and shield goal progression against various disruptions (e.g., social, cognitive), because any interruption threatens to postpone goal achievement. Since venture establishment is a long-term project, the individual will have to deal with repeated interruptions and possible setbacks. According to Gollwitzer (1990) and Achziger and Gollwitzer (2008), such a situation elicits an *actional mind-set* associated with Csikszentmihalyi's "flow experience" and Wicklund's "dynamic orientation", which are conceptually linked to intrinsic motivation and eudaimonic feelings of vitality.<sup>81</sup> As this is a situation which promotes constant motion, an increased level of experiential involvement is thus to be expected.

From a functional perspective on human well-being and self-regulation (Vittersø et al., 2010), eudaimonic feelings are likely to be produced in order to facilitate change and growth, and to motivate behavior in challenging environments (especially when a quick return to a previous equilibrium state is dysfunctional, such as in entrepreneurship).<sup>82</sup> As evident from the early works of Lewin (1926) and colleagues (e.g., Mahler, 1933; Ovsiankina, 1928), once an intended goal pursuit has been initiated, interruptions do not typically lead to withdrawal, but rather to a resumption of the respec-

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<sup>81</sup> It should be noted nonetheless that unlike the theoretical incongruity between the deliberative and the implemental mindsets, the implemental and actional mindsets exhibit congruity and similarity, and until recently they were also treated as one and the same (Gollwitzer & Bayer, 1999).

<sup>82</sup> In contrast, the adaptive role of hedonic feelings is to regulate stability and homeostasis in human systems, and hence, these feelings are created in states of equilibrium or assimilation.

tive behavior, which is an indication of the potent presence of the actional mind-set and of ego strength. This is also supported by Kruglanski et al. (2000), who observed, by making people feel engaged in implementing courses of action, a strong correlation between elicitation of locomotion and feelings of vitality.<sup>83</sup> This also aligns with recent research on pro-active goal regulation in which strong links between self-initiation of activities and feelings of vitality have been observed; in general (Bindl et al., 2012) as well as in entrepreneurship (Hahn et al., 2012). The implementation phase may thus in itself energize the entrepreneur in order to regulate goal accomplishment effectively. Previous research in entrepreneurship supports this by noting the passion involved in venture creation (Cardon et al., 2009).

Aside from this, starting up a venture, especially for first-time entrepreneurs, entails a process of self-initiation, and a rapid process of learning and becoming independent. From the standpoint of the self-organizational approach discussed above, moving into entrepreneurship and establishing one's own venture also entails a strong and rapid shift in the experiences of competence, relatedness, and freedom that is unique to entrepreneurship. This is directly connected with the procedural and motivational approaches developed above, and I will not repeat the arguments given earlier here. It is sufficient to say that, since active engagement in entrepreneurship is likely to elicit both heightened flow-like experiences and need-satisfying experiences by supporting self-determination, individuals actively engaged in entrepreneurship are likely to experience higher relative measures of both subjective and psychological well-being.

Active establishment places great demands in terms of time and effort on any entrepreneur, which may result in stress, and further jeopardize leisure and time with the family. Thus, we may speculate that this phase is associated with higher levels of psychological well-being, more affective-laden well-being (subjective vitality), and lower cognitive well-being (satisfaction) compared to equivalent phases in management of more established ventures. In fact, for those actively engaged entrepreneurs this higher sub-

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<sup>83</sup> In contrast with assessment orientation, locomotion constitutes the aspect of self-regulation that is concerned with movement from state to state and with committing the psychological resources that will initiate and maintain goal-related movement in a straightforward and direct manner, without any undue distractions or delays (Avnet & Higgins, 2003; Kruglanski et al., 2000).

jective vitality might be what mediates the impact of entrepreneurship on measures of subjective well-being. In all then, this phase in the venture creation process is likely to be associated with higher feelings of eudaimonic well-being such as subjective vitality. Moreover, since nascent entrepreneurs have achieved the goal of entering the process but not the superordinate goal of establishing one's venture, they are likely to display greater satisfaction than intended entrepreneurs, but lower satisfaction than established business owners.

### The Post-Actional Phase: Reflection and Evaluation (Goal Accomplishment)

Once their venture is established, entrepreneurs will gradually move into the reflective phase of the entrepreneurial process. The phenomenon associated with this phase of the process is evaluation, and its task is to assess what the individual has achieved, and determine whether further action is necessary. This is done by comparing the intended outcomes with the actually achieved outcomes (e.g., Carver & Scheier, 1990). Supported by the *evaluative mindset*, the post-evaluation process thus includes motivational questions related to goal setting such as the following: whether the standards envisioned were successfully achieved, whether continuing in the current direction is attractive or not, or feasible or not, whether to step up efforts (growth), or whether to disengage altogether from running the business, etc. Aside from in the cases of serial and identity-seeking entrepreneurs, a successful venture creation will transition into a more stable phase of running and developing the venture, and maintaining the entrepreneurial vision. Established business owners are thus more likely to experience their entrepreneurial goals as being satisfied, as the goal of venture creation is to establish and run a business.

Thus, having created their businesses and attaining their goals, owners and managers of established firms may enjoy higher subjective well-being (mainly in the form of life satisfaction). Moreover, besides the effects of goal attainment, running one's own enterprise also promises optimal nutrients in terms of fulfilled basic psychological needs. Unlike regular employment, running one's own venture provides the absence of supervision,

control, and strict employment hierarchy, and hence is more likely to result in need-satisfying experiences. Surely, owners or managers of established firms are also likely to enjoy activity-based experiences and continuous process-engagement, albeit to a lesser degree than those who are actively engaged in the startup process. Unlike actively engaged entrepreneurs they are less prone to self-organization and more pre-disposed to organization-by-management, and otherwise more constrained by the routines of established organizations. In sum, the effects of entrepreneurship on well-being for those involved in the process seem to be positively correlated with a gradual progression in the entrepreneurial process, as individuals move from a phase of deliberation and planning to implementation and optimization of their ventures.<sup>84</sup>

### The Mere Exposure Effect

An alternative explanation to the theoretical observations above regarding the gradual increase in well-being that may occur with progression through the venture creation process is the *mere exposure hypothesis*. The mere exposure effect is a psychological phenomenon by which people tend to develop a preference for things merely because they are familiar with them. In social psychology, this effect is sometimes called the familiarity principle. The scholar who is best known for developing the mere-exposure effect is Robert Zajonc. Before conducting his research (1968), he observed that exposure to a novel stimulus initially elicits a fear/avoidance response from all organisms. Each repeated exposure to the novel stimulus causes less fear, and more of an approach tactic by the observing organism. After repeated exposure, the observing organism will begin to react fondly to the once novel stimulus. This observation led to the research and development of the mere-exposure effect which predicts that people will exhibit greater positive affect for more frequently occurring objects. According to Zajonc, the mere-exposure effect can occur without any conscious cognition, and "preferences need no inferences". People evaluate novel stimuli positively

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<sup>84</sup> Much like deliberation, post-actional evaluation is purely cognitive (unlike planning and enacting), and hence difficult to observe directly. The assumption that owners of established firms are thus located in this action phase is of course a simplification.

as a function of frequency of exposure – without intention or conscious control. The mere exposure effect suggests that preferences are changed unconsciously, as a function of experience, so that what we like is more a function of what we have experienced than of what we think we like. A meta-analysis of 208 experiments found that the mere-exposure effect is robust and reliable, with an effect size of  $r=0.26$  (Bornstein, 1989). In entrepreneurship, the mere exposure hypothesis predicts that the effects on well-being of engagement in the venture creation process, as long as they are not immediately harmful, will become gradually more positive as one progresses in entrepreneurship. Having set their goal to enter the process, intended entrepreneurs are like the person who is about to move to a new country. He plans when, where, and how he will do it, and potentially for how long. While somewhat insecure prior to implementing his planning, shortly after the move, he begins to fear his new environment less, and like it more. This is equivalent to entrepreneurs growing accustomed to their roles and tasks.

## Final Comments and Propositions

In fact, the effects of mere exposure work in parallel with and are clearly anticipated by SDT, which portrays humans' internalization as a naturally occurring disposition towards well-being. However, SDT differentiates between various "preferences". Accordingly, not all intentions and goals are compatible with humans' innate needs, and repeated exposure to contexts that are supportive of individuals' basic psychological needs for autonomy, competence, and relatedness is more likely to engender higher affective well-being. Since entrepreneurship is a process of self-organization, and since SDT emphasizes the value of being self-determined, a gradual exposure to entrepreneurship, rather than to employment, enhances well-being. Overall, increasing familiarity with entrepreneurship, which is essentially supportive of individuals' innate psychological needs, induces positive affect through mere exposure. The theoretical development offered by the action phase approach supports this gradual enhancement of well-being, as entrepreneurs gradually move from the pre-venture creation phase to more advanced phases of entrepreneurship.

On the basis of the theoretical development above, I postulate the following propositions:

*Proposition 5a:* Planning to start up a business results in significantly lower measures of well-being compared to being employed, owning and managing an established firm, and/or actively being engaged in entrepreneurial activities. If true, then:

*Proposition 5b:* This expected negative well-being effect of planning is weakened by the likely presence (mediation) of the implemental mindset, which positively influences well-being through its positive effects on individual optimism and self-efficacy evaluations.

*Proposition 6a:* Being actively engaged in the startup process, and/or owning and managing an established firm, results in higher measures of well-being compared to being employed and/or planning to start up a business. If true, then:

*Proposition 6b:* The expected positive well-being effect from being actively engaged is mediated by the likely presence of the actional and implemental mindsets, which positively influence well-being through their positive effects on optimism and self-evaluation.

*Proposition 7a:* In comparison to actively engaged entrepreneurs, owners of established firms experience higher life satisfaction, but lower subjective vitality. Furthermore:

*Proposition 7b:* The expected positive well-being effect of being the owner manager of an established firm is fully mediated by positive evaluations of one's work being indicative of the post-actional evaluative mindset.



# Chapter 11

## The Life Goal and Motive Approach

The previous two approaches to studying the effects of entrepreneurship on well-being focused on the self-organizational and temporal characteristics of entrepreneurship and their psychological and behavioral effects. As discussed previously in this thesis, inquiries into the entrepreneurial payoff structure should not only consider the distinctive well-being effects *of* entrepreneurship but also the more proximal factors and processes that impact well-being *in* entrepreneurship i.e., the well-being effects within entrepreneurship that are mostly evident in, though not restricted to, the phenomenon of entrepreneurial well-being (EWB).<sup>85</sup> Indeed, the questions of whether, how, and why entrepreneurship influences individuals' well-being are separated from, although related to, the question of who benefits from entrepreneurship, or in other words, the question of what impacts and supports well-being in entrepreneurship, as well as why, and how its effects can be amplified.

As reviewed in chapter 6, while much research has been conducted into the causes and correlates of well-being, and thereby also into the effects of phenomena related to entrepreneurship on well-being, only a few contribu-

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<sup>85</sup> As in the previous two chapters, my main focus here is on *individuals'* well-being, rather than on EWB. This allows the inclusion in the analysis of intended entrepreneurs, for whom EWB is more restricted in scope, as they have not yet entered into active engagement. Thus, while the discussion below could easily be extrapolated to the case of EWB as such, focusing on overall well-being allows for a more comprehensive examination of well-being variations in entrepreneurship, although it is still very likely that differences in overall well-being between people engaged in entrepreneurship will reflect differences in EWB.

tions in the field of entrepreneurship research have looked into the causes of well-being in entrepreneurship, and then exclusively in terms of satisfaction (Cooper & Artz, 1995; Bradley & Roberts, 2004), and no research at all has been done on how to enhance well-being in entrepreneurship (very little work in any field has focused on ways to reliably enhance well-being. See: Sheldon & Lyubomirsky 2006ab). In the organizational work literature, more work has been done on the link between work and employees' well-being, but few researchers have specifically investigated how to enhance well-being in the workplace (for a review, see Cotton & Hart, 2003; Harter, Schmidt, & Keyes, 2003; Page & Vella-Brodrick, 2009).

In order to bridge these gaps, I propose *the life goal and motive approach*. By focusing on people's choices of life goals (Kasser & Ryan, 1993, 1996) and their reasons for establishing ventures (Carter, Gartner, Shaver, & Gatewood, 2003; Shaver & Scott, 1991), this entrepreneurial perspective is intended to explain variations in well-being as they relate to individual volition. Here, unlike in my investigation of the two approaches presented in the preceding chapters, I will be considering the role of the individual, rather than that of entrepreneurship, in impacting her own well-being in the process of venture creation.

This is an important contribution. Motivational models of entrepreneurship typically start from the assumption that the strength of one's intention to enter entrepreneurship determines goal attainment, which in return results in some desired state. Indeed, theorizing and empirical work on motivation in entrepreneurship seems to converge on the idea that forming an entrepreneurial intention is the key motivational act that promotes venture creation (e.g., Krueger, Reilly, & Carsrud, 2000; Shepherd & Krueger, 2002). Although there is accumulated empirical evidence in support of this idea, there is also an emerging body of evidence indicating that initial intentions do not directly translate into action (Delmar & Davidsson, 2000; Reynolds, 2000; Van Gelderen et al., 2005).

In the previous chapter, the *action-phase approach* identified some of these difficulties as inherent in the nature of entrepreneurship and its conative process (Emmons, 1989; Little, 1993; Sheldon & Elliot, 1998); in other words, they were attributed to a failure in the motivational sequence, which typically begins with the inception of a goal, and continues through a peri-

od in which plans are made and then implemented, and goals are attained or abandoned. The life goal and motive approach developed in this chapter touches on these problems, but emphasizes the role of the entrepreneur instead, and suggests that such failures are attributable in part to the motives and life goals that individuals hold in their goal pursuit.

## Effects on Well-Being from Life Goals and Entrepreneurial Motives

Self-determination theory was introduced in chapter 6 as a broad theoretical approach to human motivation, personality development, and well-being. On its basis, the self-organizational approach was developed in chapter 9, where it was argued that entrepreneurship has self-determining features, and allows individuals to self-organize their behavior, which has a range of positive implications for basic psychological needs and well-being. But as in SDT, self-organized goal pursuit is not the only important precursor of individuals' well-being. Central to SDT is the notion that the ways in which individuals enact their basic needs are further reflected in their stated reasons or motives for engagement, and in their stated life goals or aspirations (life goals and aspirations are used interchangeably by SDT researchers).<sup>86</sup>

SDT predicts that if the life goals that individuals hold, the motives they have for action, and the ensuing behavior are all consistent with intrinsic needs, this will lead to greater well-being. If they are not, as when people

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<sup>86</sup> Surely, aside from life goals and motives, there are other individual and contextual contingencies worth taking note of. Briefly speaking, when SDT is extrapolated into entrepreneurship, the theory further implies that individual features such as (perceived) entrepreneurial opportunities, activities, and other individual contexts that support psychological autonomy, competence and relatedness may incite intrinsic motivation, support effective internalization and integration of activities and external motives into the self, and lead to greater motivation and well-being. To the extent that individuals are successful in finding such opportunities, initiating such activities, and working in such supportive contexts, they will experience positive well-being in entrepreneurship and show greater persistence in their efforts. Nevertheless, circumstantial factors such as these are likely to be overridden in their explanation of well-being both by psychological and intention-related factors (Lyubomirsky et al., 2005b). On this basis, I develop the life goal and motive approach in entrepreneurship, taking individuals' motives for engagement and the life goals they hold as two important antecedents or acts of will in the causal structure of motivation and well-being in entrepreneurship.

engage in entrepreneurship because it offers a means to greater wealth and status, the theory predicts a deterioration of personal well-being. However, these general theoretical observations concerning the importance of intrinsic motives and intrinsic life goals seem at odds with implicit assumptions that people pursue entrepreneurship primarily for extrinsic financial reasons. For instance, people must strive for profit in order simply to “stay in the game”. So while entrepreneurship is an act of volition which seems to offer greater opportunities for individuals to pursue intrinsic goals than other employment alternatives, the venture creation process must abide by the institutional rules and demands of the market, if only in order to gain legitimacy and survive (Aldrich, 1999).

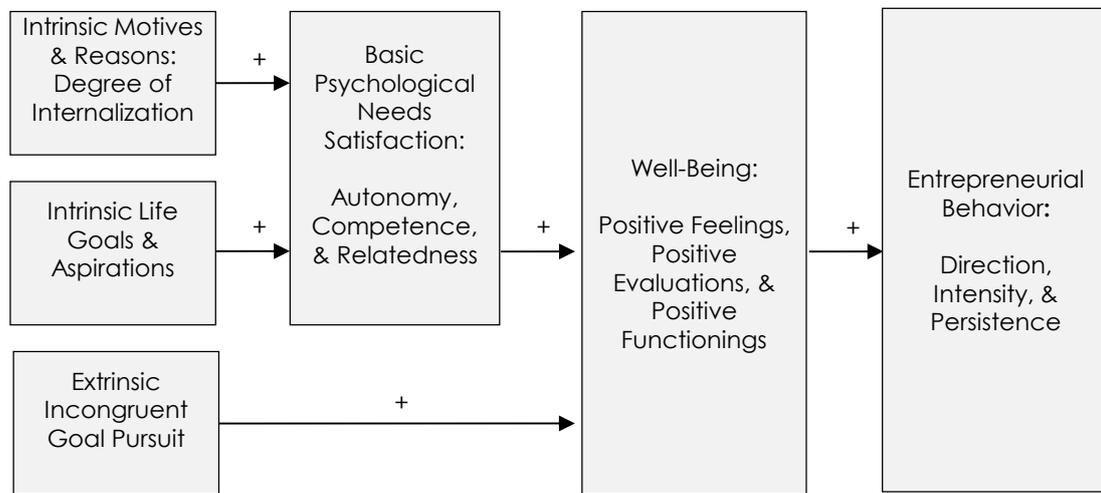
Entrepreneurship thus seems to grant a challenging and intriguing context in which to test two dissimilar, and so far incompatible, perspectives on the implications of people’s motives and life goals for their well-being and goal-directed behavior. On the one hand, drawing on SDT, the extent to which intrinsic needs are reflected in people’s motives and life goals is expected to have a positive influence on individuals’ well-being in entrepreneurship. On the other hand, other research finds that motives and life goals are not in themselves generally adaptive or maladaptive (Bianco, Higgins, & Klem, 2003; Sagiv & Schwartz, 2000; Walsh & Holland, 1992). Instead, the relation between people’s motives, achievements, and adjustment is assumed to depend on the match or fit between people’s life goals and the motives that are emphasized and encouraged in their direct environment (Pervin, 1968; Schneider, 1987). This viewpoint is commonly referred to as “the match perspective” (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Vansteenkiste, Timmermans, Lens, Soenens, & Van den Broeck, 2008).

Indeed, individuals across various stages of the process may experience several incongruities between their life goals and the specific motives they have for their entrepreneurship (or for some particular entrepreneurial activities). For instance, some may aspire to create social relationships, but engage in entrepreneurship because of their financial appetite. But does this matter? Research on the match perspective has shown that progress towards motive-congruent goals is indeed related to well-being while the pursuit of motive-incongruent goals is well-being reducing (Brunstein,

Schultheiss, & Grässman, 1998). Thus, unlike SDT, which holds motives and life goals to be separate conceptual entities, the match perspective emphasizes the relationship between these two classes of goals. Accordingly, when individuals experience misalignment between their aspirations and their entrepreneurial motives, they will experience lower well-being in entrepreneurship. Consequently, argues the match perspective, it is not just the individual constructs of aspirations and motives, but rather the relationship between the two in the goal system that matters most.

Entrepreneurship thus provides an excellent context in which to test and potentially combine these two theoretical approaches. While the two approaches have so far been studied in contrast to each other, the theoretical development below shows that the two may in fact complement each other in ways that are consistent with SDT. Specifically, I argue that extrinsic incongruity is compatible with well-being in entrepreneurship. When people experience an extrinsic incongruity or discrepancy, they are likely to experience heightened well-being in entrepreneurship, while the experience of an intrinsic discrepancy should not result in this positive outcome. The resulting model is outlined in figure 11.1. I now turn to presenting these arguments in greater detail.

Figure 11.1. Life goals and motives in entrepreneurship



The model is combined with the *entrepreneurial well-being as resource perspective* developed in chapter 7. Accordingly, intrinsic relative to extrinsic life goals and entrepreneurial motives, and extrinsic relative to intrinsic incongruent goal pursuit, both support continuous well-being in entrepreneurship, which in turn positively influences peoples' continued motivation and persistence in entrepreneurship.

## Entrepreneurial Motives

The most important theoretical and empirical motivational constructs within SDT are extrinsic and intrinsic motivation. SDT holds that these two types of motivation represent or are evident in two qualitatively different types of motives or reasons for goal-directed behavior, and are often studied as the “why” of individuals’ goal pursuit (Carver & Baird, 1998; Deci & Flaste, 1996; Deci & Ryan, 2000).<sup>87</sup> Whereas extrinsic motivation is reflected in one’s motives for engaging in an activity in order to obtain an outcome or a reward contingent upon, but separable from, the activity itself, intrinsic motivation refers to engaging in an activity for its own sake, simply because it is challenging, interesting, enjoyable, satisfying, and meaningful. For instance, starting up a venture in order to create personal wealth or out

<sup>87</sup> In fact, both existential and humanistic thought has highlighted the importance of reasons for actions as crucial aspects of will. SDT has integrated this into its theoretical credo.

of a sense of obligation to one's family are examples of extrinsic motivation, but starting a venture because it constitutes an opportunity for personal growth is a case of intrinsic motivation. Intrinsic motivation represents an autonomous or self-determined type of motivation, while extrinsic motivation is non-autonomous, and controlled by the constraints or rewards associated with the behavior it relates to. Theoretical accounts of intrinsic and extrinsic motivation propose that these two kinds of motivation are in opposition with one another (e.g., extrinsic motivation can crowd out intrinsic motivation, or the imposition of external control on an activity can generate intrinsic motivation for the activity); although it is conceivable for the two motivations to coexist in alignment with each other (Amabile, 1993, 1997). Over the past four decades, a broad array of evidence from various fields of research has indicated that across many domains, intrinsic motivation is associated with several beneficial outcomes such as creativity, proactivity, well-being, and more persistent and effective task performance (Amabile, 1996; Deci & Ryan, 1991, 2008; Nix, Ryan, Manly, & Deci, 1999; Shalley, 1991; Sheldon & Houser-Marko, 2001). According to SDT, intrinsic motivation causally determines these beneficial outcomes.

### **Effects of Intrinsic and Extrinsic Motives on Well-Being in Entrepreneurship**

In accordance with SDT, I claim that entrepreneurial motives which reflect individuals' basic psychological needs (i.e., intrinsic motives) are more likely to match individuals' core values and enduring interests (Sheldon & Elliot, 1998, 1999) and hence positively affect their well-being. Successful outcomes in entrepreneurship typically require substantial work and devotion. People are likely to encounter both opportunities and obstacles along the process of establishing their ventures. Their ability and interest to synthesize emerging values and demands, and to incorporate them into the self – as evident by the extent to which they hold intrinsic entrepreneurial motives – should hence be likely to increase the well-being they experience during that process. The more intrinsic their motives are, the more intrinsically engaged they will be, and the greater the degree will be to which they internalize and integrate into their selves the entrepreneurial role and its

associated values and activities. Consequently, they will be more likely to enjoy context-specific need-satisfying experiences that enhance their well-being along the process.

First, people who pursue venture creation for more intrinsic reasons are likely to have spent more time engaging in self-chosen and meaningful behaviors. This is because many of the activities involved in starting up a venture (e.g., choosing a location, a product offering, or co-workers) reflect the evolving interests and personal values of the individual. As a result, intrinsically motivated individuals are more likely to experience themselves as autonomous and free in their decisions. Second, those who hold intrinsic motives for engagement are likely to experience curiosity and interest for the venture creation process as borne out by their intrinsic goal pursuit, and are hence likely to learn more effectively from establishing their ventures. All in all, they are likely to experience themselves as more effective and competent with respect to their entrepreneurship than those who pursue venture creation for more extrinsic reasons. Third, creating new business activities requires healthy and effective relations to important stakeholders. Those pursuing venture creation for more intrinsic reasons ought to display more intrinsically oriented pro-social behavior (Sheldon & Kasser, 1998), and be less likely to alienate others in the process. Furthermore, since the pursuit of entrepreneurship for intrinsic reasons often entails helping others or the community (e.g., social entrepreneurship), those who seek to create their ventures for these reasons are likely to feel more connected with other individuals and/or with the broader social community. And being more likely to feel free in their decisions to collaborate with others, they are also more likely to establish satisfying relationships with them.

On the other hand, when people hold more extrinsic reasons for establishing their ventures, and engage in entrepreneurship for the sake of prestige, fame or material gains, they primarily regulate their behavior by orienting themselves towards social controls and reward contingencies, and thus achieve a lower degree of integration with their core selves (Sheldon & Elliot, 1999). According to SDT, the effects of this should be negative in terms of well-being. In sum then, when people are more intrinsically motivated in their goal pursuit, they should experience higher well-being, relative to the extrinsically motivated.

## Life Goals

While the concepts of intrinsic and extrinsic motivation have been the focal theoretical concepts of SDT for understanding the well-being aspects of individuals' goal pursuit, people's life goals or aspirations have also been accorded theoretical significance in that respect (Kasser & Ryan, 1993, 1996). On the basis of humanistic (Maslow, 1943; Maslow, Frager, Fadiman, McReynolds, & Cox, 1970) and existential theories (Fromm, 2013), early theorizing by SDT researchers differentiated between extrinsic life goals, such as wealth, image, and public recognition, and intrinsic life goals, such as relatedness, personal growth, and community contribution. Similarly to the case of intrinsic motivation, intrinsic life goals are assumed to reflect people's innate tendencies towards growth and well-being, and are characterized by an inward orientation towards one's "true self" (Sheldon & Elliot, 1999). On the other hand, when people pursue extrinsic life goals, they tend to adopt an outward orientation (Williams, Hedberg, Cox, & Deci, 2000) – that is, they focus on impressing others by garnering external signs of self-worth (Vansteenkiste, et al., 2008). This means that individuals' stated life goals or aspirations represent another aspect of how they enact their basic psychological needs for competence, autonomy, and relatedness. In SDT, intrinsic and extrinsic life goals represent the "what" of individuals' goal pursuit (Deci & Ryan, 2000).

Over the last two decades, researchers working within the SDT framework have shown that the type of life goals held determines which psychological and motivational outcomes are to be expected. Most notably, an emphasis on extrinsic life goals such as wealth, fame or image, has been shown to be directly related to poorer task performance and psychological well-being, and has even been causally linked with anxiety and depression in some cases (Kasser & Ryan, 1993, 1996; Ryan et al., 1996). In contrast, intrinsic life goals such as intimate relationships and personal growth are consistently associated with greater task performance, intrinsic motivation, and psychological well-being (Kasser & Ryan, 1993, 1996). Further, studies have shown that fulfillment or thwarting of the different types of life goals result in the increase or decrease, respectively, of growth and well-being. Specifically, progressing towards and attaining intrinsic goals has positive and en-

during effects on well-being, while the attainment of extrinsic goals does not, and can in fact even lead to negative affective experiences (Easterlin, 2010; Kasser & Ryan, 1996; Niemiec, Ryan, & Deci, 2009). Apparently, although extrinsic goal pursuit might provide some satisfaction, this type of satisfaction is likely to be derivative and short lived, because extrinsic goal pursuits do not directly satisfy individuals' basic psychological needs (Kasser, 2002; Kasser, Ryan, Couchman, & Sheldon, 2004).

### **Effects of Intrinsic and Extrinsic Life Goals on Well-Being in Entrepreneurship**

People who strive to create new business activities – like all humans – are aspiring by nature. Surprisingly, this obvious human orientation has been neglected by entrepreneurship scholars. Research has not tackled the questions concerning peoples' world views and aspirations in entrepreneurship, or how they drive entrepreneurship and affect the well-being of those involved in it. In keeping with SDT, I claim that these qualitatively different types of life goals have effects on well-being distinct and separate from those of entrepreneurial motives. Relative to extrinsic life goals, intrinsic life goals are likely to strengthen well-being by directing attention and efforts to relevant information and activities supportive of basic need satisfaction in entrepreneurship.

Thus, in line with SDT, life goals and motives are assumed to reflect two different motivational concerns, and should be understood separately as regards their effects on individuals' well-being. For instance, an intended entrepreneur may value altruism and friendship more than anything else (i.e., holding a strong intrinsic life goal orientation) and at the same be engaged in entrepreneurship for markedly extrinsic reasons, such as impressing external stakeholders or creating wealth. In fact, to a great extent, the extrinsic context of entrepreneurship, in which individuals are controlled by the demands of the market, promotes extrinsic goal setting.

On the other hand, even in cases where extrinsic aspirations lead individuals into entrepreneurship, the pursuit that follows can be largely intrinsically motivated by the pleasure of starting-up one's venture. And although life goals and motives are held to be strictly independent of one another in their impact on well-being, I argue that since life goals represent more en-

during aspects of the personality, they at least partially and causally influence individuals' stated motives for behavior. For example, an individual who values relationships more than other things in life is more likely to hold motives that are relational in nature.<sup>88</sup> In sum, on the basis of SDT, I suggest that individuals with higher intrinsic aspirations are likely to display greater well-being in entrepreneurship, regardless of whether or not those aspirations are attained. Furthermore, I expect independent effects of motives and life goals on well-being, as well as a partial mediation effect.

### The Match Perspective

Although life goals and motives are positioned on different motivational levels within the same goal system, and hence, as is argued by SDT, should be understood and examined separately for their effects on well-being, SDT researchers have typically underplayed another important feature of goal systems: their interconnectedness in terms of consistency or congruence. An approach that has made this its sole theoretical focus is the *match perspective*. In contrast to SDT, the match perspective suggests that the impact on well-being depends not only on the types of life goals and motives that people hold, but also on the discrepancies between the two. The study of match or congruence is represented in a broad array of fields in psychological research (e.g., Brunstein et al., 1998; Edwards, 1991; Higgins, 1987, 2000; Locke et al., 1994; Ostroff, Shin, & Kinicki, 2005). However, most of this work concerns the examination of a person/environment match in goals (e.g., Vansteenkiste, et al., 2004; Vansteenkiste, et al., 2008), and little attention has been paid to life goal/motive discrepancies (Sagiv & Schwartz, 2000). A discrepancy between life goals and motives for entrepreneurship captures the internal tensions between what individuals aspire to in life and the reasons they hold for starting up their business. For instance, an entrepreneur can value working for his community (i.e., have an intrinsic life goal), but engage in entrepreneurship for extrinsic reasons, such as impressing others or accumulating financial wealth. Such incongruences may be common. The survival of a business depends on meeting the

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<sup>88</sup> This link is direct. If I value X in life I am more likely to enact behavior with X as the dominant motive. This also suggests that motives mediate the impact of values on various other outcomes.

demands of the market, which constitutes an extrinsic motive. This is the case independently of the entrepreneur's life goals. Thus, the match perspective suggests that the impact on well-being depends not only on the types of life goals and motives held, but also on the relation between the two.

According to the match perspective, individuals may experience an overall decrease in well-being when their life goals are at odds with their motives for engaging in entrepreneurship. First, people with motives for engagement in entrepreneurship that match their life goals are better positioned to translate goals into plans, to carry out plans, and hence to attain goals. Second, the internal discrepancies that people experience when their life goals are in conflict with their entrepreneurial motives are also likely to result in internal conflict, which forestalls well-being. When individuals experience a discrepancy, they face internal conflict because their own personal goal orientation does not match the motives they have for engaging in entrepreneurship. This may in turn cause stress and negative affect from engagement.

However, given the assumptions underlying SDT, such an agnostic perspective is difficult to uphold. More specifically, I argue that these assumptions about the effects of discrepancies need to be balanced by considering the type of discrepancy in question.

### **Effects of Matching on Entrepreneurship**

Intrinsic and extrinsic motives and life goals form two distinctive matching conditions: intrinsic match (as reflected by the degree of similarity between stated intrinsic life goals and stated intrinsic motives) and extrinsic match (as reflected by the degree of similarity between stated extrinsic life goals and stated extrinsic motives). Each matching condition can take one of two forms. For instance, there are two types of intrinsic match in entrepreneurship: (a) high match: when people who personally value intrinsic life goals also hold intrinsically stated motives for their engagement in entrepreneurship (i.e., high scores on both life goals and motives), and (b) low match: when people who don't personally value intrinsic life goals do not primarily have intrinsic motives for engaging in entrepreneurship (i.e., low scores on both life goals and motives).

According to SDT, high intrinsic matchers should benefit more, and display the greatest integration of these well-being enhancing motivational concerns into the self, while low matchers should incur the greatest costs, and display the least integration of these intrinsic concerns. Thus, since both intrinsic concerns are important, and do not otherwise constitute any obstacle in entrepreneurship, it follows that the motivational value of intrinsic incongruity (i.e., a mismatch) lies somewhere between these two internal matching conditions in terms of well-being.

Similarly, a match in extrinsic concerns could be either high or low. SDT implies that high extrinsic matchers should incur the greatest cost to their well-being, and display the greatest integration of these motivational concerns, which are generally costly in terms of well-being. However, while low matchers, in general and in line with SDT, would be expected to benefit from not integrating these motivational concerns, it is questionable whether ignoring extrinsic concerns is actually beneficial in the domain of entrepreneurship. Thus, since some extrinsic motivational concerns are in fact needed in entrepreneurship, extrinsic discrepancy may actually be associated with greater well-being than extrinsic match (whether high or low). It follows that relative to intrinsic discrepancy, which signifies the existence of a problem in integrating these motivational concerns into the self, extrinsic discrepancy is likely to display greater positive motivational value in terms of well-being, as it represents a way of dealing with the extrinsic demands of entrepreneurship without fully integrating these motivational concerns into the self.

Thus, although experiencing a life goal/motive discrepancy might typically be considered a bad thing, the effects of extrinsic discrepancy are actually contingent on the context of one's goal engagement. As some extrinsic concerns are actually beneficial in domains such as entrepreneurship, even though they are generally considered harmful by SDT, it follows that relative to intrinsic life goal/motive discrepancy, extrinsic discrepancy should have greater positive effects on well-being in the domain of entrepreneurship.

## Final Comments and Propositions

The currently widespread emphasis on cognitive theories of motivation in entrepreneurship research has resulted in the replacement of (innate) needs (Deci & Ryan, 2000; Maslow, 1943) with the concept of intentions as the dominant motivational forces in our understanding of entrepreneurship (Bird, 1988; Krueger et al., 2000).<sup>89</sup> This theoretical orientation has led entrepreneurial psychologists to explore the psychological value of entrepreneurs' career goals (Gimeno et al., 1997), their expectations for attaining them (Chen et al., 1998; Kuratko, Hornsby, & Naffziger, 1997; Venkataraman, 1997), and the cognitive mechanisms that keep them moving towards their selected goals (Shane et al., 2003). Their focus has thereby shifted to the cognitive and motivational processes of goal setting (e.g., goal-directed efficacy, or goal commitment) rather than to the *volitional* processes behind the goal striving processes (e.g., intrinsic motives and life aspirations).

Consequently, contemporary motivational theories haven't considered the roles played by the type and content of the goals selected and pursued by intended and actively engaged entrepreneurs – the *why* and the *what* of their goals, respectively – or how these are related to basic psychological needs, well-being, and continued interest and engagement in entrepreneurship.

This indicates widening gaps in psychological theories of entrepreneurship, since they on the one hand acknowledge the vital significance of individual volition and motivation, but on the other hand have little to say about the nature of the individual-level precursors of entrepreneurial motivation, how these are related to the innate psychological needs, aspirations, and well-being of those involved in entrepreneurship, or how motivation and commitment to engage in entrepreneurial activities are upheld throughout the entrepreneurial process. As a result, complementing the theoretical tradition of opportunity-based theories with cognitive psycho-

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<sup>89</sup> Research on entrepreneurship has also looked at acquired needs such as the need for achievement, control, etc. (Davidsson, 1991). In doing so, it has neglected the differences in psychological outcomes from pursuing different goals, as well as their consequences for entrepreneurial sustainability. It has also treated these needs as stable psychological traits rather than as the outcome of organismic organization.

logical theories of entrepreneurial motivation has failed to adequately explain a range of empirical observations, such as why so many *enter* entrepreneurial activities when and where there is no recognizable or foreseeable opportunity for profit, why so many *persist* in their entrepreneurship despite the apparent absence of a positive opportunity trend, or why many still refuse to (or lose their interest to) grow and persist in entrepreneurship, despite a positive opportunity trend and profit projections (Wiklund, et al., 2003).

According to the *life goal and motive approach* developed above, not only is the self-organized nature of goal pursuit an important precursor of individuals' motivation and well-being, but so are the choices people make, especially in terms of the reasons or motives they have for their actions and behaviors. In general, if the reasons for action are consistent with intrinsic needs, the theory posits that this will lead to greater well-being when creating a venture.

Thus, the *life goal and motive approach* involves assumptions that contrast with current approaches in entrepreneurship research and theory, such as the assumption that every conscious pursuit of returns from entrepreneurship enhances well-being, which underlies opportunity-based models. Instead, well-being is produced during the entrepreneurial process to the extent that individuals consistently engage in activities that relate to their intrinsic sense of self-determination and meaningful self-aspirations, which in turn satisfy their basic psychological needs. However, since some dose of extrinsic concerns is in fact beneficial for achieving these very ends, the theory posits that a mismatch, rather than a match, between extrinsic life goals and motives is likely to result in greater well-being in entrepreneurship. In sum, I postulate the following propositions:

*Proposition 8:* Intrinsic entrepreneurial motives are positively associated with well-being in entrepreneurship.

*Proposition 9:* Extrinsic entrepreneurial motives are negatively associated with well-being in entrepreneurship.

*Proposition 10:* Intrinsic life goals or aspirations are positively associated with well-being in entrepreneurship.

*Proposition 11:* Extrinsic life goals or aspirations are negatively associated with well-being in entrepreneurship.

*Proposition 12:* In regards to discrepancies between life goals and motives, extrinsic discrepancy has positive effects on well-being, while intrinsic discrepancy has no effect on well-being in entrepreneurship.

# Section V: Empirical Method



# Chapter 12

## Data and Methodology

The central objective of this thesis is to explore the payoff structure of entrepreneurship by addressing each of the following research questions:

1. Does entrepreneurship have an impact on individual's well-being?
2. How does well-being evolve during the entrepreneurial process?
3. Who benefits the most from entrepreneurship in terms of well-being?
4. Why is *entrepreneurial well-being* significant, and how can it be measured?

Several approaches developed in the previous two sections of this thesis have been brought forward to advance the theoretical terrain for such an inquiry. One important direction in this respect was to reflect on and develop the structure of entrepreneurs' well-being and isolate a context-specific dimension of it in entrepreneurship. Another direction taken was to investigate the impact of entrepreneurship, as an active personal-goal engagement and work related phenomenon, on the well-being of working individuals in comparison to those who are engaged in regular employment. This also led to exploration of the impact of entrepreneurship as an unfolding goal-directed process of venture creation on the evolution of well-being along that process, and in comparison to those not engaged in that process.

Finally, the life goal and motive approach developed in the previous section is used to explain differences in well-being within entrepreneurship; that is, across intended and actively engaged entrepreneurs.

In the next section of the thesis, studies 1-4 (chapters 13-16) put some of these theoretical approaches to the test. In order to accomplish these objectives, a large and representative sample of individuals had to be constructed, and a subset of intended and actively engaged entrepreneurs had to be followed over time in order to, among other things, ensure that the results produced would not be caused by selection bias, but by the hypothesized effects. This is a major challenge, as the topic of well-being is relatively new; especially to the entrepreneurship community, and there are literally no available data sets which are adequate for this purpose. Thus, in 2010, in collaboration with the Swedish GEM team (GEM: Global Entrepreneurship Monitor, the largest ongoing study of entrepreneurial dynamics in the world), I was given the opportunity to insert into the general survey a set of my own questions. All of my questions (with single item variables and higher-order factors) are well-grounded in previous empirical studies. I have collected variables and factors that capture most of the constructs I use in my models.

A few years later, in 2013, this initiative was adopted globally by the entire GEM Consortium. However, given the very general scope of that global initiative, a complete and satisfactory examination of the link between entrepreneurship and well-being cannot be performed. Surely, there are great advantages to having such a big data set, such as the ability to perform cross-cultural comparisons and validation of theory in a variety of contexts. However, without access to a large battery of relevant questions, as well as a longitudinal section of the data, the utility of this data set for the kind of theoretical development and empirical examination set out by this thesis is limited. The data set constructed for this thesis is unique, not only because it contains a large battery of relevant questions and includes a longitudinal section, but most importantly because it is theory-driven. Studies 1-4 in the next section of this thesis all make use of this exclusive data set in attempting to give adequate answers, if only partial ones, to each of the research questions above, as well as provide evidence supporting the propositions developed in the previous section.

Below, I will describe the data and the collection procedure used in greater detail, as well as some of the key variables and measures used in the individual studies in the next section. Having done that, I will conclude this chapter with a simple table that matches the stated propositions from the previous section to the four empirical studies that are to follow, which were undertaken in order to test these propositions.

## The GEM Data Set

The GEM Project is an ongoing study that started in 1999 with the intent of measuring entrepreneurial activity across the globe (Reynolds, Hay, & Camp, 1999). The GEM respondents in each country are randomly selected among the general population of their countries, and interviewed about their attitudes and current entrepreneurial activities, and asked to provide extensive demographic data. The 2011 Swedish GEM study thus contains comprehensive, detailed, and representative information about respondents' work-related status and engagement in entrepreneurial activities, as well as a battery of well-being measures. The 2011 Swedish GEM data thus provides a unique opportunity to carefully test some of the core research questions and propositions highlighted in previous chapters. More specifically, studies 1 and 2 both make extensive use of this cross-sectional data set in exploring the effects, in terms of well-being, of engaging in entrepreneurial activities relative to engagement in non-entrepreneurial work activities, i.e., relative to working individuals who are not engaged in entrepreneurship.<sup>90</sup>

All in all, a total of 3,101 respondents answered the Swedish GEM-survey in 2011 (1638 females and 1463 males, with the youngest individual being 18 and the oldest being 99).<sup>91</sup> Out of these, the total number of in-

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<sup>90</sup> The most striking feature regarding the entrepreneurial profile for Sweden in the 2011 GEM survey is its very high level of entrepreneurial employee activity (EEA) with the highest level of EEA (approximately 14% of total entrepreneurial activity) among all participating countries (Bosma et al., 2012). This highlights the important role of entrepreneurial undertaking within existing firms.

<sup>91</sup> The vendor contracted to conduct the survey is the Swedish statistical agency Demoskop. The sampling method consisted of fixed-line phone and mobile phone (random dial from list) and selected respondents were contacted up to 8 times to ensure the quality and breadth of their responses (contacted at different days of the week and times of the day). The sample design was conducted on a regional basis,

tended future entrepreneurs is 198 (classified as FUTSUP in GEM);<sup>92</sup> the total number of nascent, or what I define in this thesis as actively engaged entrepreneurs is 251 (classified as either SUB or TEA in GEM);<sup>93</sup> and the total number of owner managers of firms older than 42 months is 211 (classified as ESTBBUSO in GEM).<sup>94</sup> These three measures correspond to three of the four entrepreneurial action phases specified in the action phase model that was developed in the preceding theoretical section of the thesis. They comprise the sequence or progression of venture creation as a personal goal pursuit: from an intentional and pre-actional stage, to actional or startup phase, and finally to a post-actional phase of venture establishment. In addition to this, the total number of employees in the sample is 1,742; a combined measure of full-time employment (1,374) and part-time employment (392). While we should have had 1,766 cases in total, 24 cases were double-marked; hence 1,742 employees in total. Of course, individuals may fall into more than one category, and therefore, depending on the type of analysis employed, we might want to harmonize these categories. This will be done in studies 1 and 2, which look to unpack the effects of entrepreneurship on the well-being of working individuals; 1) as an active self-organized work engagement, and 2) as a temporal goal-directed process with distinct action phases; thus assessing the impact of each phase on individuals' well-being.<sup>95</sup>

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and the total response rate was 16 percent, which is twice as high as the response rate for the US sample survey for the same year (Bosma et al., 2012).

<sup>92</sup> Of these 198 individuals who were planning their startup, 71 were either actively pursuing the establishment of another venture (60) and/or the owner managers of existing firms older than 42 months (11).

<sup>93</sup> The category of active entrepreneurial engagement is a combined measure of TEA (159) and SUB (175), minus their overlap. This composite variable was created to come as close as the data permits to measuring active entrepreneurial engagement, and hence excludes self-employed business owners of firms older than 42 months.

<sup>94</sup> Of these 211 individuals, 23 were either planning to establish a new venture in the coming 3 years or already actively engaged in starting-up a new venture.

<sup>95</sup> The GEM data set also includes other social and work related categories: retired/disabled (982), student (198), full-time homemaker (230), currently seeking employment (232), and self-employed (372). Aside from these measures the total number of unemployed individuals is 287 (Classified as UNEM in GEM: assessed in a single item yes/no question). As expected, some individuals belong to more than one category. A harmonized measure in the GEM data set classified as GEMOCCU discriminates between categories such that every individual can only belong to one category. In total, 2999 respondents are classified, while the remaining 102 cases are missing values. Note that the category of self-employed is broad-

In the same survey, I also had the opportunity to pose a question to all intended entrepreneurs (FUTSUP=198) and a subset of actively engaged entrepreneurs (TEA=159) regarding their willingness to participate in a longitudinal study to be conducted by me and supervised by Professor Carin Holmquist (head of the Department of Management and Organization at the Stockholm School of Economics). Both intended and actively engaged entrepreneurs, in either the planning or early establishment phases of new ventures, were included in this project in order to allow for a more comprehensive investigation of their well-being and goal striving in entrepreneurship. Altogether, 160 respondents gave their consent (N intended=114, N nascent=53, while 7 of the respondents were both planning to start up a venture and actively engaged in the startup of another venture). An analysis of those who withheld consent and those who gave it did not reveal any significant differences in response patterns. Weights based on sex and age were used to make the sample representative of the overall population. These data sets are described below.

## The Longitudinal Data Sets

Between 2011 and 2012, this cohort of intended and nascent entrepreneurs participated in follow-up surveys every six to nine months, in an additional two rounds of data collection, in order to sample information about the respondents' psychology, behavior, and goal progression. The second round of data collection (i.e., the first one conducted by me) contains information about 137 of the original 160 respondents. Of these, 38 remained in a state of planning, withholding their strong intentions to start up their ventures (in this group, 6 were concurrently classified as involved with another startup or owning another business); 21 who were initially planning their startup gave up on it (although 4 remained owners of other firms, and were thus reclassified accordingly); 29 who were initially planning their startup had now progressed in their entrepreneurship, typically

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er than the total amount of entrepreneurially engaged individuals, as well as partially inclusive of it. Thus, controlling for it will limit prediction only to those cases who are actively involved in startup efforts for an organization for which they are employed (intrapreneurs) and for established business owners. Hence, I do not control for this category in studies 1 and 2.

implementing and accomplishing more gestation and business activities (in this group, 9 were also involved with another venture); 28 remained actively engaged in the startup process they were involved in during the first round, while 15 others subjectively reported having established their business, thus leaving the startup process but remaining engaged with running their new firms; and, finally, 6 more of those who were initially actively engaged with a startup had given up on it all together (interestingly, without exception, each of these 6 was either currently trying to establish another startup or the owner manager of an established firm, and they were all reclassified accordingly).

In total, the second round contains information on 88 entrepreneurs (either nascent or established with another firm on the side), out of which a total of 44 had progressed one stage since the first round, 28 stayed in their previous stage, and 16 left their engagement with their new venture, but remained in entrepreneurship either because they owned and managed another firm or because they were actively trying to start up another. Finally, 3 respondents were deemed to be outliers – displaying seriously unstable response patterns – and 17 had completely disengaged from entrepreneurship, doing so either from the planning or the implementation phase, which left a total number of 117 intended entrepreneurs, actively engaged entrepreneurs, and established business owners (65 males and 52 females, with an average age of 47).

The third round of data collection (i.e., the second round conducted by me) contains information on 124 of the 160 respondents from the first round of data collection (117 out of these 124 are included in the second round, so there is a loss of 20 respondents from the second round). Of these, 25 still remained in a state of planning, 33 were actively engaged in a startup process (of which 5 had moved into the active startup phase from a previous state of planning), and 44 were considered established business owners, either because they recently moved into this stage in the second or the third round (13 individuals progressed into this phase from the second round), or because they were running another firm. In total, 70 out of 124 were classified as either nascent entrepreneurs or recently established business owners, and out of these 70, 64 had belonged to the group of 88 entrepreneurs in the second round.

These additional data sets contain detailed information about the respondents' psychology, behavior, and goal progression in entrepreneurship, as well as general and specific individual and opportunity-level characteristics. Hence, both studies 3 and 4 use this longitudinal section of the data set to explore the structure of individuals' well-being in entrepreneurship, i.e., among those who are currently engaged in entrepreneurship. I also make use of these additional data sets when investigating the robustness of the results obtained in studies 1 and 2, which otherwise draw on the cross-sectional part of the data.

An analysis of those who gave their consent and those who withheld it revealed no significant differences in response patterns. I observed no significant differences in target or control variables, nor in firm characteristics (age, number of employees, or sales), between those who selected to participate in my study ( $n_2=88$ ) and those who did not, and between those who stayed until my third round of data collection ( $n_3=70$ ) and those who did not. Respondents ranged in age from 18 to 80 years old (average=48.4 years, S.D.=14.0 years), and about 50% of the respondents ( $n=42$ ) had completed a university degree. Also, 63 of the respondents (71.5%) reported being opportunity-driven in their entrepreneurial undertaking. In terms of new venture experience, 39 respondents (44.3%) were currently involved in establishing another new venture, or were currently the owner managers of at least one other venture.

To summarize, my data is divided into two separate parts: 1) a cross-sectional data set representative of the entire Swedish population, including information about intended entrepreneurs, actively engaged entrepreneurs, and established business owners. The data contains 3101 adult individuals (18-99 years of age), and provides information on their entrepreneurial activities and attitudes, as well as extensive demographic data and data concerning their well-being. 2) The second part of my data is a panel data based on 160 intended and actively engaged entrepreneurs who were followed for a period of three years. This cohort is a subset of those who gave their consent to participate in my study in their responses to the national survey. Having both intended and actively engaged entrepreneurs as the object of my longitudinal study, I am able to study entrepreneurial activity along different stages of the process. Thus, the data collected is highly rele-

vant for testing propositions which predict changes in entrepreneurial activities along the entrepreneurial process, as well as changes in psychology, behavior, and performance: well-being, motivation, continued performance, and entrepreneurial sustainability.

## Key Variables and Measures

### Well-Being Measures

The theory outlined in chapter 4 defines well-being as the presence of positive (hedonic) feelings and positive functionings. Hence, various measures of well-being have been employed in order to provide a comprehensive picture of the effects of entrepreneurship on well-being. Specifically, in the 2011 Swedish GEM data set, participants' well-being was mainly assessed in terms of (a) life satisfaction: the cognitive aspect of subjective well-being as a measure of hedonic well-being; (b) overall happiness: the affective aspect of subjective well-being as a measure of hedonic well-being; and (c) subjective vitality: an affective-physiologic measure of eudaimonic (or psychological) well-being (i.e., a positive feeling, but also a direct indicator of positive functioning). Due to survey limitations in this round of data collection, the 2011 Swedish GEM data contains mostly single item measures. Despite this limitation, all variables have followed their original 1-7 Likert scale, and have been validated on the basis of previous research. Furthermore, research in several fields during the past 40 years points to the idea that global and domain-specific self-report measures of well-being possess adequate psychometric properties, exhibiting good internal consistency, moderate stability and appropriate sensitivity to changing life circumstances (Diener et al., 1999).

To fulfill the objectives of this thesis, it was further necessary to measure other related aspects of well-being. Specifically, the GEM data contains information on individuals' psychological need satisfaction (Deci & Ryan, 2000) as well as various single-item measures of domain-specific satisfaction (Campbell 1976; Cummins 1996). The original Basic Psychological Needs Satisfaction Scale has 21 items that assess general satisfaction of the three needs for competence, autonomy, and relatedness. However, due to

its length, some studies have worked with 10 items only, 3-4 items per subscale. I took this approach in the Swedish GEM study. Finally, the data contains a list of 7 single-item measures of various domain satisfactions: satisfaction with one's current economic situation, health, work, and partnership with significant other, as well as satisfaction with one's social life in general, leisure, and with one's opportunity to utilize one's knowledge and skills. All scales and variables have followed their original 1-7 Likert scales, and have been validated on the basis of previous research. Most of these measures are utilized in studies 1 and 2, where I will present more detailed information about their nature and usage.

Finally, in addition to these measures, the panel structure of the data collected in rounds two and three also contains the Satisfaction With Life Scale (Diener et al., 1985; Pavot & Diener, 1993) – a five-item scale that has been shown to be valid and reliable for measuring life satisfaction (Diener et al., 1999) – and the Subjective Vitality Scale (Bostic et al., 2000; Ryan & Frederick, 1997) – a seven-item scale for measuring participants feelings of being alive and alert as an assessment of eudaimonic well-being. However, these full scales were sampled for the purpose of conducting a more rigorous investigation of well-being in entrepreneurship – as presented in study 3 – as well as for validating the Entrepreneurial Satisfaction Scale (ESS) – a five item 1-7 Likert scale that captures a context-specific measure of subjective well-being in entrepreneurship (EWB, or entrepreneurial well-being). Study 4, building on the longitudinal section of my data, is solely dedicated to the construction and validation of this scale. Table 12.1 summarizes each of these measures and indicates which studies they are used in.

Table 12.1. Well-being variables and measures

Well-being Variables & Measures	Study 1	Study 2	Study 3	Study 4
Global Life-Satisfaction (single item)	X	X		
Global Happiness (single item)	X	X		
Global Subjective Vitality (single item)	X	X		
Domain Satisfactions (single items)	X	X		
The Basic Need Satisfaction Scale (three sub-scales)	X	X		
The Satisfaction with Life Scale			X	X
The Subjective Vitality Scale			X	X
The Entrepreneurial Satisfaction Scale				X

In studies 1 and 2, the first three single items are combined into an overall index of mental health as the chief dependent variable (see chapter 13), while the three basic need sub-scales are investigated as mediators for the relationship between entrepreneurship and well-being. Combining measures into an overall index of well-being is repeated in study 3, although this time I make use of the full scales of life satisfaction and subjective vitality. Finally, study 4 validates a context-specific measure of well-being in entrepreneurship: the Entrepreneurial Satisfaction Scale. In doing this, the relationship between this scale and the two other scales of life satisfaction and subjective vitality is investigated in depth.

### Entrepreneurial Engagement (Status and Goal Progression) Measures

Engagement during the entrepreneurial process is divided into phases on the basis of the action phase model of venture creation developed in chapter 3. At the very beginning of that process, individuals deliberate between various work-related options. However, individuals' pre-decisional deliberations are not sampled in the GEM data set. First, no theoretical guidance to the study of this aspect of the process has been offered in previous research. Second, such an endeavor would prove highly difficult to execute since it is not easy to adequately "observe" such deliberations in the moment. Instead, the data contains detailed information on various phases, from planning to implementation and subsequent realization of the venture.

At first, the post-decisional but pre-actional (i.e., pre startup) phase is considered, i.e., after the intention or expectation to start up a venture in

the near future (i.e., in the next three years) has been formed. This is reported in GEM as the category of future (i.e., potential) or intended entrepreneurs, as reported above (classified as FUTSUP in GEM). For capturing active implementation of the venture (i.e., the startup phase), the data contains information on people's involvement in early entrepreneurial activities. Depending on the exact definition-operationalization fit, the GEM data includes several measures of this stage of involvement, all of which overlap to a great extent (classified as either SUB and/or TEA in GEM).

Engagement in the post-actional phase is captured by several other measures. Common to these is the requirement of having managed or owned a business considered to be established for more than 42 months (this final composite is classified as ESTBBUSO in GEM). The data contains a few cases that fall into two or all three categories. For instance, a handful of individuals report a planning activity for one venture, an active startup for another venture, and/or being owner managers of an existing firm.

For the second – longitudinal – half of the data, participants were chosen on the sole basis of being intended or actively engaged entrepreneurs. This set of data contains detailed information about individuals' advancement in the venture creation process, in which progress (i.e., positive movement from one phase to another) and disengagement (i.e., exiting the venture creation process) were monitored under the study period

### Work Status Measures

The GEM data set contains detailed information on individuals' work-related status. Aside from the above measures of engagement in the process of venture creation, the following measures were obtained to enable a careful comparison between those who are engaged in entrepreneurial activities and those who are not. These include: unemployed, not working because of retirement or disability, student, full-time home maker, employed by others (full and part-time), seeking employment, and self-employed. Since the main objectives of studies 1 and 2 involved comparisons between those who are engaged in entrepreneurial activities and those who hold regular employment, for the most part the majority of these variables were exclud-

ed from the analysis, leaving the non-entrepreneurial regular employment categories (full and part-time) as the benchmark category against which the entrepreneurially related measures above were compared. Naturally, the data contains several cases that fall into two or more of the above categories. Since this entails some difficulties for studying some of the postulated propositions, special care was given to these cases. A full elaboration on this procedure is given in the individual studies below.

### Life Goals and Entrepreneurial Motives Measures

In the second round of data collection, I assessed peoples' intrinsic and extrinsic life goal orientations based on Kasser and Ryan's (1996) Aspiration Index. The original index includes 3 categories of intrinsic life goals (meaningful relationships, personal growth, and community contributions) and 3 categories of extrinsic life goals (wealth, fame, and image), with five specific items within each category. The original index also includes a seventh category of health aspirations, which turned out not to be clearly intrinsic or extrinsic. Thus, in this study, as well as in most other studies, the aspiration category of health is excluded. I further relied on a shortened version of the index (Duriez, Vansteenkiste, Soenens, & De Witte, 2007) by sampling three items from each of the six goal-categories, for a total of 18 life goals, capturing the respondents' evaluations of each type of goal by having them report a number on a 7-point Likert scale ranging from 1 (*not important at all*) to 7 (*very important*). Consistent with SDT and previous studies on entrepreneurial motives (Carter, Tagg, & Dimitratos, 2004; Kuratko et al., 1997; Samuelsson, 2004), I further asked participants in the second round of data collection to reflect on their reasons for engaging in the startup activity based on a comprehensive list of 19 motives, or reasons, for engagement. Participants rated these reasons on a Likert scale ranging from 1 (*not important at all*) to 7 (*very important*). From an SDT perspective, the items are found across the autonomous-controlled continuum of motivation. Both measures of life goals and entrepreneurial motives constitute the independent variables in study 3, which examines the effects of life goals, entrepreneurial motives, and their discrepancy on intended and actively engaged entrepreneurs' well-being.

## Control and Other Measures

The general GEM survey for 2011 provides access to important control and moderation variables such as age, gender, type of salient motive for engagement, income and wealth, level of education, and many other variables and measures aimed at providing a comprehensive picture of the individual and the venture creation process. The second part of my data contains more specific information about both the individual and the venture. For instance, firm level measures include completion of gestation activities, new entrepreneurial initiations, growth expectations and survival rates (or rate of duration in business), to mention but a few. Thus, the data includes, on the one hand, specific opportunity-process data [e.g., status for engagement, time for start and finish (time of opportunity involvement), growth expectations, cost of starting up, loans of money, team level variables (number of owners, status in the team, relations among members), wages, the sector and the products and/or services provided, degree of innovation, etc.], and on the other hand, general business process data (e.g., planning another firm, starting up another firm, running another firm, etc.).

Appendix A provides a summary of all variables used in this thesis per round of data collection. Here, I have limited my focus to the most important concepts and constructs measured in my study. In the individual studies that follow, I will report in greater detail the exact measurement and validation of each variable.

## Survey Design and the Quality of Data Collected

The first part of my data, the GEM data set, was administered by a professional opinion research agency: Demoskop. The second part of my data was administered by myself and collected by a trained Swedish interviewee – trained especially for this purpose at the Stockholm School of Economics, by a professional trainer. While Demoskop ensured the quality of the first part of the data, I drew on similar rigorous practices in collecting the second part of the data. The questionnaires were all appropriately designed – in terms of language, length (approx. 20 minutes), and construct validity

(special care was dedicated to minimizing non-response and measurement errors). The surveys were all pre-tested, translated into Swedish, and modified systematically from session to session as required by the objectives of the research program. Translations of the items were performed by a professional linguistic adviser and then approved by two professors of entrepreneurship with command of both English and Swedish.

I based most of my measures on past surveys and research in the relevant fields. I also paid close attention to what was asked, and how it was asked, in determining the relevance and accuracy of the information obtained by the survey. When designing my surveys I made use of practical advice from professionals and relevant literature on survey and measurement quality (Biemer & Lyberg, 2003). Furthermore, people's responses to questions were assessed before they were included in the final version. The decision to use a phone interview as the main data collection mode was mainly a function of the study objectives, in which there was a need for a relatively high n-number of respondents and a high response rate. It also alleviated problems of social desirability in regard to sensitive questions somewhat, as compared to a face-to-face interview. Since some of my questions require the individuals to assess their affective states, this is a reasonable method of data collection. The design and the data collection method thus ensure a high quality of longitudinal data and high response rates. The data is further appropriately coded in accordance with GEM standards.

Overall, the data is relevant for testing propositions concerning the effects of entrepreneurship and the role of individual volition on well-being; between entrepreneurs and non-entrepreneurs, as well as over time and among (or across) a group of intended and actively engaged entrepreneurs.

## General Methodology

The next four chapters put to test the propositions developed in previous chapters in answering the four research questions posed by this thesis. Study 1, which tests the self-organizational approach, gives a direct answer to the first question, while study 2, which tests the action phase approach also addresses the second question more explicitly. Additionally, study 3 directly addresses the third research question while study 4 contributes to

answering the fourth research question by validating the unique experience of entrepreneurial well-being as a distinctive entrepreneurial phenomenon.

Empirically, I make use of basic econometric and quantitative multivariate modeling techniques (some of the methods employed include factor analysis, regression analysis MANOVA and ANOVA techniques, and structural modeling techniques). In all studies, problems related to the normality assumption, multicollinearity, heteroscedasticity, and model specification are accounted for and corrected when needed. I specify in greater detail the exact nature of these procedures in the individual studies. Below, I conclude this chapter by summarizing the theoretical propositions tested by each of these four empirical studies:

Table 12.2. Propositions and empirical studies

Propositions	Study 1	Study 2	Study 3	Study 4
1	X			
2	X			
3	X			
4	X			
5a		X		
5b		X		
6a		X		
6b		X		
7a		X		
7b		X		
8			X	
9			X	
10			X	
11			X	
12			X	

Studies 1 and 2 are largely built on the GEM data set, while studies 3 and 4 are based on the longitudinal sections of the data. Study 4 validates a measure of entrepreneurial well-being developed theoretically in chapter 5, and thus examines the unstated proposition that entrepreneurial well-being is a distinctive psychological construct.



Section VI:  
Four Empirical Studies



# Chapter 13

## Study 1: The Impact of Entrepreneurship on Well-Being

### Introduction

On the basis of the self-organizational approach developed in chapter 9, the main purpose of this study is to investigate if and why entrepreneurship is uniquely different from other work-related engagements in supporting individual's well-being. Previous research into this question has mainly dealt with differences in work satisfaction between those engaged in self-employment and those engaged in organizationally-dependent employment. Yet, although overlapping to some extent, self-employment and entrepreneurship are not the same phenomenon. In fact, a larger portion of entrepreneurial activities (i.e., the starting up of ventures) are undertaken today by individuals employed in medium-sized and larger corporations. And, although recent evidence is now emerging with regards to the well-being benefits of engagement in entrepreneurial activities per se, there is still a large gap in our understanding of whether and why entrepreneurship is better suited for the pursuit of individual well-being. First, as just mentioned, most studies have looked into effects on work satisfaction. Only recently has research on this question incorporated the concept of life satisfaction. And life satisfaction is still only one facet of individuals' well-being, rather than representing the broader category of well-being as the presence of mental health. Second, while most studies in this domain emphasize the

importance of independence in people's evaluation of their well-being, it still remains unclear how this independence is actually translated into higher well-being. This study aims to open up this black box.

As argued in the self-organizational approach developed in chapter 9, entrepreneurship may not only impact individuals' well-being through the freedom-value it grants them (as assumed by the procedural approach), but also by providing an important and unique goal and work-related context for *actively* fulfilling one's innate psychological needs for competence, relatedness, and autonomy; and this to a greater extent than regular or non-entrepreneurial employment alternatives. By transforming the experience of wage earning into a meaningful personal goal, entrepreneurship is more likely to result in well-being by providing individuals with opportunities to become more connected, competent, and self-determined. As a result of these positive need-satisfying experiences, entrepreneurs are likely to experience greater well-being. This is also likely to operate via a cognitive evaluative function, since individuals draw on these subjective experiences when evaluating well-being-related aspects of their lives. In sum, this study tests the following propositions as they were stated in the self-organizational approach outlined in chapter 9:

*Proposition 1:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' feelings of competence.

*Proposition 2:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' feelings of relatedness.

*Proposition 3:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals' feelings of agency and freedom (i.e., autonomy). Thus:

*Proposition 4:* Engagement in entrepreneurship, compared to non-entrepreneurial employment, has a positive impact on individuals'

well-being. This is mediated by satisfaction of the three basic psychological needs.

## Methodology

The present study is aimed at examining if and why entrepreneurship is uniquely different to other social and work related engagements in its support of individual's basic psychological needs and well-being (mainly as compared to regular i.e., non-entrepreneurial work alternatives). The main data source used for analyzing and accomplishing this objective is the Swedish GEM study of 2011 (described in chapter 12). Since the base line category for the analysis is employees (part-time or full-time) not involved in active entrepreneurial activities, 156 individuals had to be subtracted from the total number of 1,742 employees, to arrive at 1,586 non-entrepreneurial workers.<sup>96</sup> These 156 individuals are either employees engaging in entrepreneurial activities for their employers (and in that case they are retained in the category of entrepreneurial engagement) and/or people who despite being self-employed categorized themselves as having full/part-time employment. In total, thus, most of the examination is performed on a final sample of 1,837 individuals consisting of 1,586 non-entrepreneurial workers and 251 individuals that are actively engaged in entrepreneurial activities. Thus, excluded from the analysis are non-entrepreneurial self-employed individuals who run firms that are older than 42 months. Self-employed individuals running firms older than 42 month can certainly also act entrepreneurially; such as when they strive to create new business activities for growth. However, being restrictive in this regard guarantees that we observe entrepreneurship, and nothing else. Finally, while this constructed sample is the main source of my individual-level data, which is used to answer my research question, I also make use of the entire 2011 GEM dataset, as well as of the longitudinal section of the data, to demonstrate the robustness of the obtained results. These procedures are performed at the

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<sup>96</sup> Out of these 1,586 individuals 166 are classified simultaneously as established business owners of firms older than 42 months or as intended entrepreneurs. Nevertheless, since these two categories do not constitute active entrepreneurship per se these individuals were retained in the analysis.

very end of the empirical analysis, where they are further explained in greater detail.

## Variables and Measures

### **Dependent Variables: Well-Being**

Well-being was assessed by three single item (global) measures: life-satisfaction (i.e., a positive evaluation = cognitive), happiness (i.e., a positive feeling = affective), and subjective vitality (i.e., positive functioning = affective-physiological). Life satisfaction was measured by asking individuals' to evaluate their contentment with their lives (Campbell, 1976; Cummins, 1996): "All things considered, how dissatisfied or satisfied are you with your life as a whole these days?" 1=not at all satisfied, 7=very satisfied. Happiness was measured on the basis of the Gurin Scale (Gurin et al., 1960), as it appears in major surveys such as the World Values Survey and the General Social Surveys which asks: "Taking all things together, how happy would you say you are"? 1= not at all happy and 7= very happy. Subjective vitality was assessed on the basis of the Subjective Vitality Scale (Ryan & Frederick, 1997). Since it was impossible to sample the entire scale, I made use of the first item "I feel alive and vital", which respondents ranked by indicating a number between 1=not at all true and 7=very true. All variables have been validated in previous research, and follow their original 1-7 Likert scale. Finally, aside from viewing each one of these measures as a standalone dependent variable, these three variables are further combined into an overall 19-point index of mental health ranging from 3 (min value) to 21 (max value) in accordance with the model built in chapter 4 of this book (Cronbach's Alpha 0.83). Table 13.1 displays information on basic statistics for each of these measures.

Table 13.1. Well-being measures used in the study as dependent variables

Well-being Variables & Measures	N	Min-Max	Mean	SD
Global Life-satisfaction (single item)	1829	1-7	5.75	1.15
Global Happiness (single item)	1824	1-7	5.73	1.03
Global Subjective Vitality (single item)	1821	1-7	5.76	1.16
Mental Health Index	1812	3-21	17.25	2.89

Correlation among all three variables is highly significant at the 0.01 level (2-tailed), such that global life satisfaction is correlated 0.71 with global happiness and 0.57 with a global measure of subjective vitality, which in turn is correlated 0.62 with global happiness.

### Mediators: Basic Psychological Needs Satisfaction (BPNS)

Individuals' satisfaction of their basic psychological needs was assessed by the Basic Psychological Needs Scale (BPNS); a family of three scales designed to address individuals' satisfaction of positive psychological functionings in terms of relatedness, competence, and autonomy in their lives. The original BPNS contains 21 items; 7 items per subscale on a 7-point Likert-scale ranging from 1 (not at all true) to 7 (very true), which form an overall index of basic need satisfaction. Due to its length, I relied on a shortened version of the scale, which contains 10 of the original 21 items (3 items for relatedness and competence and 4 items for autonomy), and asked subjects to respond the following way: "Please listen to each of the following items carefully; thinking about how it relates to your life, and then indicate how true it is for you", which respondents ranked by indicating a number between 1=not at all true and 7=very true. For example, one item assessing psychological autonomy states "I feel like I am free to decide for myself how to live my life" whereas an example for an item which assesses psychological relatedness states "I get along with people I come into contact with"; and finally, an example for an item which assesses psychological competence states "Most days I feel a sense of accomplishment from what I do". In terms of their placing in the original 21 item scale, these are: Relatedness: 2, 6, 16(R); Competence: 3(R), 5, 13; and Autonomy: 1, 8, 11(R), 20(R). Following instructions given by Deci and Ryan, scores for each subscale were calculated by adding all relevant items; first reversing

those items that are worded negatively by subtracting the item response from 8. Depending on the procedure below, the scores were then analyzed independently or aggregated to form an overall index (Cronbach's Alpha 0.71). Items were also averaged and standardized for each subscale, and then added when subscales were used in the mediation analysis as independent variables in OLS regressions. Table 13.2 displays information on basic statistics for each of these measures (before they were averaged and standardized).

Table 13.2. BPNS measures used in the study as mediators

<b>BPNS Variables &amp; Measures</b>	<b>N</b>	<b>Min-Max</b>	<b>Mean</b>	<b>SD</b>
Basic Need Satisfaction Scale: Autonomy	1803	4-28	21.24	3.72
Basic Need Satisfaction Scale: Competence	1791	3-21	16.62	2.56
Basic Need Satisfaction Scale: Relatedness	1813	3-21	17.13	2.71
BPNS Index	1768	33-70	55.03	7.20

Table 13.2. BPNS variables and measures used in the study as dependent variables. Correlation between each of the three sub-scales is significant at the 0.01 level (2-tailed), ranging between 0.41 and 0.49.

### **Independent Variable: Active Engagement in Entrepreneurial Activities**

Since engagement in entrepreneurship is not equivalent to being self-employed, it entails a careful analysis and fit between theory and method. Hence, this thesis draws upon several measures of engagement in entrepreneurial activities to arrive at an accurate and representative measure of active entrepreneurial engagement. Initially, all those who report new startup efforts by answering yes to either one of the following questions were identified as being engaged in entrepreneurial activities: "Are you, alone or with others, currently trying to start a new business, including any self-employment or selling any goods or services to others?" (Classified BSTART in GEM) or "Are you, alone or with others, currently trying to start a new business or a new venture for your employer as part of your normal work?" (Classified BJOBST in GEM). The final composite is classified as SUB in GEM, and captures all those who are engaged with new

startups, regardless of whether this is an independent initiative or job related (175 in total). Further to that, a second variable is used to capture engagement in entrepreneurial activities by summing together all those individuals that have been actively engaged in the process of starting a business without wages and during the past 12 months (Classified SUBOANW in GEM) and those running new businesses that are less than 3 ½ years old (Classified BABYBUSO). The final composite is classified as TEA by GEM (Total Early Activity), and consists of 159 cases (of which 83 cases overlap with SUB). Finally, the dummy variable *entrepreneurial engagement* was created by recording those who either belong to SUB or TEA (N=251 altogether). Of these 251 individuals 192 are mainly opportunity-driven in their approach to entrepreneurship, while the remaining 59 are mainly necessity-driven (calculated on the basis of GEM variables SUREASON and OMREASON). For more background information about these measures, see chapter 12 and/or the original 2011 GEM survey.

### Control and Other Variables

Other than the above variables and measures, the following variables are controlled for: gender (female=1), age (continuous variable), education (an ordinal variable ranging from 0 to 8 where 0=incomplete compulsory schooling or less than 9 years and 8=doctoral degree), household income (an ordinal variable ranging from 1 to 6 where 1=under 100,000 kr and 6=over 500,000 kr), type of sector in which work is performed (a categorical variable consisting of private, governmental, not for profit, and other), and both economic and leisure satisfactions as work-related outcome measures that are non-procedural sources of well-being (Benz & Frey, 2003, 2008ab).<sup>97</sup> These two measures of satisfaction were measured by asking individuals' to evaluate their contentment with their financial situation and leisure time, respectively (Campbell, 1976; Cummins, 1996): "All things considered, how dissatisfied or satisfied are you with..?" 1=not at all satisfied, 7=very satisfied.

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<sup>97</sup> Although these two variables are highly correlated with measures of well-being, they cannot explain why engagement in entrepreneurial activities is more supportive of well-being. Rather, the effects of entrepreneurship on well-being tend to increase when these variables are included in the regression (see below).

Furthermore, when testing the robustness of the results, the personality characteristics of general optimism and self-efficacy are both added to the regressions as controls for selection bias. These are measured by single item scaled 1-7 (1=completely disagree; 7=completely agree): “In uncertain times I usually expect the best”, and “I can do anything I set my mind on doing”, respectively. These measures and variables have been shown to be related to both engagement in entrepreneurial activities and to various measures of well-being (e.g., Bradley & Roberts, 2004; Lange, 2012), and for reasons explained in the analysis below they are used in this study to eliminate the risk of selection bias. This needs to be clear: Since entrepreneurship is likely to affect many of the factors that are associated with well-being, such as marriage, health, subjective experiences, and a range of domain satisfactions, controlling for these factors also reduces the actual effects that entrepreneurship has on well-being. Thus, I restrict my analysis to the above variables, taking greater care when examining the data as required by a sound principal of parsimony.

Finally, on the basis of the entire GEM data set, I perform a cohort analysis in order to further check the robustness of the results obtained. For reasons which will be explained in the analysis below, I constructed the variable *intended entrepreneurial engagement* to be such that it captures only those who have set themselves the goal to start up a venture in the near future without being presently entrepreneurially active. Setting the intention to be engaged in entrepreneurial activities was identified in GEM by asking respondents to answer yes or no to the following question: “Are you, alone or with others, planning to start a new business, including any type of self-employment, within the next three years?” The final composite (N=198) is classified as FUTSUP in GEM, and it captures all those who plan to be engaged with new startup in the near future whether this is an independent initiative or job-related (see chapter 12). However, since 60 respondents were simultaneously involved in trying to start up another venture, they were excluded as intended entrepreneurs, but retained as actively engaged entrepreneurs; thus resulting in a total of 138 intended yet non-actively engaged entrepreneurs.<sup>98</sup>

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<sup>98</sup> Aside from this measure I also include in the final cohort analysis five additional work related dummies (student, retired/disable, homemaker, unemployed, and established business owners) to guaran-

## Empirical Analysis and Results

The main goal of the empirical analysis is to determine whether active engagement in entrepreneurship is positively related to the well-being of working individuals and whether and to which extent particular need-satisfying experiences contribute to this association. In order to address this question, the empirical analysis makes use of basic econometric and multivariate techniques. The empirical analysis is conducted in three steps. First, descriptive statistics and well-being regressions are estimated in order to investigate whether those actively engaged in entrepreneurship are mentally healthier in comparison to non-entrepreneurial employees, holding basic and other relevant socio-demographic and psychological characteristics constant. In a second step, the causes (i.e., the need-satisfying effects) behind the relationship between entrepreneurship and well-being are studied using mediation analysis, in which the mediating effects of individuals' feelings of autonomy, competence, and relatedness are studied. In the final step, further tests for robustness and selection bias provide further evidence for the ways in which entrepreneurship impacts individuals' well-being.

### Basic Results

Table 13.3 presents independent T-tests (mean comparisons) for the differences in well-being between entrepreneurs and those engaged in regular employment, and three basic ordered logit regressions and one additional OLS regression that demonstrate these effects. For all measures of well-being, the results from the independent T-tests indicate statistically and significantly higher well-being effects from entrepreneurship on the life of working individuals (differences ranged from 0.15 to 0.19 index points for the individual well-being measures scaled 1-7,  $p < 0.05$  for all cases).

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tee that the baseline category is indeed employees and not a combined category of employees and self-employed people.

Table 13.3. Entrepreneurship and well-being

Variable	Life Satisfaction		Global Happiness		Subjective Vitality		Mental Health Index	
	mean life satisfaction	ordered logit regression	mean global happiness	ordered logit regression	mean subjective vitality	ordered logit regression	mean mental health index	OLS regression
Entrepreneurial Engagement	5.92*** (1.17)	0.39** (0.17)	5.86** (1.03)	0.41*** (0.17)	5.92** (1.15)	0.34** (0.17)	17.75*** (2.67)	0.83*** (0.22)
Entrepreneurial Engagement Opp.	5.95*** (1.17)		5.86** (1.08)		5.95*** (1.15)		17.84*** (2.67)	
Entrepreneurial Engagement Nec.	5.79 (1.16)		5.84 (0.84)		5.80 (1.16)		17.44 (2.67)	
Regular Employment	5.73 (1.15)	ref.	5.71 (1.02)	ref.	5.73 (1.16)	ref.	17.17 (2.92)	ref.
Age		-0.07** (0.02)		-0.09*** (0.03)		-0.02 (0.02)		-0.06* (0.03)
Gender (Female)		0.14 (0.10)		0.23** (0.10)		0.12 (0.10)		0.26** (0.13)
Leisure Satisfaction		0.36*** (0.03)		0.42*** (0.03)		0.38*** (0.03)		0.56*** (0.04)
Economic Satisfaction		0.67*** (0.04)		0.51*** (0.04)		0.35*** (0.04)		0.68*** (0.05)
Type of Sector		4 categ		4 categ		4 categ		3 dummies
Income		6 categ		6 categ		6 categ		0.18*** (0.05)
Education		9 categ		9 categ		9 categ		0.03 (0.02)
Constant								12.31*** (0.85)
Chi-Square/F		527.02***		449.93***		318.44***		52.37***
R <sup>2</sup>								0.27
R <sup>2</sup> - Adjusted								0.27
Observations		1528/1837		1527/1837		1524/1837		1520/1837

Dependent variable: Well-being (three measures and an overall index of Mental Health). Independent variables: Entrepreneurial engagement (N=251). Reference category: Regular Employment without entrepreneurial activities (N=1586: full-time plus part-time minus those employees who are engaged in entrepreneurial activities). Notes: Weighted ordered logit regressions are applied to models 1-3 with independent well-being measures (scaled 1-7), and

a weighted OLS regression is applied to model 4 with the combined Mental Health Index (calculated by summing the three dependent variables). Missing values are excluded listwise. In model 4, all controls are included, but the 4 categorical variables of sector type is divided into three dummies – the category other being the referent, and the variables education and income treated as continuous variables. Standard errors in parentheses. Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Out of the 251 entrepreneurs, 59 are necessity-driven entrepreneurs who exhibit slightly higher well-being scores than employees on average, but the difference is insignificant (e.g., for life satisfaction 5.79 vs. 5.73). Also, when excluded from the regression analysis, effects of entrepreneurship on well-being tend to be more positive and more significant (e.g., average life satisfaction raises to 5.95). Data source: GEM 2011 Sweden Demoskop

Of course, these differences may be the result of several socio-demographic and psychological characteristics setting apart those who engage in entrepreneurship from those who engage in other/regular employment alternatives. Thus, in a second step, multivariate regressions containing the control variables discussed in the data section are run. These include – aside from age, gender, education, and household income – differences between entrepreneurs and non-entrepreneurs (i.e., regular employees) unrelated to the sources of well-being hypothesized to be positively influenced by engagement in entrepreneurship. For example, it is likely that entrepreneurial activities take place in systematically different social sectors (e.g., the market) than those where performance of regular employment occurs. Moreover, both leisure time and economic conditions are important work-related outcome conditions, and satisfaction with those represents an important part of every worker's (entrepreneurial or not) total utility from his work engagement. We also know that employees enjoy more leisure time and higher average income than those engaged in entrepreneurship, so controlling for the effects of income and leisure time (satisfaction with those) may further clarify (strengthen) the link between entrepreneurship and well-being.<sup>99</sup>

Since all of the well-being measures included in this study are ordinally scaled dependent variables, the first three basic regressions presented in

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<sup>99</sup> Benz & Frey include similar measures in their studies (Benz & Frey, 2003, 2004, 2008ab). It should however be noted that since entrepreneurship is likely to affect many of the factors associated with well-being, controlling for these factors also reduces the potential effects of entrepreneurship on well-being. This is the reason for not including work satisfaction in the model. It could have obscured the results by capturing a large portion of the variance, tapping into it all sources of outcome and procedural returns coming out of active engagement in entrepreneurship. It is also the case that the majority of studies on the link between self-employment and well-being make use of job/work satisfaction as the predominant dependent variable for the utility that individuals' derive from their work. In this study, we are more interested in the returns of entrepreneurship in terms of overall well-being.

table 13.3 are estimated using an ordered logit model. The fourth regression takes the mental health composite (an index consisting of all three measures of well-being) as its dependent variable, and is estimated using an OLS regression model. With values ranging from min 3 to max 21, this 19-point scale alleviates the possible objections to using OLS.<sup>100</sup> The weighting variables applied allow representative results, and further statistical procedures ensure the quality of the statistical procedures (high chi-square values and good model fit statistics).<sup>101</sup>

Overall, the multivariate regressions confirm that engagement in entrepreneurship is systematically more subjectively rewarding than engagement in regular employment. For all the three independent measures, as well as for the composite index measure of mental health, substantial and highly significant effects are found. The results are robust even when regressions only include full-time employees as the baseline category. The reason why part-time is uncontrolled for is that moving between part-time and full-time employments is an integral part of being an employee. Furthermore, when regressions are run with two separate categories for opportunity and necessity-driven entrepreneurship, results stay more or less the same. More specifically, it seems that even necessity-driven entrepreneurs enjoy higher well-being measures, but the raw differences between this category of entrepreneurship and engagement in regular employment tend to be insignificant.

In a separate analysis, which also looked at the mediation effects of including work satisfaction in the model (in the most comprehensive model

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<sup>100</sup> While some econometric reservations are still to be expected (since the variable is composed of three ordinally scaled variables), previous research in economics of happiness shows that there are, if any, very little differences between using ordered-logit or OLS regressions (Ferrer-i-Carbonell & Frijters, 2004). Moreover, treating Likert scaled variables (with ranges 1-7 and above) as cardinal variables is the default approach in the psychological literature on well-being. One reason for the robustness of cardinal treatments of well-being variables may have to do with cognitive processes in which individuals adapt the ordinal response labels into similar numerical values which equally divide up the response space (Clark et al., 2008; Van Praag, 1991).

<sup>101</sup> Aside from the chi-squared statistics reported in the table, other goodness-of-fit statistics were calculated (Pearson and Deviance) with generally positive results (i.e., high significant levels). However, these statistics are not reported in the table since they should only be used for models that have reasonably large expected values in each cell. Since we have both continuous independent variables and relatively many categorical predictors, there are many cells with small expected values, which renders these statistics undependable.

of table 13.4), it seems that work satisfaction mediates the relationship relatively little; the entrepreneurial engagement coefficient still remains substantial and significant. However, it seems warranted to extend the previous research and more precisely address the question of whether the higher well-being of entrepreneurs is indeed a robust result. Before moving to examining this issue, a deeper investigation of the self-determination effects that can be attributed to entrepreneurship is offered.

### What makes Entrepreneurship so Damn Good? Causes of the Higher Well-Being of Entrepreneurs

Table 13.4 presents independent T-tests (mean comparisons) for the differences in basic needs satisfaction between entrepreneurs and those engaged in regular employment, and four basic OLS regressions which demonstrate these positive effects. For all measures of basic needs satisfaction (i.e., relatedness, competence, autonomy, and an overall index), the results from the independent T-tests indicate statistically and significantly higher needs satisfaction effects from entrepreneurship.<sup>102</sup> Once again, these differences may be the result of several socio-demographic and psychological characteristics that set apart those engaged in entrepreneurship from those engaged in other employment activities. Following the procedure above, multivariate regressions are run with the same control variables as in the previous section. This includes age, gender, education, household income, leisure time, and economic satisfaction, as well as the type of sector within which work is performed.

Overall, the multivariate regressions presented in table 13.4 confirm that engagement with entrepreneurship is systematically more subjectively rewarding in terms of psychological relatedness, competence, and autonomy than engagement in regular employment.<sup>103</sup> For all the three independent measures, as well as for the composite index measure, substantial and

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<sup>102</sup> A complementary analysis was performed separately for opportunity and necessity-driven individuals. Here also, necessity-driven individuals score higher than those involved in regular employment, but generally lower than opportunity-driven entrepreneurs.

<sup>103</sup> On the basis of my discussion in chapter 4, these need-satisfying experiences are in fact to be considered measures of psychological well-being.

highly significant effects are found. As before, the results are robust even when regressions only include full-time employees as the baseline category. Furthermore, when regressions are run with two separate categories for opportunity and necessity-driven entrepreneurship, results stay more or less the same again. More specifically, it seems that even necessity-driven entrepreneurs enjoy higher levels of psychological needs satisfaction, but the raw differences between this category of entrepreneurship and engagement in regular employment options trends towards insignificance. These results complement the obtained results from the last section, by demonstrating that the positive effects of entrepreneurship go beyond mere life satisfaction and direct measures of positive feelings to also include positive psychological functionings. Now, it seems warranted to extend this line of research and more precisely address the question of whether the higher well-being of entrepreneurs is mediated by these effects, which were hypothesized to be the sources of well-being positively influenced by engagement in entrepreneurship. The results from the mediation analysis are reported in Table 13.5 below.

Table 13.4. Entrepreneurship and basic need satisfaction

Variable	Relatedness Index		Competence Index		Autonomy Index		BPNS Overall Index	
	mean relatedness index	OLS regression	mean competence index	OLS regression	Mean autonomy index	OLS regression	Mean BPNS index	OLS regression
Entrepreneurial Engagement	17.39*	0.42**	16.87*	0.37*	22.44***	0.99***	56.80***	1.90***
	(2.81)	(0.17)	(2.70)	(0.17)	(3.86)	(0.29)	(7.78)	(0.55)
Entrepreneurial Engagement Opp.	17.38*		16.94*		22.21***		56.61***	
	(2.81)		(2.61)		(3.90)		(7.89)	
Entrepreneurial Engagement Nec.	17.41*		16.66		23.26***		57.46***	
	(2.81)		(3.00)		(3.62)		(7.42)	
Regular Employment	17.09	ref.	16.59	ref.	21.06	ref.	54.76	ref.
	(2.70)		(2.54)		(3.67)		(7.07)	
Age		-0.05*		0.00		-0.08*		-0.14
		(0.03)		(0.03)		(0.04)		(0.09)
Gender (Female)		0.93**		0.15		0.27		1.43***
		(0.13)		(0.12)		(0.18)		(0.13)
Leisure Satisfaction		0.34**		0.24**		0.48***		1.07***
		(0.04)		(0.04)		(0.05)		(0.11)
Economic Satisfaction		0.33**		0.31**		0.60***		1.27***
		(0.05)		(0.05)		(0.06)		(0.13)
Type of Sector		3 dummies		3 dummies		3 dummies		3 dummies
Income		0.18***		0.16***		0.30***		0.68***
		(0.05)		(0.05)		(0.07)		(0.14)
Education		-0.01		0.01		0.12***		0.10
		(0.02)		(0.02)		(0.03)		(0.07)
Constant		15.63***		14.00***		16.73***		46.29***
		(0.85)		(0.81)		(1.13)		(2.17)
Chi-Square/F		22.05***		13.51***		28.98***		35.08***
R <sup>2</sup>		0.13		0.09		0.17		0.20
R <sup>2</sup> – Adjusted		0.13		0.08		0.16		0.20
Observations		1521/1837		1501/1837		1514/1837		1487/1837

Dependent variable: Basic Psychological Needs Satisfaction (three indexes for each need-scale and an overall index calculated by summing the three need-scales). Notes: Both the relatedness and competence indexes are composed of 3 items scaled 1-7, while the autonomy index consists of 4 items scaled 1-7; which corresponds to 19-point (3-21) and 24-point (4-28) indexes, respectively (the overall BPNS index thus constitutes a 60-points scale ranging from min 10 to max 70). Weighted OLS regressions are applied to all models. Missing values are excluded listwise. In all models, all controls are included with the 4 categorical variables of sector type divided into three dummies – the category other being the referent, and the vari-

ables education and income treated as continuous variables). Standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Data source: GEM 2011 Sweden Demoskop

Table 13.5. Entrepreneurship, basic needs satisfaction, and well-being

Variable	Mental Health Index			
	baseline regression	regression incl. relatedness	regression incl. relatedness & competence	regression incl. Relatedness, competence, & autonomy
Entrepreneurial Engagement	0.83*** (0.22)	0.64*** (0.19)	0.61*** (0.19)	0.54*** (0.19)
Age	-0.06* (0.03)	-0.03 (0.03)	-0.04 (0.03)	-0.03 (0.03)
Gender (Female)	0.26** (0.13)	-0.11 (0.12)	-0.08 (0.12)	-0.06 (0.12)
Leisure Satisfaction	0.56*** (0.04)	0.41*** (0.04)	0.39*** (0.04)	0.36*** (0.04)
Economic Satisfaction	0.68*** (0.05)	0.53*** (0.04)	0.50*** (0.04)	0.47*** (0.04)
Income	0.18*** (0.05)	0.10* (0.05)	0.08 (0.05)	0.06 (0.05)
Education	0.03 (0.02)	0.04 (0.02)	0.04 (0.02)	0.02 (0.02)
Type of Sector	3 dummies	3 dummies	3 dummies	3 dummies
Relatedness		1.29*** (0.06)	0.98*** (0.06)	0.88*** (0.07)
Competence			0.55*** (0.07)	0.48*** (0.07)
Autonomy				0.36*** (0.07)
Constant	12.31*** (0.85)	5.57*** (0.84)	13.33*** (0.77)	13.68*** (0.85)
F	52.37***	88.15***	87.68***	83.80***
R <sup>2</sup>	0.27	0.41	0.43	0.44
R <sup>2</sup> – Adjusted	0.27	0.40	0.43	0.43
Observations	1520/1837	1515/1837	1492/1837	1482/1837

Dependent variable: Well-being (Mental Health Index). Notes: Weighted OLS regression are applied to all models. Missing values are excluded listwise. Durbin-Watson statistics for all models show values of over 1.9 and less than 2.1 which indicates good model fit and no problem of omission. Model 1 replicates the result from Model 4 in Table 13.1. All controls are included with the 4 categorical variables of sector type divided into three dummies – the category other being the referent, and the variables education and income treated as con-

tinuous variables. Standard errors in parentheses. Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Data source: GEM 2011 Sweden Demoskop

The multivariate regressions presented in table 13.5 confirm that the positive well-being effects of entrepreneurial engagement are systematically mediated by satisfaction of the three basic needs: relatedness, competence, and autonomy. However, a considerable share of variance remains unexplained, and it is likely that other, more proximal and procedural aspects of entrepreneurs' work mediate this positive association (e.g., EWB).<sup>104</sup> Once again, the results are robust even when regressions only include full-time employees as the baseline category. Furthermore, when regressions are run with two separate dummies for opportunity and necessity-driven entrepreneurship, results stay more or less the same. More specifically, it seems that the coefficient of necessity-driven entrepreneurship is reduced in magnitude as satisfaction of the three basic needs is introduced into the model, although the effect remains insignificant. In conclusion, these results clearly show that entrepreneurial engagement results in higher well-being, significantly and meaningfully so, and that the needs for relatedness, competence and autonomy mediate these effects.

Now, it seems appropriate to extend the previous research and more precisely address the question of whether the higher well-being of entrepreneurs is indeed a robust result. In the next section, I examine whether the positive well-being effects from entrepreneurship are the result of selection bias in that mentally healthier people seek and succeed in entrepreneurship.

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<sup>104</sup> Another variable which had an additional, though relatively minor, mediation effect was satisfaction with being able to utilize one's skill, which aligned very closely to the satisfaction with one's need for competence. Furthermore, in a separate analysis using logit ordered regression for each measure of well-being independently (scaled 1-7), the results obtained indicate very similar findings. However, when the three basic needs constructs are introduced step by step into the ordered logit functions, the positive well-being effects of entrepreneurship on life satisfaction and subjective vitality are fully mediated by basic needs satisfaction, while that of global happiness is significantly and substantially reduced, but remains significant. This of course strengthens our theoretical predictions.

## Robustness Checks and Correction for Selection Bias

One important concern that may be voiced against the findings above is that the relationship between entrepreneurship and well-being may be spurious or otherwise suffer from selection bias. In other words, it is possible that a third variable might explain both individuals' engagement in entrepreneurial activities and their well-being, or else that the relationship between entrepreneurship and well-being suffers from reversed causality. That is, people who are engaged with entrepreneurship may be a selection of people with naturally higher levels of well-being. Since well-being is partly determined by individuals' genetic profiles and stable personality traits (Lykken & Tellegen, 1996), and since it is an established fact today that it is one of our most important psychological resources for attaining positive outcomes in our lives (Lyubomirsky et al., 2005a), it appears sensible to address these concerns. These are addressed below using two methodologies.

### **Controlling for Self-Efficacy and Optimism**

The fact that the relationship between entrepreneurship and well-being may be subject to other personality features was highlighted in previous research on job satisfaction and self-employment (e.g., Blanchflower & Oswald, 1990; Lange, 2012). In particular, individuals' self-efficacy and optimism have been shown to be related to both engagement in entrepreneurial activities (e.g., Baron, 1998; Krueger, 1993) and to various measures of well-being (e.g., Bradley & Roberts, 2004; Lange, 2012). Firstly, self-efficacy is likely to be a more common characteristic of people engaged in entrepreneurial activities relative to others. This is in part because starting a venture is a demanding goal-directed activity that necessitates high levels of motivation and self-control; to form an intention, to plan, to implement, and to disengage from the process when necessary. Indeed, self-efficacy has been shown to be an important motivational antecedent in entrepreneurship (Krueger, 1993; Krueger et al., 2000). Furthermore, self-efficacy is likely to be associated with feelings and beliefs of competence and personal mastery, and is thus also a likely predictor of positive affect and well-being (Bandura, 1991; Lucas et al., 1996).

Secondly, dispositional optimism is another personality characteristic likely to be related to both entrepreneurship and well-being. Optimism entails overall positive orientation and a tendency to think and act in ways that result in positive emotional experiences. Its positive relationship to well-being resembles that of pessimism to depression. Optimistic people, unlike their pessimistic counterparts, are especially likely to act on existing opportunities, in part because of a favorable desirability and feasibility assessment, and hence likely to be overrepresented among entrepreneurs (Cooper, Woo, & Dunkelberg, 1988). Furthermore, dispositional optimism has been shown to be strongly related to various measures of well-being, in general (Lucas et al., 1996) as well as in entrepreneurship (Cooper & Artz, 1995), and is likely, by virtue of being a stable personality characteristic, to be associated with (or be a proxy to) dispositional positive affect. In sum, it is argued that both self-efficacy and optimism should be associated positively with both engagement in entrepreneurial activities and higher levels of well-being, and thus may explain the positive entrepreneurship-well-being effect observed above when added to the regression models as additional controls. The results from this analysis are reported in Table 13.6 below.

Table 13.6. Robustness and selection bias

Variable	Mental Health Index				
	baseline regression	baseline regression incl. optimism and self-efficacy	regression incl. relatedness	regression incl. relatedness & competence	regression incl. relatedness, competence, & autonomy
Entrepreneurial Engagement	0.83*** (0.22)	0.78*** (0.21)	0.61*** (0.19)	0.59*** (0.19)	0.53*** (0.19)
Age	-0.06* (0.03)	-0.02 (0.03)	-0.00 (0.03)	-0.01 (0.03)	-0.00 (0.03)
Gender (Female)	0.26** (0.13)	0.14 (0.13)	-0.11 (0.12)	-0.16 (0.12)	-0.14 (0.12)
Leisure Satisfaction	0.56*** (0.04)	0.50*** (0.04)	0.37*** (0.04)	0.35*** (0.04)	0.33*** (0.04)
Economic Satisfaction	0.68*** (0.05)	0.54*** (0.05)	0.41*** (0.04)	0.40*** (0.04)	0.39*** (0.04)
Income	0.18*** (0.05)	0.13** (0.05)	0.06 (0.05)	0.04 (0.05)	0.03 (0.05)
Education	0.03 (0.02)	0.03 (0.02)	0.04* (0.02)	0.04 (0.02)	0.03 (0.02)
Type of Sector	3 dummies	3 dummies	3 dummies	3 dummies	3 dummies
Self-efficacy		0.34*** (0.04)	0.30*** (0.04)	0.27*** (0.04)	0.25*** (0.04)
Optimism		0.24*** (0.04)	0.21*** (0.04)	0.19*** (0.03)	0.18*** (0.04)
Relatedness			1.12*** (0.06)	0.96*** (0.06)	0.88*** (0.07)
Competence				0.47*** (0.07)	0.41*** (0.07)
Autonomy					0.26*** (0.07)
Constant	12.31*** (0.85)	9.61*** (0.87)	10.50*** (0.79)	10.91*** (0.80)	11.33*** (0.80)
F	52.37***	53.22***	83.27***	82.19***	78.10***
R <sup>2</sup>	0.27	0.32	0.44	0.46	0.46
R <sup>2</sup> – Adjusted	0.27	0.31	0.43	0.45	0.45
Observations	1520/1837	1487/1837	1483/1837	1465/1837	1455/1837

Dependent variable: Well-being (Mental Health Index). Mediators: averaged and standardized basic psychological satisfactions for relatedness, competence, and autonomy. Selected variables for control: general self-efficacy and optimism. Notes: Model 1 replicates the result from Model 4 in Table 13.1. Models 2-5 are equivalent to Models 1-4 in table 13.5, with the addition of self-efficacy and optimism. Weighted OLS regression are applied to all models.

Missing values are excluded listwise. Durbin-Watson statistics for all models show values of over 1.9 and less than 2.1, which indicates good model fit and no problem of omission. Standard errors in parentheses. Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Data source: GEM 2011 Sweden Demoskop

The multivariate regressions confirm that engagement in entrepreneurship is more subjectively rewarding in general as well as in comparison to employment, even when self-efficacy and dispositional optimism are controlled for. This demonstrates the large and significant effect that entrepreneurship has on well-being. In fact, while both efficacy and optimism are positively associated with well-being, as expected, they matter very little to the results obtained from the analysis above. When both items are added to the baseline regression the entrepreneurial engagement coefficient is reduced by just 0.05 scale points (compared to a decrease in 0.25 scale points after adding all the three basic needs to the model). Thus, it seems likely that the higher well-being of entrepreneurs is indeed a robust result. Moreover, it is likely that entrepreneurship affects well-being through its additional effects on core self-efficacy and optimism. For instance, entrepreneurship is likely to positively affect self-efficacy through its impact on core feelings of competence (Deci & Ryan, 2000), as hypothesized. Yet, since self-efficacy is considered a more stable personality characteristic than competence satisfaction, which is also more temporally and socially contingent, as evident by the wordings of items, it makes sense to include it in the robustness analysis. On the other hand, entrepreneurship is also likely to positively affect individuals' optimism (and self-efficacy) by the impact that the accompanied implemental and actional mindsets have on positive illusions (Taylor & Gollwitzer, 1995).<sup>105</sup>

### **Cohort Analysis**

As a second approach for checking the robustness and selection bias of the entrepreneurship-well-being effect, a cohort analysis is performed together

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<sup>105</sup> Note that the variable measuring engagement in entrepreneurial activities includes only acts of current implementation of entrepreneurial activities; thus excluding those who either deliberate (pre-actional), plan, or evaluate (post-actional), as is the case for pre-intended entrepreneurs, intended entrepreneurs, and established business owners, respectively. Taylor and Gollwitzer (1995) found that being in implemental and actional mindsets within the process of goal pursuit is likely to result in an optimistic illusion of self-control and in feelings of "flow" and intrinsic motivation, which are likely to be related to optimism, self-efficacy perceptions, and positive affect. These issues are explored in the next chapter.

with the panel structure of the data, to determine whether individuals who move into entrepreneurship differ significantly in their well-being from those who did not. This would be indicated, for example, if the mean level well-being of intended entrepreneurs, who are not already entrepreneurially engaged, were significantly lower than that of active entrepreneurs. This is because it is out of this group that individuals are most likely to enter entrepreneurship; individuals who already formed the intention to engage in entrepreneurial activities in the near future but haven't started doing that yet. A legitimate reservation against this analysis may suggest that even if mean level well-being is in fact lower for that group on average, it may still be the case that it is those with higher well-being among intended entrepreneurs who are more likely enter the process (at least to a greater extent). However, such evidence may still provide important indirect evidence for the positive effects of entrepreneurship on well-being, in particular if one controls for the presence of unemployment in the model, which thereby rules out the possibility for intended entrepreneurs to score lower on well-being because of a lack of job alternatives.

Table 13.7. Cohort analysis

Variable	Mental Health Index			
	mean mental health index	base-line OLS regression	mediation analysis with economic and leisure satisfaction	mediation analysis with self-efficacy and opti- mism
Entrepreneurial Engagement	17.75*** (2.67)	0.91*** (0.24)	1.11*** (0.20)	0.75*** (0.22)
Intended Entrepreneurial Engagement	16.53*** (3.78)	-0.67*** (0.23)	-0.39*** (0.20)	-0.90*** (0.21)
Regular Employment	17.17 (2.92)	ref.	ref.	ref.
Age		-0.15*** (0.02)	-0.07*** (0.02)	-0.07*** (0.02)
Gender (Female)		0.56*** (0.12)	0.46*** (0.11)	0.35*** (0.11)
Income		0.46*** (0.04)	0.23*** (0.04)	0.31*** (0.04)
Education		-0.00 (0.02)	0.00 (0.02)	-0.00 (0.02)
Type of Sector		3 dummies	3 dummies	3 dummies
Other Social & Work Status		5 dummies	5 dummies	5 dummies
Economic Satisfaction			0.66*** (0.04)	
Leisure Satisfaction			0.68*** (0.04)	
Self-efficacy				0.65*** (0.03)
Optimism				0.28*** (0.03)
Constant		17.65*** (0.82)	10.97*** (0.85)	11.54*** (0.82)
F		18.43***	77.43***	50.10***
R <sup>2</sup>		0.08	0.30	0.22
R <sup>2</sup> – Adjusted		0.08	0.30	0.22
Observations		2448/3101	2442/3101	2393/3101

Dependent variable: Well-being (Mental Health Index). Notes: Weighted OLS regression. Missing values are excluded listwise. Standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Data source: GEM 2011 Sweden Demoskop

Table 13.7 presents independent T-tests (mean comparisons) for the differences in well-being between actively engaged entrepreneurs (251), intended entrepreneurs who are not entrepreneurially active (138),<sup>106</sup> and those engaged in regular employment without being actively engaged in additional entrepreneurial activities (1,586). Results from the independent T-tests indicate statistically and significantly higher well-being from active engagement in entrepreneurship, but also statistically and significantly lower well-being for intended entrepreneurs; lower even than the average well-being of non-entrepreneurial employees. In order to further test the robustness of this result, three basic OLS regressions were run on the entire GEM sample (3101), with employees as the baseline category. Thus, in addition to the control variables age, gender, education, household income, and type of sector (3 dummies), the regressions also include 5 additional work-related dummies: student, retired/disable, homemaker, unemployed, and established business owners.<sup>107</sup> The results for the base-line OLS regression model are reported in the second column. The second and third regressions also include the variables economic and leisure satisfaction, and self-efficacy and optimism, respectively, as additional mediators for further testing the robustness of the regression estimates.

The results obtained from the multivariate analysis make it clear: Second only to unemployed people, intended entrepreneurs suffer the lowest level of well-being among all cohorts (i.e., relative to employees, active entrepreneurs, business owners, students, homemakers, and retired/disable individuals). In fact, net of optimism and self-efficacy perceptions, intended entrepreneurs have even lower levels of well-being than the unemployed.<sup>108</sup> Economic and leisure satisfaction on the other hand seem to mediate some of this negative relationship between being an intended entrepreneur and mean levels of well-being. In particular, regardless of current income, em-

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<sup>106</sup> Out of these 138 intended entrepreneurs, 11 reported being business owners of firms older than 42 months. They were retained in the analysis for their planning activities with their new businesses.

<sup>107</sup> As mentioned, controlling for these different dummies guarantees that the baseline category is indeed employees rather than a combined category of employees and self-employed people. In fact the category self-employed is subsumed by the variables (active) entrepreneurial engagement and established business owners. Controlling explicitly for self-employment is of course undesirable, since by doing that the results obtained will only be valid for the group of entrepreneurs who are employed by others.

<sup>108</sup> Since the objective here is not to make such a comparison, these results are not reported in the table. Instead, the reasons for and further analysis of these results are provided in the next chapter.

ployment, and working status, intended entrepreneurs seem to be less satisfied with their material conditions. Thus, it is safe to conclude that relative to those who engaged in entrepreneurial activities intended entrepreneurs have significantly and substantially lower well-being. Appealing as these results may seem they only provide indirect evidence that it is in fact engagement in entrepreneurship that is responsible for the positive link between entrepreneurship and well-being.<sup>109</sup>

Finally, the strongest evidence for a direct relationship between entrepreneurship and well-being may be established by comparing the mean level well-being of a subgroup within the cohort of intended entrepreneurs before and after its members move into entrepreneurship. If differences in mean levels are insignificant, it is likely that well-being results from engagement in entrepreneurship and not vice versa. All in all, the second round of data collection (T2) contains information about 20 individuals who moved into entrepreneurship after being classified as intended non-entrepreneurially engaged entrepreneurs at T1 out of a total of 138 (9 more had moved in, but they were concurrently involved in the startup or running of another venture, and hence excluded from the analysis). The mean level of well-being (Mental Health Index) for this group of individuals at T1 was 16.55 (SD=3.2) which is practically identical to the overall group mean level well-being at the time (16.53; 3.5: See Table 13.7).<sup>110</sup> Using the same composite of Mental Health Index at T2, the mean level of well-being for this group was even lower than initially (15.65 and SD=4.4)! While this result is puzzling (we would expect higher well-being at T2 than at T1), it should be taken with a grain of salt.<sup>111</sup> Overall, the results obtained from

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<sup>109</sup> Incorporating the three basic needs satisfaction in the models didn't alter the results with respect to intended entrepreneurs. The only thing that was altered is the significance of the *entrepreneurial engagement* and *established business owner* coefficients, which were reduced to barely 0.4, indicating what the previous analysis already revealed: that basic needs satisfaction is an important mediator of the link between entrepreneurship and well-being.

<sup>110</sup> Excluding the three outliers (discussed in chapter 12), the mean level for this group is 17.25 (SD=2.1). However, this doesn't change the overall picture, as this group still exhibits significantly lower well-being than entrepreneurs, and equal well-being to employees. However it does differ from the mean level group at 16.5 which may indicate the potential benefits of well-being for moving into entrepreneurship. Yet, because 3 out of 20 still represents 15 percent of this group, their information was retained in the analysis.

<sup>111</sup> One explanation for this puzzling result may be seasonal variations in well-being in Sweden. That is, the first round of data was collected during the spring/summer, and the second one during the au-

the cohort analysis and the panel structure of the data lend strong support to the effects found in previous sections concerning the positive consequences that entrepreneurship has on the well-being of working individuals.

## Concluding Remarks

Drawing on the self-organizational perspective outlined in chapter 9, this study investigated whether and how active entrepreneurial engagement impacts the well-being of working individuals. This is an important endeavor, since previous research by economists and entrepreneurship scholars has exclusively investigated the effects of self-employment and business ownership on work satisfaction, rather than studying the effects of active entrepreneurship on well-being in terms of mental health.

This study makes it clear. Active engagement in entrepreneurial activities – relative to engagement in non-entrepreneurial employment – pays off in terms of well-being. This both corroborates and complements results reported by previous research in economics (Benz & Frey, 2003, 2004, 2008ab; Blanchflower, 2000; Blanchflower et al., 2001) and entrepreneurship (Binder & Coad, 2013; Bradley & Roberts, 2004), by demonstrating how the well-being effects of entrepreneurship go beyond mere satisfaction to also include more affective and psycho-physiological well-being outcomes. The results obtained further demonstrate the mechanisms through which entrepreneurship is positively associated with individuals' well-being. They clearly show that active engagement in entrepreneurial activities results in positive need-satisfying experiences of relatedness, competence, and autonomy, and that these explain a significant part of the positive effect that entrepreneurship has on well-being.

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tumn/winter. A second explanation may have to do with the fact that most of these 20 individuals had been engaged in entrepreneurial activities for less than 6 months on average, and hence were more likely to have suffered from the immediate stress common to this period. Finally, measurement errors are also likely to play a role, as the first round was conducted within a large survey over a much longer period of time, while the second round was more specific and less condensed, which may have resulted in more accurate estimates by individuals. Finally, excluding the three outliers, the mean is 17.23 (SD=2.3), but as I just discussed in the previous footnote, 3 out of 20 represents 15 percent of the group, and I would thus caution against further interpretation.

This is an important discovery, not only because it corroborates previous observations and theory, but also because it further extends existing models that support entrepreneurship as a source of procedural utility (Benz & Frey, 2003; Binder & Coad, 2013). In addition to autonomy, this study finds that competence and relatedness are two important domains of freedom and well-being. Entrepreneurs are not only independent in the sense that they are free from supervision; they are also free to create their own approach to work, and their own working relationships. The results seem to suggest that people who engage in entrepreneurial activities positively impact their efficacy feelings and feelings of inclusion and belonging, and by doing so improve their own mental health. This study is thus the first to draw attention to the plausibility and observation that entrepreneurship strengthens individuals' core affiliation, as well as core efficacy – two aspects which are directly connected to individuals' well-being.

To sum up, this study corroborates and extends the existing literature by being the first to address the global nature of individuals' well-being, instead of merely focusing on job satisfaction, and by taking a well-defined and theoretically informed approach to entrepreneurship as an active and self-organized goal-engagement, rather than looking at self-employment as an institutional preference. The results obtained hold true for both male and female subsamples, and even when a battery of key socio-demographic and psychological characteristics is controlled for. Most importantly, results are robust even after the effects of optimism and self-efficacy are controlled for in the models. Drawing on the entire GEM data set, and subsequently on the longitudinal structure of the data, an additional cohort analysis confirmed the robustness of the findings. Nonetheless, a significant portion of unexplained variance still remains, and it is likely that other non-outcome aspects of entrepreneurs' work will be found to further mediate the relationship between entrepreneurship and well-being. For instance, EWB, and relatedly, intrinsic motivation and greater internalization of entrepreneurship into the self, are likely to add more explanatory power to the models. All in all, by and large, propositions 1-4 were all supported by the data.



# Chapter 14

## Study 2: The Evolution of Well-Being during Venture Creation

### Introduction

Contemporary entrepreneurship research is based on the process perspective (Baron & Shane, 2007; Davidsson, 2012b; Gartner, 1988), whereby most research has been dedicated to untangling the nature of the venture creation process and how it can be successfully exploited (e.g., Low & Macmillan, 1988; Shane & Venkataraman, 2000; Zahra & Dess, 2001). Yet, relatively little is known regarding how people actually experience the process of striving after and creating a venture. In fact, there are only a small number of empirical studies that have looked into the emotional features that are in play within the individual as the venture takes shape and evolves (Schindehutte et al., 2006). And, while a few empirical findings do suggest that entrepreneurial undertakings might affect a person's central functions (e.g., stress, family relations, etc.), and thereby individuals' well-being in general as well as in specific domains, to the best of my knowledge we know very little about the impact of this unfolding goal-directed process on individuals' well-being.

What is it like to plan for and be on the verge of starting up a venture? What is it like to embark on venture creation and be in the moment as a venture takes form? What is like to accomplish one's goal to establish a business and becoming the owner manager of an operative venture?

As discussed throughout this thesis, entrepreneurship is an experiential and emotional process, not only in the sense that people's well-being is impacted by how well they progress in it, but also in the sense that different feelings may have important self-regulatory functions along the process, which may, or for various reasons may not, be called upon by the situation or phase of engagement. An alarming and possibly surprising finding from the previous study was that intended entrepreneurs' planning to start up a business is significantly and substantially linked to lower measures of well-being. Although lower levels of well-being are expected for this group compared to those who actually implement their startup or those who have already established their firms, one may not have expected this group to have lower well-being scores than non-entrepreneurial employees.

In fact, this result stands in sharp contrast to predictions made by the action phase approach in psychology, which predicts a heightened implemental mindset associated with positive affect for those who engage in planning for implementation of their personal goals (Gollwitzer & Bayer, 1990). The question here is whether entrepreneurial planning drives these results and how, or whether there is something else operating in the background? This is crucial, for if setting the goal and planning to start up a venture results in such a high cost to one's well-being, this may explain why so many intended entrepreneurs experience tremendous difficulties to move from thought to action (Van Gelderen et al., 2015). Knowing the cause of this would take us one step closer to offering solutions to these problems.

Hence, to further our investigation into the pay-off structure of entrepreneurship, this study looks at the effects of entrepreneurship, as a process unfolding over time, on the well-being states of those involved in it. Drawing upon the *action phase approach* developed in chapter 10, the following study aims to examine the relation between different action phases along the process of venture creation and well-being. Since individuals' pre-decisional deliberations are not sampled in the data set, and are further highly difficult to adequately "observe" in the moment, investigation is dedicated to deciphering the emotional aspects that arise within the individual as the venture is being planned, takes form, and is established; i.e., from planning, to implementation, and realization of the venture. In sum, this

study tests the following propositions as they were postulated in chapter 10, where the *action phase approach* was outlined:

*Proposition 5a:* Planning to start up a business results in significantly lower measures of well-being compared to being employed, owning and managing an established firm, and/or actively being engaged in entrepreneurial activities. If true, then:

*Proposition 5b:* This expected negative well-being effect of planning is weakened by the likely presence (mediation) of the implemental mindset, which positively influences well-being through its positive effects on individual optimism and self-efficacy evaluations.

*Proposition 6a:* Being actively engaged in the startup process and/or owning and managing an established firm, results in higher measures of well-being compared to being employed and/or planning to start up a business. If true, then:

*Proposition 6b:* The expected positive well-being effect from being actively engaged is mediated by the likely presence of the actional and implemental mindsets which positively influence well-being through their positive effects on optimism and self-evaluation.

*Proposition 7a:* In comparison to actively engaged entrepreneurs, owners of established firms experience higher life satisfaction, but lower subjective vitality. Furthermore:

*Proposition 7b:* The expected positive well-being effect of being the owner manager of an established firm is fully mediated by positive evaluations of one's work being indicative of the post-actional evaluative mindset.

## Methodology

With the purpose of testing these propositions, the main data source used in the empirical analysis below is the Swedish GEM study of 2011 (described in chapter 12). Since the base line category for the analysis is employees (part-time or full-time) not involved in any phase of the process, 322 individuals had to be subtracted from the total number of 1,742 employees, to arrive at a total number of 1,420 employees not engaged in any stage of the venture creation process. Although the total number of employees not engaged in active entrepreneurial activities in the sample is 1,586 (as described in study 1), 166 had to be subtracted for being simultaneously classified as established business owners of firms older than 42 months and/or for being simultaneously classified as intended entrepreneurs. In total, the constructed and final sample examined consists of 1,986 individuals, including 1,420 employees without any record of engagement in entrepreneurial activities, 127 individuals currently planning to start up a business but with no track record of entrepreneurial engagement, 251 individuals who were actively engaged in starting up a business, and 188 owners/managers of firms older than 42 months who were not actively engaged in any intended or active entrepreneurial arrangement. I describe these last three measures in the variable section below, as they constitute the set of independent variables in this study.

### Variables and Measures

#### **Dependent Variables: Well-being**

Well-being is measured in the same way that it was assessed in the previous study (chapter 13): (a) global life-satisfaction; (b) global happiness; and (c) subjective vitality. Similarly, in the analysis below, these three variables are further combined into an overall 19-point index (Cronbach's Alpha 0.83). Table 14.1 displays information on basic statistics for each of these measures (see chapter 13 and Appendix A for more detailed information on how each one of these measures was assessed).

Table 14.1. Well-being measures used in the study as dependent variables

Well-being Variables & Measures	N	Min-Max	Mean	SD
Global Life-satisfaction (single item)	1977	1-7	5.75	1.17
Global Happiness (single item)	1971	1-7	5.73	1.03
Global Subjective Vitality (single item)	1970	1-7	5.77	1.17
Mental Health Index	1959	3-21	17.26	2.91

Correlation among all three variables is highly significant at the 0.01 level (2-tailed): global life satisfaction is correlated 0.72 with global happiness and 0.57 with a global measure of subjective vitality, which in turn is correlated 0.61 with global happiness.

### Independent Variables

Involvement along the venture creation process is assessed by measuring individuals' intended entrepreneurial engagement (post-decisional but pre-actional), active entrepreneurial engagement (actional), and post-entrepreneurial engagement (post-actional). Since several individuals were simultaneously classified as belonging to more than one of these three groups, these measures had to be harmonized. First, of the 198 individuals who reported planning to start up a venture in the next 3 years (classified as FUTSUP in GEM), 60 reported being actively involved in starting up another venture, and an additional 11 reported being business owners of firms older than 42 months. Thus, dropping these 71 respondents, the dummy *intended entrepreneurial engagement* contains information on 127 individuals who have set themselves the goal, and are currently planning, to establish their ventures without any other active or post-actional engagement. Second, of those 211 individuals who report being the owner managers of firms older than 42 months (classified as ESTBBUSO in GEM), 23 report being actively involved in the startup of another venture or otherwise planning the establishment of another venture. Thus, the dummy variable *post entrepreneurial engagement* contains information on 188 individuals who have realized their goal to establish their venture. Finally, the dummy variable *active entrepreneurial engagement* – which is identical to the dummy variable *entrepreneurial engagement* in study 1 – contains information on *all* 251 individuals who report being actively engaged in starting up a venture (a

combination of SUB and TEA as these are classified in GEM: see chapter 13 for how this category was calculated).

### **Control Variables and Other Measures**

Other than the variables and measures above, the following variables are controlled for in the first stage of the analysis below: gender (female=1), age (continuous variable), education (an ordinal variable ranging from 0 to 8 where 0=incomplete compulsory schooling or less than 9 years and 8=doctoral degree), and household income (an ordinal variable ranging from 1 to 6 where 1=under 100,000 kr and 6=over 500,000 kr). When testing the robustness of the results in the second stage, other important controls and mediators are included for reasons explained in the analysis below. These include: unemployment (a dummy variable), economic and work satisfactions (single items scaled 1-7), satisfaction with freedom to use one's skills (single item scaled 1-7: used as proxy for motive engagement), general optimism, and positive self-efficacy evaluation (the last two being indicators of the presence of the implemental mindset). For more information about all these measures, see Appendix A and chapter 13, where they were previously discussed.

## **Empirical Analysis and Results**

The main goal of the empirical analysis is to determine how involvement in the entrepreneurial process is related to the well-being of individuals. In order to address this question, I make use of basic econometric and multivariate techniques, and conduct the analysis in two parts. First, descriptive statistics and well-being regressions are estimated in order to investigate whether there are significant differences in well-being among the various groups currently involved in the entrepreneurial process. These are compared to the base line category of employees, holding basic socio-demographic characteristics constant. In a second step, the non-theorized, but potentially important causes behind these differences are submitted to mediation analysis. In the final part, further tests for robustness and selection bias provide further evidence for the ways in which well-being evolves throughout the entrepreneurial process.

## Basic Results (Mean Comparison and Cohort Analysis)

Table 14.2 presents independent T-tests (mean comparisons) for the differences in well-being between employees and individuals in each of three distinctive action phases of the entrepreneurial process. Moreover, the table includes three basic ordered logit regressions for each independent measure of well-being and one additional OLS regression for the overall combined index. The results from the independent T-tests indicate statistically and significantly lower well-being effects from planning to start up a business (compared to employees, differences ranged from 0.13 to 0.33 index points for the individual well-being measures scaled 1-7,  $p < 0.05$  for all cases), and statistically and significantly higher well-being effects from active and post-actional engagement in entrepreneurship, relative to those engaged in regular employment.

To better understand these findings, multivariate regressions are run in a second step that includes basic socio-demographic controls: age, gender, education, and household income. As in study 1, since all of the well-being measures included in this study are ordinally scaled dependent variables, the first three basic regressions presented in table 14.2 are estimated using an ordered logit model. The fourth regression takes the mental health composite (an index consisting of the all three measures of well-being) as its dependent variable, and is estimated using OLS regression model. As discussed in the previous chapter, with values ranging from min 3 to max 21, this 19-point scale alleviates the possible objection to using OLS (see study 1 for further discussion). The weighting variables applied allow representative results, and further statistical procedures ensure the quality of the statistical procedures (high chi-square values and good model fit statistics).<sup>112</sup>

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<sup>112</sup> As was the case in study 1, aside from the chi-squared statistics reported in the table, other goodness-of-fit statistics were calculated with generally positive results. Since these statistics should only be used for models that have reasonably large expected values in each cell, they have been excluded from the table.

Table 14.2. Well-being along the Entrepreneurial Process

Variable	Life Satisfaction		Global Happiness		Subjective Vitality		Mental Health Index	
	Mean life satisfaction	ordered logit regression	mean global happiness	ordered logit regression	mean subjective vitality	ordered logit regression	mean mental health index	OLS regression
Regular Employment	5.72 (1.14)	ref.	5.71 (1.02)	ref.	5.74 (1.16)	ref.	17.17 (2.91)	ref.
Intended Entrepreneurial Engagement	5.39*** (1.62)	-0.35** (0.18)	5.44*** (1.33)	-0.36** (0.18)	5.61*** (1.40)	-0.11 (0.18)	16.41*** (3.88)	-1.31*** (0.25)
Active Entrepreneurial Engagement	5.92*** (1.17)	0.33*** (0.16)	5.86*** (1.03)	0.37*** (0.14)	5.92*** (1.15)	0.28** (0.13)	17.75*** (2.67)	0.63*** (0.21)
Post Entrepreneurial Engagement	6.02*** (0.91)	0.50*** (0.15)	5.98*** (0.80)	0.55*** (0.16)	5.92*** (1.04)	0.24 (0.15)	17.90*** (2.27)	0.65*** (0.24)
Age		-0.06*** (0.02)		-0.06*** (0.02)		-0.03 (0.02)		-0.10*** (0.03)
Gender (Female)		0.26*** (0.09)		0.41*** (0.09)		0.27** (0.09)		0.52*** (0.13)
Income		6 categ		6 categ		6 categ		0.38*** (0.05)
Education		9 categ		9 categ		9 categ		0.04 (0.03)
Constant								17.37*** (0.74)
Chi-Square/F		105.82***		86.69***		53.58***		17.01***
R <sup>2</sup>								0.07
R <sup>2</sup> – Adjusted								0.07
Observations		1741/1986		1736/1986		1734/1986		1726/1986

Dependent variable: Well-being (three measures and an overall index of Mental Health). Independent variables: Intended, active, and post-entrepreneurial engagement. Reference category: Regular employment without planned, current, or previous, entrepreneurial activities (N=1420). Notes: Independent T-tests show significant differences in well-being between employees and those involved in each phase of the process. Weighted ordered logit regressions are applied to models 1-3 with independent well-being measures (scaled 1-7), and a weighted OLS regression is applied to model 4 with the combined Mental Health Index. Missing values are excluded listwise. In model 4 the control variables education and income are treated as continuous variables. Standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Data source: GEM 2011 Sweden Demoskop

Firstly, and strikingly, the multivariate regressions confirm that planning to start up a business is negatively associated with individuals' well-being, and that this relation is systematic, significant, and substantial. This holds not only in comparison to those who are actively engaged in entrepreneurial activities, or to those who run their own businesses, but also relative to the base line category of employees. For two out of the three independent measures, as well as for the composite index, substantial and highly significant effects are found.<sup>113</sup> Secondly, as expected, active engagement and running one's business have systematic positive well-being effects. This corroborates the findings from the previous study by showing the distinctive effects of active and post-actional engagement with the process of venture creation. Thirdly, the data shows, as proposed in the *action phase approach* outlined in chapter 10, that being actively engaged in entrepreneurship is associated more with subjective vitality than with life satisfaction, as compared to owners of established firms.

Next, a rigorous attempt to check the robustness of these results is made to prove the validity and strength of these remarkable findings. In particular, the finding that individuals who are currently planning to start up their ventures incur such a heavy cost to their well-being is a serious concern. If indeed planning has such detrimental effects, and if these effects are related to a failure in the transition of from a deliberative mindset to an implemental one, this may explain why so many intended entrepreneurs never make any substantial effort to go beyond their intended goals. They simply lack the mental resources to self-regulate themselves towards achieving their goal of venture establishment.

### A Deeper Examination of the Link between Action Phase and Well-Being

An important and likely objection to the findings above concerns the possibility of alternative theoretical explanations for this pattern of well-being in entrepreneurship. While the impact of active engagement and business ownership on the well-being of working individuals has been previously

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<sup>113</sup> The relatively lower  $R^2$  in model 4 in comparison with the regression model presented in Table 13.3 of the previous study is the result of excluding the specific domain satisfactions from this analysis.

established, and further corroborated in study 1, the finding that planning to start up a business is systematically associated with lower well-being demands greater attention. Most importantly, the relationship between planning and well-being may be spurious or otherwise suffer from selection bias.

First, unemployment is likely to affect individuals' propensity to plan to start up a business positively, and their well-being negatively. Second, both planning to start up a business and lower levels of well-being may be explained by individuals' dissatisfaction with their current work and material conditions. Third, from the point of view of individuals' self-determination, the reasons people hold for their intended startup engagement may divide the sample between those who are likely to incur a heavy cost to their well-being, acting out of necessity, and those who act out of their volition and hence are less likely to experience these negative effects.<sup>114</sup> Finally, it is likely that the demonstrated negative effects from planning are somewhat softened by the presence of the implemental mindset. Thus, in line with earlier predictions the final regression model in table 14.3 below includes measures of optimism and self-efficacy which are expected to positively moderate the link between planning and well-being, which once controlled for will thus further expose the negative well-being effects of planning.

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<sup>114</sup> Unfortunately, the GEM study of 2011 does not contain information on intended entrepreneurs' reasons for their intended engagement. However, these may be inferred from people's satisfaction with their current freedom to use their skills and capabilities as they wish. In important ways, this helps to divide those who are engaged in startup planning out of necessity from those who do it by choice.

Table 14.3. Well-being along the Entrepreneurial Process: further examination

Variable	Mental Health Index				
	baseline regression	regression incl. un-emp	regression incl. work and economic satisfaction	regression incl. freedom satisfaction	regression incl. optimism and self-efficacy
Regular Employment	ref.	ref.	ref.	ref.	ref.
Intended Entrepreneurial Engagement	-1.31*** (0.25)	-1.13*** (0.26)	-0.68*** (0.23)	-0.63*** (0.22)	-0.79*** (0.21)
Active Entrepreneurial Engagement	0.63*** (0.21)	0.68*** (0.21)	0.34* (0.18)	0.25* (0.17)	0.20 (0.17)
Post Entrepreneurial Engagement	0.65*** (0.24)	0.67*** (0.24)	0.09 (0.21)	-0.01 (0.20)	-0.07 (0.20)
Age	-0.10*** (0.03)	-0.11*** (0.03)	-0.08*** (0.03)	-0.07*** (0.02)	-0.04 (0.02)
Gender (Female)	0.52*** (0.13)	0.52*** (0.13)	0.38*** (0.11)	0.37*** (0.11)	0.30*** (0.11)
Income	0.38*** (0.05)	0.36*** (0.05)	0.14*** (0.05)	0.10** (0.04)	0.08* (0.04)
Education	0.04 (0.03)	0.04 (0.03)	0.02 (0.02)	0.01 (0.02)	0.01 (0.02)
Unemployment		-1.17*** (0.46)	0.19 (0.51)	0.24 (0.48)	0.08 (0.47)
Work Satisfaction			0.85*** (0.04)	0.52*** (0.04)	0.51*** (0.04)
Economic Satisfaction			0.59*** (0.04)	0.46*** (0.04)	0.35*** (0.04)
Freedom Satisfaction (Proxy for Motive)				0.76*** (0.05)	0.71*** (0.05)
Optimism					0.12*** (0.03)
Self-efficacy					0.27*** (0.03)
Constant	17.37*** (0.74)	17.00*** (0.74)	10.58*** (0.74)	8.97*** (0.66)	7.28*** (0.66)
F	17.01***	15.88***	80.36***	100.12***	95.46***
R <sup>2</sup>	0.07	0.07	0.34	0.42	0.45
R <sup>2</sup> – Adjusted	0.07	0.07	0.34	0.41	0.44
Observations	1726/1986	1726/1986	1672/1986	1669/1986	1632/1986

Dependent variable: Well-being (Mental Health Index). Notes: Weighted OLS regressions are applied to all models. Missing values are excluded listwise. Standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Data source: GEM 2011 Sweden Demoskop

The multivariate regressions confirm that planning to start up a venture is detrimental to one's well-being, even when unemployment, work, economic, and freedom satisfactions are all controlled for; demonstrating the large and significant effect that planning has on well-being. Indeed, the effects of these four variables, in particular work and economic satisfaction, explain a large portion of the variance. When both items are added to the regression model, the intended entrepreneurial engagement coefficient is reduced by 0.45 scale points (a statistically significant reduction). Notwithstanding this reduction, an equally large portion of the variance remains "unexplained". Furthermore, as predicted, the demonstrated negative well-being effects from planning are somewhat softened by the likely presence of the implemental mindset, which positively influences well-being through its positive effects on people's optimism and self-efficacy evaluations. Indeed, controlling for both optimism and self-efficacy, thus controlling for the indirect effects through which the implemental mindset is expected to impact well-being, results in an even larger negative well-being effect from planning. It seems safe to conclude that planning to start up a business is in and of itself systematically associated with lower well-being.

As far as active and post-actional engagements are concerned, the results corroborate and complement previous findings. First, actively starting up a business contributes positively to well-being over and above the effects of work satisfaction. This is an important finding since it demonstrates that the positive effects of entrepreneurial engagement are not confined to work utility alone (procedural or outcome-related). Moreover, even when controlling for self-determination (freedom satisfaction), effects from engagement are still positive and significant; although reduced, as expected. Second, the positive well-being effects from being an owner manager of an established firm are fully mediated by the presence of work satisfaction in the model. This is important since it suggests that owner managers of established firms derive their well-being from positive evaluations of their work. Finally, when measures of optimism and self-efficacy are included in the regression model, the demonstrated positive well-being effects from active engagement are fully mediated. This indicates the likely presence of the implemental-actional mindset, which positively influences

well-being through its positive effects on people's optimism and self-evaluations.<sup>115</sup>

## Concluding Remarks

Drawing on the *action phase approach* to goal regulation in entrepreneurship, as outlined in chapter 10, this study complements the previous study by investigating the evolution of individuals' well-being throughout the business creation process. This is an important endeavor, because previous research has narrowly looked at the static effects of self-employment and business ownership on work satisfaction rather than studying the temporal effects of entrepreneurship on well-being in terms of mental health. The results obtained thus complement the previous study, as well as previous research in economics and entrepreneurship, by shedding new light on how well-being evolves along the entrepreneurial process.

This study draws a clear conclusion: while the findings support a general positive evolution of well-being throughout the process – from the post-decisional but pre-actional phase of planning to the actional and post-actional phases of implementation and evaluation of goal attainment – they also differ substantially from predictions made by previous research on the psychology of personal goal pursuit. This pertains mainly to the post-decisional phase of planning. Most importantly, the results illuminate the emotional difficulties involved in moving from thought to action, or in other words, in committing to actually implement one's goal in entrepreneurship. As a temporal goal-directed phenomenon, entrepreneurship is an evolved experiential and emotional process.

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<sup>115</sup> When adding to the final regression model in table 14.3 a measure of leisure satisfaction, the coefficient for active engagement turns highly significant, and is magnified by more than 50 percent while no change is observed for any other variables in the model. Also included in the model is the type of sector within which work is performed, as well as the three measures of basic needs satisfaction, which do not have any significant impact on the results aside from the partial mediation effect of including the relatedness construct, which makes the coefficient for active involvement even weaker. Finally, when measures of basic needs satisfaction for autonomy and competence are included, the autonomy construct displays no significant well-being effects, and the competence construct only displays minor effects, as these are mediated by freedom satisfaction and self-efficacy, respectively. Since the objectives of study 2 are different to those of study 1, and since study 2 contains two more independent variables, these measures were omitted as required by sound parsimony.

Specifically, intended entrepreneurs planning to start up a business seem to incur a heavy cost in terms of individual well-being, even after a large battery of alternative explanations has been excluded, and further, over and above what could have been expected from predictions made on the basis of the action phase perspective in psychology (Gollwitzer & Bayer, 1999; Taylor & Gollwitzer, 1995). For instance, while planning does seem to be related to positive evaluations of optimism and self-efficacy, which in turn positively mediate the relationship between planning and well-being, the overall relationship between planning and well-being remains systematically, substantially, and significantly negative.

Seemingly, planning to start up a business – unlike the planning of other intended personal goals – often leads to a high cognitive load, and to a failure to optimally transit from a mindset of deliberation into a mindset of implementation.<sup>116</sup> This may be especially the case in entrepreneurship due to the complex nature of its goal system, which entails a range of serious deliberations even after the goal of establishing one's business has been set in motion. Thus, although no direct measures are offered to verify these propositions, the empirical picture gives good grounds for drawing these conclusions.

The consequences are evidently severe. Planning, while continuing to deliberate and experience lower well-being, directly translates into higher chances of failing to start up, as one lacks the mental resources to enter the process of active implementation. In fact, this may help explain why many intended entrepreneurs never move beyond their initial intentions. It may also help explain why business incubators, accelerators, and action-based interventions are so important. The procedures surrounding these arrangements facilitate smoother transitions from deliberating over goals to implementing them.

Finally, with respect to the other two action phases, results complement previous theoretical and empirical research by demonstrating the well-being advantages gained by owners/managers of established firms as well as by

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<sup>116</sup> Alternatively, a higher likelihood of experiencing serious approach-avoidance conflicts may operate in the background. This, however, goes hand in hand with the likelihood of excess momentum of the deliberating mindset and inertia of the implemental mindset.

those who are actively involved in the business creation process, and their different sources.

Attaining the goal of venture creation has a strong positive impact on the well-being of working individuals, and this seem to be mainly the result of greater work satisfaction. This was to be expected, considering the tasks to be achieved in the post-actional phase. The challenge of the established business owner-manager is to decide whether one's goal to establish the venture has been met, and whether to "stay" in the business, thus protecting against disturbances to current business operations, or leave it and move on. Satisfaction is here the focal and congruent cognitive experience, since it provides the necessary information for making such evaluations. And, since in every moment we are observing only those who have decided to stay, satisfaction is high on average.

On the other hand, the challenge of the actively engaged is to initiate and bring the startup process into completion, thereby building up a viable and operative business. The findings suggest that actively progressing towards one's goal of establishing the venture has a systematically strong impact on individuals' well-being, and this seems to relate to other causes besides mere evaluation (work satisfaction). In particular, the predicted positive cognitive effects from the implemental and actional mindsets seem to operate interdependently alongside positive need-satisfying experiences during active engagement in entrepreneurial activities. These findings thus sit well with predictions made by the *action phase approach* developed in chapter 10, but also find justification in other dual process theories of motivation and self-regulation (Kruglanski et al., 2000; Kuhl, 1992). To conclude, propositions 7-9 were all supported by the data.



# Chapter 15

## Study 3: The Significance of Life Goals and Entrepreneurial Motives for Well-Being

### Introduction

Entrepreneurship is pursued for a large variety of reasons. Some people start businesses because they dream of acquiring wealth and renown, while others wish to be their own bosses and work with the things that interest them the most in life. The question I ask in this study is if the life goals and reasons people have for pursuing entrepreneurship influence the extent to which their pursuits lead to well-being? To the best of my knowledge, this question has not been explored previously. Prior research has examined how the strength of various specific motives influence firm-level outcomes (e.g., growth motivation influencing growth), but has not considered the psychological effects stemming from general life goals and motives for engaging in entrepreneurship, let alone the implications of whether one's life goals and motives are congruous with each other. In fact, the extent to which people's entrepreneurial motives match their important life goals varies substantially, but we know nothing about the implications of this on the psychology of these people. Focusing on early stage entrepreneurs' well-being is important, since well-being is not only an indication for the

relative success of engaging in the entrepreneurial process, but also a motivational variable with important self-regulatory benefits (see chapter 7).<sup>117</sup>

Building on the *life goal and motive approach* developed in chapter 11, I examine the effects of intrinsic and extrinsic entrepreneurial motives, life goals, and their matching conditions on the well-being of those trying to establish their ventures. Unlike study 1, which considers the self-determining features of entrepreneurship in supporting individuals' well-being, the present study considers the role of the individual, rather than that of the work-related context, in explaining variations in well-being among those involved with entrepreneurship.

In this study, I make several contributions to the literature. The most important among them is to address the important question of how different types of life goals and motives for engaging in entrepreneurship influence individuals' well-being. My research allows for study of a greater range of peoples' life goals and motives for pursuing entrepreneurship. Furthermore, I extend previous work within self-determination theory (SDT) on the match perspective (Kasser & Ahuvia, 2002; Sagiv & Schwartz, 2000; Vansteenkiste, Duriez, Simons, & Soenens, 2006) by advancing and examining an under-theorized aspect of the match hypothesis: the discrepancy between life goals and motives for engaging in entrepreneurship. I test whether the match between one's stated entrepreneurial motives and the life goals one holds is associated with well-being over and beyond the effects of life goals and motives.

All in all, this study tests the following propositions postulated in chapter 11:

*Proposition 8:* Intrinsic entrepreneurial motives are positively associated with well-being in entrepreneurship.

*Proposition 9:* Extrinsic entrepreneurial motives are negatively associated with well-being in entrepreneurship.

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<sup>117</sup> In this chapter, I use the term "early stage entrepreneurs" to refer to intended and actively engaged entrepreneurs, although only those who are actively engaged in the creation of new business activities are usually considered to be entrepreneurs. Although I do not wish to refute that praxis, I do consider intended entrepreneurs' planning to be a part of the entrepreneurial process.

*Proposition 10:* Intrinsic life goals or aspirations are positively associated with well-being in entrepreneurship.

*Proposition 11:* Extrinsic life goals or aspirations are negatively associated with well-being in entrepreneurship.

*Proposition 12:* In regards to discrepancies between life goals and motives, extrinsic discrepancy has positive effects on well-being, while intrinsic discrepancy has no effect on well-being in entrepreneurship.

## Methodology

The data source used for analyzing these propositions is the longitudinal section of my data (described in detail in chapter 12). More specifically, I make use of the second round of data collection, which contains information on 137 of the original 160 respondents who consented to participate in this study in the GEM 2011 survey. Three respondents displayed seriously unstable response patterns and were excluded from the analysis. Another seventeen no longer met the criteria of being engaged in the entrepreneurial process, either as intended entrepreneurs who are currently planning their venture establishment or as actively engaged entrepreneurs who are currently implementing their business ideas, and were thus excluded, leaving a total of 117 intended and actively engaged entrepreneurs (65 males and 52 females; mean age = 47).

### Variables and Measures

#### **Dependent Variables: Well-being**

Well-being was assessed by creating an overall Mental Health Index on the basis of three established and validated scales and measures of well-being: (a) the Satisfaction With Life Scale (Diener et al., 1985), a five-item scale measuring the cognitive aspect of subjective well-being as a measure of hedonic well-being (Cronbach's Alpha 0.77), (b) the Subjective Vitality Scale

(Ryan & Frederick, 1997), a seven-item scale measuring participants feelings of being alive and alert as a measure of eudaimonic well-being (Cronbach's Alpha 0.89), and (c) a single item of global happiness as an affective measure of subjective well-being (Gurin et al., 1960). Combining (after standardizing) the three measures into an overall index of mental health (Cronbach's Alpha 0.82) reflects the unique contribution of each to the more general phenomenon of well-being and collectively constitute a more stable and reliable measure. All scales and variables are based on 1-7 Likert scales and have been validated in previous research. I excluded two items from the subjective vitality scale: the control negative formulated item ("I don't feel very energetic") was excluded on the basis of previous recommendation (Bostic et al., 2000), and a second item was excluded as it exhibits inconsistencies in response patterns due to its value-laden formulation ("Sometimes I feel so alive I just want to burst").

#### **Independent Variables: Life Goals and Entrepreneurial Motives**

These measures were discussed in chapter 12. An exploratory factor analysis indicated that the six life goal scores fall neatly into two overall factors: an extrinsic life goal orientation factor, including wealth, fame, and image; and an intrinsic life goal orientation factor, including personal growth, relationships, and community contribution (eigenvalues 2.2 and 1.4), explaining 61% of the variance across the six life goal scores. On this basis, I constructed the final intrinsic and extrinsic life goal orientation scores by standardizing and summing their three respective sub-scores. Alpha values for these two scores were 0.69 and 0.61, respectively. As for entrepreneurial motives, an exploratory factor analysis using varimax rotation indicated that the nineteen items fall into four factors related to personal growth, wealth, organizational, and status motives. Because I was more interested in the extremes of this continuum, I retained eight items that clearly captured these extremes: four items capturing a clear intrinsic motivation (e.g., "To grow and learn as a person"; "To have considerable freedom to adapt my own approach to work") and four capturing a clear extrinsic motivation (e.g., "To earn a larger personal income"; "To have a chance to build great wealth or a very high income"). An exploratory factor analysis using varimax rotation indicated that the eight items fall neatly into two factors; in-

trinsic and extrinsic (eigenvalues 3.5 and 1.4), explaining 63% of the variance across the items. The Alpha values for the two measures were 0.80 and 0.77 respectively. The mean scores of the two factors were 23.4 and 16.6 (and SD 3.7 and 4.7), and the alpha reliability coefficient for the two was 0.8 and 0.77 respectively. Following this, both intrinsic and extrinsic motivation scores were constructed by standardizing and adding the items.

On this basis I have calculated *Life Goal and Motive Discrepancy* scores as follow. I constructed two measures of life goal – motive discrepancies: intrinsic discrepancy (i.e., the absolute difference between peoples' ratings of intrinsic life goals and intrinsic entrepreneurial motives) and extrinsic discrepancy (i.e., the absolute difference between peoples' ratings of extrinsic life goals and extrinsic entrepreneurial motives). For both types of discrepancies, the absolute values of the gaps and their standard deviations were almost identical. Thus, no gap was found to be larger than the other, and both gaps varied equally around their mean. In relation to recommendations regarding unconstrained models (Edwards, 1994, 1995) I justify the use of difference-score predictors with the aforementioned theoretical account of the match perspective as it was outlined in chapter 11.

### **Control Variables**

Other than the above variables and measures, the following variables are controlled for: gender (female=1), age (continuous variable), education (an ordinal variable ranging from 0 to 8 where 0=incomplete compulsory schooling or less than 9 years and 8=doctoral degree), and household income (an ordinal variable ranging from 1 to 6 where 1=under 100,000 kr and 6=over 500,000 kr). Following previous research, I have chosen these controls for their potential effects on individuals' well-being. I restricted the usage of other controls to make the analysis as parsimonious as possible, given the small sample size of 117 individuals.

## **Empirical Analysis and Results**

The main goal of the empirical analysis is to determine the effects that entrepreneurial motives and life goals have on the well-being of individuals engaging in early stage entrepreneurship. I use OLS regressions to address

these concerns in the form of propositions 8-12. The regression results are reported in Tables 15.1 and 15.2. The empirical analysis is conducted in three parts. First, the effects of entrepreneurial motives are investigated with respect to individuals' well-being. Second, I test the effects that individuals' life goals have on well-being and further investigate any mediation effects arising when the two regression models are merged. In the final part, I examine the effects of motive/life goal incongruences on well-being over and beyond the effects of the individual components of life goals and motives.

### Effects of Entrepreneurial Motives

The results for propositions 8 and 9 are presented in column 1 in Table 15.1, which presents OLS regressions for the effects of entrepreneurial motives on the mental health composite. Proposition 8 tests the implications of intrinsic motivation. The results indicate significant positive effects from holding intrinsic motives for entrepreneurship on the well-being of early stage entrepreneurs. Thus, Proposition 8 is supported by the data. Proposition 9 tests the implications of extrinsic motivation. The results from the basic regressions fail to indicate statistically and significantly higher negative effects from holding extrinsic motives in entrepreneurship on the well-being of early stage entrepreneurs. Thus, to the extent that intrinsic and extrinsic motives are in competition with each other, holding extrinsic motives is not beneficial, whereas, holding intrinsic motives relative to holding extrinsic motives is beneficial to well-being. Thus, although proposition 9 is not supported, the overall pattern of results does not contradict SDT with regards to the effects of motives.

### Effects of Life Goals

The results for the effects of life goals on individuals' well-being are presented in column 2 in Table 15.1. Proposition 10 regards the implications of intrinsic life goals for individuals' overall well-being. The results indicate significant positive effects from holding intrinsic life goals in entrepreneurship on the well-being of early stage entrepreneurs. The effect remains

when individuals' intrinsic motives are added to the regressions as indicated by the third column. Thus, proposition 10 is supported. In fact, the positive well-being effects of both intrinsic motives and intrinsic life goals remain in the more comprehensive model. Thus, both constructs have independent positive effects on the well-being experiences of early stage entrepreneurs, which supports claims made by SDT researchers in other contexts. However, it is also evident that there is a partial mediation effect, in which the effects of intrinsic life goals both dominate those of intrinsic entrepreneurial motives and partially operate through them.

Proposition 11 tests the implications of extrinsic life goals for well-being. Although the results indicate negative effects from holding extrinsic life goals in entrepreneurship on the well-being of early stage entrepreneurs, these are insignificant (though marginally significant at the 1-tail t-test). When individuals' motives are added to the regressions, as indicated by the third column, the effect of the extrinsic life goals change very little, although the effect of extrinsic motives becomes slightly positive (though insignificant), indicating the existence of a partial mediation effect. Thus, all things considered, there is no support for Proposition 11. All in all, then, the overall prediction made by SDT with regards to the effects of life goals is only partially supported.

Table 15.1. Effects of Entrepreneurial Motives and Life Goals on Well-being

Variable	Mental Health Index		
	(i)	(ii)	(iii)
Intrinsic Motives	0.84*** (0.24)		0.49** (0.27)
Extrinsic Motives	-0.21 (0.27)		0.04 (0.35)
Intrinsic Life Goals		0.97*** (0.24)	0.69*** (0.27)
Extrinsic Life Goals		-0.26 (0.21)	-0.30 (0.27)
Intrinsic Discrepancy			
Extrinsic Discrepancy			
Age	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.01)
Gender (Female)	0.01 (0.44)	-0.23 (0.42)	-0.01 (0.45)
Income	0.57*** (0.15)	0.56*** (0.15)	0.58*** (0.14)
Education	-0.09 (0.22)	0.04 (0.20)	-0.01 (0.22)
Constant	14.27*** (1.24)	13.94*** (1.10)	13.75*** (1.25)
F	4.49***	4.84***	4.31***
R <sup>2</sup>	0.19	0.20	0.24
R <sup>2</sup> – Adjusted	0.15	0.16	0.18
Observations	117	117	117

Dependent variable: Well-being (Mental Health Index). Notes: Weighted OLS regressions are applied to all models. Durbin-Watson statistics for all models show values of over 1.9 and less than 2.1, which indicates good model fit and no problem of omission. Standard errors in parentheses. Significance levels: \*\*\*  $p \leq 0.01$ , \*\*  $p \leq 0.05$ , \*  $p \leq 0.1$ .

## Effects of Life Goal/Motive Discrepancies

Table 15.2 presents the results of testing proposition 12. Proposition 12 makes claims regarding the implications of intrinsic and extrinsic life goal/motive discrepancies for the well-being of early stage entrepreneurs. The effect of intrinsic discrepancy on the mental health composite was not significant as expected; in contrast, and also as expected, I found a positive effect of extrinsic discrepancy on well-being. Thus, proposition 12 which states that relative to intrinsic life goal/motive discrepancy, extrinsic discrepancy results in greater positive effect on peoples' well-being, is supported by the data. It should be noted that the positive effect of extrinsic discrepancy on well-being remains when all individual components, including the other type of discrepancy, are included in the third column. I will discuss these findings in the concluding section below.

Table 15.2. Effects of life goal/motive discrepancies on well-being

Variable	Mental Health Index		
	(i)	(ii)	(iii)
Intrinsic Motives	0.47* (0.25)		0.42 (0.29)
Extrinsic Motives		0.68** (0.31)	0.17 (0.35)
Intrinsic Life Goals	0.62** (0.27)		0.60** (0.28)
Extrinsic Life Goals		-0.42* (0.27)	-0.36 (0.27)
Intrinsic Discrepancy	-0.04 (0.34)		-0.20 (0.34)
Extrinsic Discrepancy		1.06*** (0.44)	0.79** (0.44)
Age	-0.00 (0.01)	-0.00 (0.01)	0.00 (0.01)
Gender (Female)	-0.10 (0.42)	0.39 (0.45)	-0.15 (0.45)
Income	0.56*** (0.15)	0.52*** (0.15)	0.55*** (0.14)
Education	-0.00 (0.20)	0.04 (0.22)	-0.07 (0.22)
Constant	13.63*** (1.11)	12.87*** (1.29)	13.54*** (1.28)
F	4.62***	3.03***	3.80***
R <sup>2</sup>	0.23	0.16	0.26
R <sup>2</sup> – Adjusted	0.18	0.10	0.19
Observations	117	117	117

Dependent variable: Well-being (Mental Health Index). Notes: Weighted OLS regressions are applied to all models. Durbin-Watson statistics for all models show values of over 1.9 and less than 2.1, which indicates good model fit and no problem of omission. Standard errors in parentheses. Significance levels: \*\*\*  $p \leq 0.01$ , \*\*  $p \leq 0.05$ , \*  $p \leq 0.1$ .

## Concluding Remarks

Despite the frequently made observation that initial motives for launching a business vary greatly among individuals, the implications of this variation have received virtually no attention. Drawing on the *life goal and motive approach* developed in chapter 11, I examined the important implications of differences in entrepreneurial motives and life goals, and of the extent to which they are congruent with each other, for people's well-being. This is an important addition to previous studies on the psychology and motivation of intended and actively engaged entrepreneurs, which has studied a limited set of predefined motives and a small range of outcomes on the firm level. As theorized, intrinsic entrepreneurial motives have consistent positive effects on well-being in entrepreneurship. However, predicted negative effects from extrinsic motives on well-being were not significant.<sup>118</sup> I also hypothesized and tested the effects of aspirations on early stage entrepreneurs' well-being on the basis of SDT. As predicted, positive effects were noted for intrinsic life goals and negative ones for extrinsic life goals, although unlike the former, the latter's effects were largely insignificant.

Aside from the direct effects of aspirations and motives as independent constructs, I also tested the matching approach developed in chapter 11, where I hypothesized the differential effects of two different kinds of discrepancies between life goals and entrepreneurial motives. As predicted, in dramatic contrast to the effects of intrinsic discrepancy, I found that whereas extrinsic aspirations and extrinsic motives are generally bad for one's well-being as independent factors, they can be combined to generate a strong and positive well-being effect in entrepreneurship; an effect that has the potential to override any negative well-being effect stemming from the individual components. The question that remains is why this is so.

It is commonly assumed that congruence between one's motivational concerns is generally a good thing and that a mismatch is bad. Nevertheless, once we treat motivational features such as goals and motives as extrinsic or intrinsic, the desirability of reaching congruence between one's

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<sup>118</sup> In fact, contrary to what was expected, there were even signs of a positive and significant effect from extrinsic motives when these were tested together with extrinsic life goals and their matching condition (see column 2 in table 15.2). This is discussed in the text below.

life goals and motives becomes questionable, or at the very least something that is or could be contingent on the particular circumstances. Thus, whether “being one with one’s concerns” is good or not could depend on the kind of situation or domain within which one’s activities take place. In entrepreneurship, individuals constantly face challenges and demands involving money, prestige, and reputation; and while these are unquestionably important issues to deal with, taking these issues as primary concerns may prove detrimental to well-being, which has been shown to be more closely aligned with intrinsic concerns. Consequently, contrary to the idea that congruence between one’s motivational concerns is good, a mismatch between one’s extrinsic aspirations and motives might actually be a good thing.

In particular, a mismatch between stronger extrinsic motives and weaker extrinsic life goals (rather than the opposite) would seem appropriate, as life goals (like values) tend to be more deeply rooted in one’s psychological profile, while motives are closer to specific activities that may be necessary to achieve the material success demanded by the process of venture creation. As I found a positive impact of extrinsic discrepancy on well-being in the regression analyses (see column 2 in table 15.2), with additional positive impact of extrinsic motives and negative impact of life goals, the aforementioned pattern seems to be supported by my results. In addition, the impact of the extrinsic discrepancy is not entirely dependent on the existence of regression covariates, as the correlation analysis also shows a significant positive direct correlation between extrinsic discrepancy and well-being.

Another potential explanation for this interesting finding might be offered on the basis of existential psychology (Frankl, 1985). In the existential tradition, a person attains meaning not only by creating something and/or by enjoying her wealth and fortune, but also through resistance and suffering, as long as these have clear meanings and are existentially unavoidable. The need for some extrinsic concerns in entrepreneurship is unavoidable given the demands of the market, and such concerns are meaningful for making progress in entrepreneurship. Thus, it is possible that making a deliberate choice to pursue the goal of establishing a business without matching extrinsic concerns invigorates, rather than distracts, the individual. This also echoes Bertrand Russell’s typology over the causes of human unhappi-

ness and the remedies he offers (Russell, 1930). According to Russell, narcissism, which occurs when vanity passes a certain threshold, can only be cured when the individual does *not* enact his materialistic self-absorption but instead through a “successful activity inspired by objective interests” rises above himself.

With these findings I make several contributions to the entrepreneurship literature, specifically the literature on entrepreneurial motivation and performance. First, because people design their own jobs in entrepreneurship, the process of venture creation potentially offers unique possibilities for people to reach important life goals through their work. Despite this, little attention has been paid to examining such life goals and the extent to which they are pursued and attained within the entrepreneurial process. Second, while it is well known that people pursue entrepreneurship for various reasons, previous research has not sufficiently captured the richness of these entrepreneurial motives and how they relate to important outcomes such as well-being. I propose that this focus on life aspirations, entrepreneurial motives, and their possible discrepancies, is a way to unpack the complexity of entrepreneurial motives and show how they are related to important outcomes in entrepreneurship. Finally, I also contribute to the more general literature on self-determination theory and the match perspective by showing that the two do not necessarily contradict each other. The results obtained point towards the importance of holding, on the one hand, strong intrinsic motives and life goals, and, on the other hand, some degree of extrinsic motives and life goals, as evident by the positive effects of experiencing incongruence between the latter. This finding not only contradicts previous research on the match perspective in psychology (e.g., Higgins, 2000), but also opens new avenues for goal and SDT researchers to begin integrating competing theoretical approaches into their analysis.



# Chapter 16

## Study 4: Construction and Validation of the Entrepreneurial Satisfaction Scale

### Introduction

In chapter 5, the concept of entrepreneurial well-being (henceforth EWB) was developed and distinguished as an important facet of entrepreneurs' overall well-being, and further differentiated from other related concepts in entrepreneurship (Cooper & Artz, 1995; Cardon et al., 2009). Among other things it was argued that EWB is a distinctive, cognitive-affective relevant phenomenon, which plays a crucial role in the process of venture creation. In subsequent chapters, a comprehensive framework for studying its cognitive and motivational effects (chapter 7), and its possible antecedents (chapters 9, 10, and 11)<sup>119</sup> was elaborated on at length. The aim of this study is to develop and validate a scale – the Entrepreneurial Satisfaction Scale (henceforth “ESS”) – for measuring one of its most central components: the global cognitive judgment of satisfaction that entrepreneurs derive from

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<sup>119</sup> While chapters 9-11 were not directly concerned with EWB per se, but with the broader concept of the overall well-being of individuals, as EWB is a subset of the overall well-being of any individual who experiences it, its antecedents can be taken to have been included in the analysis there, even if not precisely identified.

engagement in entrepreneurship (where entrepreneurship is seen as the self-organized career process of creating and growing business ventures).<sup>120</sup>

Underlying the ESS is a process of cognitive judgment of satisfaction, whereby the entrepreneur assesses the quality of his life, his experience, and his achievement as an entrepreneur, drawing on both cognitive and affective sources of information. Cognitively, judgments of satisfaction are dependent upon a comparison of one's circumstances with what one considers to be an appropriate standard (Weiss, 2002). This standard is set by each individual for herself, and it is thus not externally imposed. For this reason, the scale is designed around the idea that one must ask for an overall judgment of life as an entrepreneur in order to measure the concept of EWB. This lines up with the subjective well-being approach, which centers on people's own judgments, not on criteria judged important by the researcher (Diener, 1984).

Surely, the standards people use when thinking about their lives as entrepreneurs in positive terms may vary from person to person. However, it seems likely that these standards would share some common features that may prove useful for both psychological and sociological inquiry (e.g., "I have succeeded to establishing my own company", "I am my own boss", "I am a boss of others", "I contribute to the well-being of my customers and my employees", etc.). Moreover, besides cognitive appraisal of life as an entrepreneur in positive terms, positive affective experiences in entrepreneurship may likewise shape the subjectively rewarding entrepreneurial life in similar ways. For instance, when accumulated positive experiences in entrepreneurship dominate negative affective experiences (e.g., successful launch of product, successful patent protection, partnering with a high potential partner, being recognized for innovation and social contribution, preventing competitors from entry, raising financial investments, helping an employee, facing the challenge, etc.), entrepreneurs will be more likely to feel satisfied with their entrepreneurship.

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<sup>120</sup> This definition of entrepreneurship was something that was both communicated to and discussed with the respondents during each round of interviews. From the 94 different perspectives offered by the entrepreneurs observed in this study, some clear patterns emerge, all of which resonate clearly with the definition of entrepreneurship as a self-organized career orientation involving the creation of new business activities.

Overall, the ESS captures an important psychological outcome in the entrepreneurial process. It is likely to provide both motivational and self-regulatory nutrients, and important information about entrepreneurs' standing and progression in their entrepreneurship. Such information serves as an important reference criterion, affecting actual motivation as well as the process and outcome of goal setting and goal striving (see chapters 5 and 7). This is especially important for the setting of and striving for long-term goals, such as creating and growing a venture, which require the planning and mobilization of both psychological and social resources. As entrepreneurs' motivation is goal-directed and occurs within the context of self-regulation, this means that entrepreneurial satisfaction is an important factor in the self-regulation of entrepreneurs.

## Methodology

The process of scale construction and validation was theoretically driven, and occurred in several stages. First, EWB was theorized and defined based on previous research on Subjective Well-being (henceforth SWB) as a context-specific subjective well-being in entrepreneurship (see chapter 5). Briefly noted, the structure of EWB was conceptualized as an analogue of SWB, i.e., as satisfaction and a feeling of wellness from engagement in entrepreneurship. To continue the analogy with SWB, this definition entails that people experiencing positive EWB evaluate their lives *as entrepreneurs* positively on the whole. Second, in order to minimize the risk of venturing beyond the bounds of the defining construct, the Satisfaction With Life Scale (SWLS; Diener et al., 1985) was used to construct the items for the Entrepreneurial Satisfaction Scale as a measure of EWB.

This procedure helped ensure not only the validity of the instrument, but also its parsimony and efficiency for data collection purposes. It further guarantees that the properties of the scale are determined by items that exhibit relevant content domain information, clarity, unambiguity, unremarkable length, and intelligibility (DeVellis, 2012). In fact, using an existing general scale as a foundation upon which to construct a more specific scale on a certain domain is not a new method in the social sciences or in psychometric theory and practice, and is even recommended for researchers

not proficient with the theory and day to day practice of scale development (DeVellis, 2012). Self-efficacy, locus of control, and goal commitment are just a few constructs of this kind which have been adapted and investigated on multiple levels, ranging from the very general to the more specific.

On the basis of these characterizations, I proceeded to develop items for ESS, replicating the procedure of Diener et al. (1985). These are presented in Table 16.1 below. In order to maximize the content validity of the scale, a group of experts knowledgeable in the field of entrepreneurship reviewed the items and approved their formulations. Having developed the items, I tested the instrument on existing entrepreneurs in the second round of data collection to obtain preliminary evidence of the validity of my approach. After six months, I interviewed the same members of my target group, in order to obtain additional observations and perform a test-retest analysis. In the *Empirical Analysis and Results* section below, I report the results for both the reliability and the validity of ESS.

Table 16.1. ESS items

1.	In most ways my life as an entrepreneur is close to my ideal.
2.	The conditions of my entrepreneurial career are excellent.
3.	I am satisfied with my life as an entrepreneur.
4.	So far I have gotten the important things I want in my entrepreneurial career.
5.	If I could live my entrepreneurial career over, I would change almost nothing.

Note: I regard ESS as a reflective scale, containing what Bollen (1989; and also Loehlin, 1998) refers to as “effect indicators” – that is, items whose values are caused by an underlying construct (i.e., latent variable = latent since ESS is not directly observable, and variable since it is likely to change in magnitude between people and over time). As in SWLS, respondents were asked to answer the following items on a Likert-scale running from 1= strongly disagree to 7= strongly agree: “To what extent do you agree with the following statements?”

All in all, the study is conducted on the longitudinal portion of the data set. The first round (i.e., the second in total) consisted of 88 entrepreneurs: 53 males and 35 females, the majority of which were between the ages of 25 and 64 (72/88), are married or cohabiting. In total, 50 had been in business for more than 42 months, and 38 had experience of less than 42 months.

Of these 88 entrepreneurs, 64 were surveyed during the final round of data collection, which also included information on 6 additional entrepreneurs (70 in total). In combination, the entire data set available for analysis includes 158 observations coming from 94 subjects. In all cases, the ESS items were interspersed within the same questionnaire, where a few other individual and firm variables were also sampled, and administered as part of a larger testing session during the spring of 2012 (for more information about the data used for the analysis, see chapter 12).

## Variables and Measures

Consistent with my validation objectives, the survey also included validated measures of affective and cognitive variables, which were expected a-priori to be related to, yet distinct from, the ESS.

### **Well-Being-Related Variables**

Two measures were used to capture respondents' recent experiences of hedonic and eudaimonic feelings of well-being: (a) the Satisfaction With Life Scale (Diener et al., 1985), a five-item scale measuring the cognitive aspect of subjective well-being (Cronbach's Alpha 0.79), (b) the Subjective Vitality Scale (Ryan & Frederick, 1997), a seven-item scale measuring participants feelings of being alive and alert as a measure of psychological well-being (Cronbach's Alpha 0.89).<sup>121</sup> In addition to that, building on the instrument developed by Cooper and Artz (1995), the data also included a five-item scale of business satisfaction (Cronbach's Alpha 0.84). While the first 2 measures have already been discussed in some detail (e.g., see chapter 15), the last measure demands further clarification.

Specifically, replicating and complementing the instrument developed by Cooper and Artz, I asked respondents to assess five dimensions (or domains) of business satisfaction in entrepreneurship. The first two items assessed entrepreneurs' satisfaction with their ventures' sales and profits. Whereas these questions address specific performance areas, the third item asked respondents to assess their "personal overall satisfaction with their

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<sup>121</sup> As discussed in the previous study (chapter, 15) only five items were eventually retained in the final composite.

business". Together, these three items constitute the core of Cooper and Artz's scale of business satisfaction in entrepreneurship. I have further complemented this with the addition of two items: "I am satisfied with the way that my business has evolved so far" and "I am satisfied with my effort to establish this business"; two subjective performance evaluations. All scales and variables are based on 1-7 Likert scales, and have been validated in previous research.

### **Other Related Variables**

Consistent with my theoretical developments, the survey also included measures of target outcomes thought to be related to EWB, including: (a) a measure of entrepreneurial self-efficacy devised by Zhao et al., (2005), a five-item scale asking subjects at how confident they are about successfully starting up a company, identifying new business opportunities, creating new products, thinking creatively, and commercializing an idea or new development (Cronbach's Alpha 0.81), (b) an adapted cognitive scale of entrepreneurial goal commitment (on the basis of Hollenbeck & Klein, 1987; Hollenbeck, Williams, & Klein, 1989), a six-item scale assessing individuals' determination to continue establishing and growing their ventures (e.g., "I am strongly committed to continue establishing/growing my own business" and "I am willing to put forth a great deal of effort beyond what I would normally do to establish/grow my own business") (Cronbach's Alpha 0.88),<sup>122</sup> (c) a scale of entrepreneurial exit propensity building on previous work in entrepreneurship and organization (Rahim & Psenicka, 1996; Veloutsou & Panigyrakis, 2004; Wincent, Örtqvist, & Drnovsek, 2008), a three-item scale measuring participants' propensity to discontinue their current stage of involvement (e.g., "If circumstances permitted, I would accept a job in another organization instead of establishing or running my own business", and "If I were completely free to choose, I would prefer not to continue with establishing or running my own business") (Cronbach's Alpha 0.84), (d) a behavioral measure of entrepreneurial commitment, measured as hours of work dedicated to the venture per week, and (e) a frequently used single measure of entrepreneurial intention ("I prefer hav-

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<sup>122</sup> As in the original scale, in this adapted version 3 items were negatively formulated and hence reversed in the analysis by subtracting the value given on each of these items from 8.

ing my own company rather than having a promising career elsewhere”). Aside from hours of work, all other scales and variables are based on 1-7 Likert scales and have been validated in previous research. To minimize the common-method biases inherent in surveys (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), I guaranteed the anonymity of respondents and counter-balanced the question order. For more information about these variables see Appendix A.

## Empirical Analysis and Results

Initial analyses including all 5 items underlying the ESS revealed that one single factor appears for all data sets, meaning that the 5 items share a unidimensional latent variable. The inter-item correlation matrix was factor analyzed using principal axis factor analysis – a common factor method. The number of factors to be extracted was determined by the eigenvalue rule (Kaiser, 1960), an inspection of the scree plot of eigenvalues (Cattell, 1966), and parallel analysis (Hayton, Allen, & Scarpello, 2004). Using these criteria, a single factor emerged, as predicted by the theory, accounting for over 70% of the shared variance for all data sets ( $n_1=88$ ;  $n_2=70$ ;  $N_{\text{total}}=158$ ). The ESS items and their respective factor loadings for each of the data sets are presented in Table 16.2. The mean scores of the ESS varied very little between the samples, from 23.15 to 23.31 (with SD from 5.4 to 5.9), and the Cronbach’s Alpha reliability coefficient for the ESS scale was 0.87 ( $n=88$ ), 0.9 ( $n=70$ ), and 0.89 for the entire sample ( $n=158$ ). Sex and age differences were also examined, and revealed no significant differences between women and men, or across different ages.

Table 16.2. ESS items and factor loadings

ESS Items	Sample 1 n=88	Sample 2 n=70	Samples 1+2 n=158
In most ways my life as an entrepreneur is close to my ideal.	.838	.887	.856
The conditions of my entrepreneurial career are excellent.	.902	.895	.894
I am satisfied with my life as an entrepreneur.	.923	.801	.863
So far I have gotten the important things I want in my entrepreneurial career.	.813	.891	.852
If I could live my entrepreneurial career over, I would change almost nothing.	.675	.822	.723

Instructions for administering the scale are: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responses. The 7-point scale is: 1 =strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 =slightly agree, 6 =agree, 7 =strongly agree. Note: The last item in the table shows relatively lower factor loadings. Since an individual could be satisfied and still score low on this item, indicating reflection on and learning from past experiences, future research should evaluate whether retaining this item is in fact necessary.

Despite my relatively small sample size(s), the Cronbach's Alpha reliability measures are high and the ratio of subjects to items exceed what is recommended for samples of less than 300 subjects (Tinsley & Tinsley, 1987: suggest 5-10 subjects per item for smaller samples under 300 subjects). I have also strictly followed recommendations by Hair et al. (2006) in determining the statistical power of the factor analysis based on a small sample size of 50 to 100 subjects. Based on a .05 significance level, a power level of 80 percent, and standard errors assumed to be twice those of conventional correlation coefficients, a sample size of 88 requires factor loadings of 0.6 and upward, while a sample size of 70 requires factor loadings of over 0.65 (Hair et al., 2006); all of which are supported by the results. Furthermore, I have used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity to determine the appropriateness of using factor analysis on my samples. In all cases the sample and the procedure were judged adequate (KMO over 0.8 in all cases).

## Structural Validity and Reliability Test

To determine the temporal satiability of the scale I examined the six-month test-retest correlation coefficient on a total sample of 128 observations, which was 0.71. This is highly significant, indicating some variability in the construct, but also significant temporal stability. In some respects, this is analogous to split-half and alternate forms reliability tests (DeVellis, 2012), but rather than splitting the sample based on items used as indicators, the sample is divided based on respondents answers on two separate occasions. Thus, the test-retest analysis is built on 64 respondents, who gave their responses on two separate occasions of data collection. It should be noted here that while the test-retest reliability assumes stability of the construct over time, ESS is expected to vary over time. However, since ESS is directly connected to long-term experiences, it is unsurprising that it has changed only marginally within the study range of six months. The substantial temporal reliability of ESS also indicates that it is not greatly influenced by the respondent's mood at the moment of responding (Schwarz & Clore, 1983).

Finally, as indicated above, Cronbach's Alpha coefficients were 0.87, 0.9, and 0.89 (standardized=0.894) for the combined sample, indicating that the scale is highly reliable, and given my smaller sample sizes this also yields an increase in the statistical power of the sample. A reliable measure, like a larger sample size, contributes less error to the statistical analysis. In fact, following recommendations by DeVellis (2012) and Hair et al. (2006) for working with smaller sample size I focused on increasing scale reliability right from the start, which was my main reason for basing the ESS on the existing SWLS. The high Cronbach's Alpha coefficients suggest that the items are all measuring (i.e., are all manifestations of) the same thing (i.e., the latent variable EWB). Building on assumptions based on classical measurement theory, I conclude that the strong correlation among the items measuring entrepreneurial satisfaction implies that they have strong links to EWB. The alternative possibility to the assumption that the items share a common cause is that they causally affect each other. Under most conditions this is unlikely. Overall, results suggest that the items are reliable and that the scale is internally consistent.

## Content Validity

Content validity concerns the extent to which a specific set of items reflects a relevant content domain and is intimately connected to the definition of the construct being examined. Based on a narrow conceptual definition which shares identical features with the general case of SWB, I conclude that the ESS enjoys high content validity. It adequately measures what I here refer to as EWB, namely an entrepreneur's satisfaction with life as an entrepreneur. As an additional content validation step, I asked a group of expert researchers in the field of entrepreneurial psychology to review the items. This procedure further served as a check that the items were representative of the relevant content that the instrument was designed to measure, lending further support to my claims of content validity.

## Criterion-Related (Predictive) Validity

To assess the predictive validity of ESS, I examined its relation to other relevant psychological constructs such as SWLS and business satisfaction. I used the traditional correlation coefficient as an index for the criterion-related validity of ESS. Results suggest, as predicted, that ESS is empirically associated with both SWLS ( $r=.53$ ) and business satisfaction ( $r=.60$ ). The latter also suggests that ESS is, as predicted, related to failure and success in entrepreneurs' performance. Furthermore, I performed *Known-Groups Analyses*, showing, as theory suggests, that more experienced entrepreneurs are significantly more likely to be satisfied with their life as entrepreneurs than more nascent entrepreneurs ( $t=4.52$ ,  $p<.01$ ). Finally, I predicted a negative and a positive correlation between ESS and entrepreneurs' propensity to quit, and intention to engage in entrepreneurship, respectively. Results were highly supportive of these predictions as well ( $r=-.51$ ,  $r=.47$ ; respectively). These results are shown in Table 16.3 below.

## Construct Validation: Convergent-Discriminant Validity

Having shown that the ESS has desirable psychometric properties and adequate content and predictive validity, the next step was to examine the rela-

tionship between it and other measures of affective well-being, satisfaction, and performance, as well as with certain personality measures to which we might expect it to be or not be related.

First, I investigated the extent to which ESS is empirically similar and distinct from conceptually related affective and cognitive variables – namely entrepreneurs' life satisfaction as measured by SWLS, subjective vitality, and business satisfaction. Results displayed in Table 16.3 show that the correlations between the ESS and relevant affective and cognitive variables were generally high in magnitude (between .40 and .60), suggesting an expected and adequate degree of construct covariation. These correlations are indicative of convergent validity between ESS and other measures of theoretically related constructs. It appears that entrepreneurs who are satisfied with their lives as entrepreneurs generally experience higher subjective well-being and subjective vitality, and are more satisfied with their businesses. Also, as expected, ESS was more highly correlated with cognitive measures of satisfaction (i.e., SWLS and business satisfaction) than with more affective-physiological self-evaluations (i.e., global subjective vitality).

In order to examine the discriminatory validity of ESS, I tested correlations between ESS and other less related constructs: entrepreneurial self-efficacy, time and goal commitment, motivation, and propensity to exit. The relatively moderate magnitude of correlations is further indication of the discriminatory validity of ESS as a measure of EWB. Furthermore, I have used the correction for attenuation formula on the SWLS, SV, and business satisfaction scales. In all cases the coefficient was under the 0.85 required of conclusive evidence for discriminatory validity between these related constructs. Using principal axis factor analysis with an oblimin rotation (to account for anticipated correlations among the factors), I further confirmed this by showing that ESS forms a distinct factor when analyzed simultaneously with the full scales of SWLS, SV, and entrepreneurs' business satisfaction.

Table 16.3. Correlations of the ESS with more and less related constructs

Scale / Variable	Sample 1 n=88	Sample 2 n=70	Samples 1+2 n=158
SWLS: Life Satisfaction Scale	.589	.465	.534
Subjective Vitality Scale	.478	.313	.405
Entrepreneur's Business Satisfaction Scale	.614	.607	.609
Entrepreneurial Self-Efficacy Scale	.502	.554	.523
Entrepreneurs' Time Commitment (hours/week)	.372	.159	.275
Entrepreneurs' Goal Commitment	.426	.287	.337
Entrepreneurs' Propensity to Exit Scale	-.516	-.509	-.510
Entrepreneurial Intention	.584	.355	.471

Note: All scales and variables follow their original 1-7 Likert scale, and have been validated on the basis of previous research. All the correlations above, without exception, are significant at the 0.01 level.

### Discriminatory Analysis between ESS and Business Satisfaction

In order to further assess the discriminatory validity of ESS, it was necessary to distinguish it from the most related construct that has been devised in previous research: the business satisfaction instrument developed by Cooper and Artz. The correlation between this later factor and ESS was 0.61 based on sample 1 and 0.6 for the combined sample. I also performed a common factor analysis which revealed two factors that fit the data as ascribed by theory. Finally, I tested for the discriminate validity of these two factors by performing a multiple regression analysis on the combined sample, taking subjective well-being (measured by SWLS) as a dependent variable. The results are reported in Table 16.4 below. All in all, they are supportive of the distinctiveness of the ESS relative to business satisfaction in its incremental contribution to SWB. ESS also fully mediates the effects of business satisfaction on SWB, but not vice versa. Moreover, it has a sig-

nificant positive contribution to entrepreneurs' SWB over and above that of SV, substantiating the claim that entrepreneurial satisfaction, as a component of EWB, is an important context-specific measure of entrepreneurs' mental health.<sup>123</sup>

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<sup>123</sup> As indicated by Table 16.4, the ESS, as a measure of EWB, is equally and strongly associated with SWLS much as the Subjective Vitality Scale. Aside from supporting my claim that EWB is a major engine of well-being and growth, this also seems to offer some support that the three scales of ESS (for EWB), SWLS (for SWB), and SV (for PWB), form an overall construct in line with my conceptualization of entrepreneurs' well-being in chapter 4 (they also constitute separate dimensions of that construct, as evidenced by the factor analysis reported in the previous section above). Although internal consistency, reliability assessments, and factor analysis are not adequate for assessing formative models (Coltman et al., 2008), such as that of entrepreneurs' well-being, it is nonetheless interesting to note that the three scales form a single factor which appears for all data sets, accounting for 67% of the shared variance, while Cronbach's Alpha reliability coefficient was 0.8 (n=88), 0.65 (n=70), and 0.75 for the entire sample (n=158).

Table 16.4. Discriminatory analysis of ESS

Variable	Satisfaction With Life Scale (SWLS)				
	baseline regression	regression incl. subjective vitality scale	regression incl. subjective vitality scale & business satisfaction scale	regression incl. subjective vitality scale & entrepreneurial satisfaction scale	regression incl. subjective vitality scale, business & entrepreneurial satisfaction scales
Age	0.01 (0.02)	0.00 (0.02)	0.01 (0.03)	0.01 (0.02)	0.01 (0.02)
Gender (Female)	-0.18 (0.74)	0.08 (0.62)	0.27 (0.77)	0.41 (0.57)	0.32 (0.71)
Income	0.29 (0.27)	0.20 (0.22)	-0.12 (0.26)	0.09 (0.20)	-0.01 (0.24)
Education	-0.31 (0.36)	-0.29 (0.30)	-0.83** (0.43)	0.02 (0.28)	-0.60 (0.40)
Subjective Vitality Scale		0.46*** (0.06)	0.41*** (0.07)	0.34*** (0.06)	0.36*** (0.07)
Business Satisfaction Scale			0.17** (0.06)		-0.01 (0.07)
Entrepreneurial Satisfaction Scale (ESS)				0.29*** (0.05)	0.34*** (0.08)
Constant	24.97*** (2.15)	13.47*** (2.38)	13.88*** (3.15)	8.26*** (2.36)	9.94*** (3.06)
F	0.55	11.98***	8.61***	17.14***	11.08***
R <sup>2</sup>	0.01	0.29	0.37	0.42	0.47
R <sup>2</sup> – Adjusted	0.01	0.27	0.32	0.39	0.42
Observations	147/158	147/158	95/158	147/158	95/158

Dependent variable: Satisfaction With Life Scale (SWLS). Notes: Weighted OLS regressions are applied to all models (SWLS values in the data set ranged from min 7 to max 34). Missing values are excluded listwise. Four basic control variables are also included as in studies 1-3. The control variables education and income are treated as continuous variables. Standard errors in parentheses. Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

### Gender Differences

Although no statistically significant differences were found between the sexes in a correlational analysis, it does appear to be the case that female entrepreneurs have a tendency to score lower on ESS than male ones. For example, female entrepreneurs have higher chances of belonging to the lower cut of entrepreneurs in terms of low ESS. Yet, while female entre-

preneurs do seem to score lower on ESS, they significantly score higher on the business satisfaction scale (correlation of 0.27, significant at the 0.05 level). Given that females also tend to score higher on a variety of other well-being measures (see studies 1 and 2), this surprising result requires further investigation. Table 16.5 reports the results from a multiple regression analysis based on the combined sample, taking ESS as the dependent variable in a basic regression model including age, level of education, and income. To further explore the effects of gender on the ESS, in the second, third, and fourth steps I added the variable business satisfaction, an interaction term between it and gender, and finally the SWLS, respectively, to the model.

Table 16.5. Gender differences in ESS

Variable	Entrepreneurial Satisfaction Scale (ESS)			
	baseline regression	regression incl. business satisfaction scale	regression incl. business satisfaction scale and gender*business satisfaction interaction term	regression incl. business satisfaction scale, gender*business satisfaction interaction term, and SWLS
Age	-0.02 (0.03)	-0.00 (0.03)	-0.00 (0.03)	-0.09** (0.04)
Gender (Female)	-1.75* (0.97)	-0.19 (0.91)	6.56 (4.47)	7.83* (4.28)
Income	0.35 (0.35)	-0.33 (0.30)	-0.35 (0.30)	-0.36 (0.28)
Education	-1.22** (0.47)	-0.49 (0.49)	-0.49 (0.49)	0.17 (0.53)
Business Satisfaction Scale		0.56*** (0.07)	0.63*** (0.07)	0.55*** (0.08)
Gender*Business Satisfaction Scale			-0.25 (0.16)	-0.30** (0.15)
Satisfaction With Life Scale (SWLS)				0.57*** (0.11)
Constant	28.50*** (2.84)	14.09*** (3.42)	12.29*** (3.59)	0.43 (4.37)
F	2.87**	14.41***	12.59***	15.25***
R <sup>2</sup>	0.07	0.44	0.46	0.59
R <sup>2</sup> – Adjusted	0.04	0.41	0.42	0.55
Observations	148/158	95/158	95/158	81/158

Dependent variable: Entrepreneurial Satisfaction Scale (ESS). Notes: Weighted OLS regressions are applied to both models. Missing values are excluded listwise. Standard errors in parentheses. Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Net of business satisfaction and its interaction with gender, the results indeed seem to indicate some negative relationship between gender (female) and ESS, although no significant differences are found once business satisfaction is entered into the regression model. It seems that although female entrepreneurs tend to score lower overall on the ESS, the extent to which they are satisfied with their businesses mediates this relationship. However, given that female entrepreneurs are much more satisfied with their businesses than male entrepreneurs, it remains somewhat unclear why higher business satisfaction does not translate into higher ESS scores for female

entrepreneurs (as we would expect once business satisfaction is not controlled for as in the baseline model). Is it possible that gender interacts with business satisfaction in such a way that the more satisfied female entrepreneurs are with their businesses (i.e., with sales, profit, and a like) the less satisfied they are with their entrepreneurship?

If this is indeed the case, we would expect a negative interaction term between gender and business satisfaction to account for the differences in ESS between female and male entrepreneurs. The results in the third column of Table 16.5 support these assumptions. The interaction term, although not significant at the 2-tailed level, is negative, and its inclusion reverses the sign of the gender coefficient to positive. Although the new gender coefficient is not significant at the 2-tailed level (but almost so) its effect size is very large nonetheless. Thus, since females overall tend to score higher on well-being measures, I entered the SWLS into the model in order to cancel the potential top-down influences of general life satisfaction on ESS. As a result, both the interaction terms and the gender coefficient become significant, and even somewhat greater in magnitude, as can be seen from the right-hand model in Table 16.5.

On the whole, it seems that while female entrepreneurs can derive great personal satisfaction from their entrepreneurship, the extent to which they are satisfied with the business aspect of their entrepreneurship plays an important role for the overall outcome of their EWB. The more satisfied they are with their businesses, the less content they are with their entrepreneurial career. I will discuss this in the next section below.<sup>124</sup>

## Concluding Remarks

This study developed and validated the Entrepreneurial Satisfaction Scale (ESS) as the cognitive measure of entrepreneurial well-being (EWB) conceptualized in chapter 5 as a core component in an overall model of entre-

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<sup>124</sup> Another surprising result was noted for the relationship between educational level and ESS. It seems that people with higher education tend to derive less satisfaction from engagement in entrepreneurial activities, perhaps as they set higher standards for themselves in judging their business achievements. Once business satisfaction is entered the model, this negative effect is reduced to non-significance, as indicated by the right hand column of Table 16.5.

preneurs' well-being (outlined in chapter 4). My investigation encompassed a combined panel data set consisting of 158 observations from 94 entrepreneurs. I used psychometric methods to determine the structural properties, and I used the known-groups technique; convergent, discriminant and predictive validation methods; as well as additional correlational means and multivariate analysis to investigate a broad range of propositions implied by theory. On the basis of this research, it seems justifiable to conclude that (a) the theoretical notions about entrepreneurial satisfaction are supported by the data, and (b) the developed scale constitutes an adequate measure of EWB.

Specifically, I found that ESS is unidimensional, and possesses satisfactory degrees of internal consistency and temporal stability. These properties were demonstrated across two time periods. Furthermore, ESS was distinguished between groups that may be expected to have higher levels of EWB on a-priori grounds (for experienced entrepreneurs), and other groups of entrepreneurs (beginners). Likewise, ESS was found to be related in a theoretically predicted way to several individual constructs, and to demonstrate discriminant validity in regard to other both similar and less similar constructs, including the following: life satisfaction, subjective vitality, business satisfaction, and various context-specific motivational variables (self-efficacy, commitment, exit propensity, and intention).

### The Cognitive and Affective Structure of ESS

While cognitive and attitudinal in nature, ESS is likely to capture the balance between positive and negative affective experiences in entrepreneurship, and thus may be an adequate measure of overall EWB, much as the SWLS is often used as an overall representation of the subjective well-being phenomenon. This is supported by previous research on the SWLS, which found that SWLS is moderately correlated with the experience of positive emotions (Lucas et al., 1996).<sup>125</sup> Previous research on judgments of happiness and life satisfaction has further shown that these are consistently and moderately to strongly correlated with the frequency rather than the inten-

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<sup>125</sup> Indeed, much like SWLS, ESS was also found to correlate moderately with positive affective experiences in this study (See Table 16.3 for its association with subjective vitality).

sity with which one experiences pleasant emotions such as joy, contentment, excitement, affection, and energy (Diener & Lucas, 2000). Thus, while ESS, much like SWLS, represents a cognitive phenomenon, it can be considered a proxy measure of overall EWB, since individuals draw not only on cognitive sources of information when evaluating their entrepreneurial life, but also on affective information. Previous research on well-being in entrepreneurship has therefore treated SWLS as an affective measure of hedonic well-being in entrepreneurship (Hahn et al., 2012).

Nevertheless, satisfaction is better seen as an attitude, rather than an emotional phenomenon per se (Weiss, 2002). This is increasingly so the more distant or abstract the object of our evaluation is. Thus, it is doubtful that cognitive global measures of subjective well-being (such as SWLS) can predict affective and motivational phenomena on the level of entrepreneurship very well (e.g., Hahn et al., 2012, failed to produce meaningful findings regarding the effects of SWLS on personal initiative in entrepreneurship). Instead, a more context-specific measure of subjective well-being or satisfaction in entrepreneurship is more likely to be related to affective and motivational experiences in that context. Previous work in social psychology on the link between affect, belief, and overall evaluations supports this by observing that a closer experience with the attitudinal object (in our case, engagement in the entrepreneurial process) may enhance the contribution of affective experiences to the attitudinal judgments (Weiss, 2002).

All in all, although cognitive in nature, ESS is predicted to moderately to strongly correlate with the experience of positive emotions in entrepreneurship, and otherwise be an adequate measure of EWB in its formation of the overall construct of entrepreneurs' well-being. However, we should be aware of the fact that beliefs about entrepreneurship and affective experiences from entrepreneurship are likely to have separate effects on the information underlying the evaluative process of ESS.

### Antecedents (Causes) and Consequences (Effects) of EWB

While my findings so far support the existence of EWB, two important questions remain for further inquiry: "What are the antecedents of EWB?", and "What are its possible consequences?" While I have partially addressed

the first question in chapters 9, 10 and 11, and the second question in chapter 7, and empirically examined the relations of EWB to other constructs in this study, further research will be required to map out the nomological network of the construct of EWB and its components, such as entrepreneurial satisfaction. On the basis of my previous discussion, theorization, and empirical findings in this thesis, I nonetheless draw the conclusions presented below.

As a specific positive mental state of well-being that is both context and goal-dependent, EWB is likely to be affected by the degree to which the immediate entrepreneurial environment is experienced as supportive of one's basic psychological needs in general, and of one's goal pursuit in particular. As a work-related context, entrepreneurship, unlike non-entrepreneurial work alternatives, results in greater satisfaction of these needs, as noted in study 1. However, the extent to which basic needs are satisfied in entrepreneurship, rather than being a function of it, may vary between different contexts of entrepreneurship (e.g., the regulatory framework, one's familial network, etc.). Thus, circumstantial conditions supportive of psychological autonomy, competence, and relatedness in entrepreneurship are likely to result in greater EWB. But the degree to which one derives EWB also depends on one's attitudes and behavior.

As theorized in chapter 11, the ways through which individual entrepreneurs enact their motivational concerns in entrepreneurship, i.e., the extent to which one aims at and is actively engaged in need satisfying activities, and the extent of one's progress towards and attainment of important goals in the entrepreneurial context, may provide positive psychological nutriments supportive of EWB.<sup>126</sup> These assumptions are somewhat supported by the empirical findings of studies 2 and 3, which provide valuable insights into the roles of the individual and goal progress in promoting EWB, even though they did not examine the construct of EWB as such.<sup>127</sup>

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<sup>126</sup> While EWB is prompted by experiences of success, and negatively affected by experiences of failure in entrepreneurship, not every success and failure are likely to result in changes in EWB. As discussed in chapter 6, the extent to which success leads to EWB may also depend on the various factors to which entrepreneurs attribute their successes and/or failures.

<sup>127</sup> Study 3 investigated the effects of life goals and motives, i.e., the extent to which individuals enact their motivational concerns in entrepreneurship as intrinsic or extrinsic, on their overall well-being. The reason why I did not investigate the effects of these motivational concerns on EWB is that half of

In this study, we also noted the utility of delving into the more complex causal structure of EWB in disentangling the effects of different personal characteristics and socialization patterns as they contribute to the development of EWB. An important finding of the previous section is the likely consequences of gender for reaping certain of the benefits of EWB. Specifically, while female entrepreneurs derive greater satisfaction from their businesses than male entrepreneurs, they also tend to score lower on general satisfaction with their entrepreneurship, and this relationship further seem to be interdependent in such a way that higher business satisfaction translates into lower overall satisfaction, which is not the expected result. But why is this, and what do we stand to learn about the causal structure of EWB from it?

While there may be several competing theoretical explanations that could shed light on this intriguing finding, we need to know more about whether or not it is systematic. One could speculate that the extent to which female entrepreneurs are more satisfied with their businesses reflects an underlying dedication to business matters in the form of sales and profit, and thereby to difficulties in translating entrepreneurship into the formation and maintenance of other relationships they need and want in or outside of entrepreneurship. Or, perhaps female entrepreneurs derive higher business satisfaction due to somewhat lower standards in regards to their ventures, which in themselves are negatively related to EWB in terms of their overall satisfaction with being entrepreneurs. In both cases, although female entrepreneurs derive greater satisfaction from their businesses, they do not seem to integrate the overall entrepreneurial role as such into their psyches to the same extent.

Aside from its causal structure, EWB is also an important psychological resource, and a trigger for continuous action-taking during the entrepreneurial process. As theorized in chapter 7, EWB is likely to provide both important information about individuals' preferences, abilities, and goal progress in entrepreneurship and motivational nutrients in moving to-

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the sample did not qualify because of their status as intended entrepreneurs. In other words, since the context-specific activity-based experiences underlying EWB can only be derived by active engagement in the process of enterprising, the scope of intended entrepreneurs' EWB is very limited. However, it is likely that EWB, much like the overall construct of well-being, is positively affected by the presence of integrated intrinsic motivational concerns, as well as partial integration of extrinsic concern.

wards and persisting in entrepreneurship. One could say that EWB constitutes both a resource and an effective goal-barometer at any given moment. Since we find at its core both the valence dimension (pleasure/displeasure) of core affective experiences (Feldman Barrett & Russell, 1998) and one's satisfaction in entrepreneurship, EWB is partially determined by whether goals are met or blocked. Such information serves as an important reference criterion, affecting both actual motivation and the processes and outcomes of goal setting and goal striving (Oettingen & Gollwitzer, 2007). This is especially important for setting and striving for long-term goals, which require planning and mobilization of both psychological and social resources. Since entrepreneurs' motivation is goal-directed, and occurs within the context of self-regulation, this means that EWB is an important variable in the self-regulation of entrepreneurs.

To conclude, EWB is by all means likely to affect and be affected by a variety of circumstantial conditions, personality traits, psychological states and processes, and goal-directed behavioral engagements, all of which will have to be examined in greater detail by future research before the nomological structure of the construct can be mapped further. The more proximal, i.e., entrepreneurial, these factors are, the greater the likelihood of their association with EWB.

## Section VII: Conclusion



# Chapter 17

## Discussion

“To be sure, a human being is a finite thing, and his freedom is restricted. It is not freedom from conditions, but it *is* freedom to take a stand towards the conditions” (Man’s Search for Meaning: Viktor E. Frankl, 1985: 153).

In the decades that followed WW2 and the Great Depression, the so called West progressively witnessed, and still does to this day, rapid and radical changes in cultural attitudes and political reforms with regards to the role and status of individuals as members of their societies. These changes fundamentally altered the relationships between the individual and the state, as well as those between different individuals. Aside from the complex causal structure of reasons and narratives that different people might offer as explanations for these changes, individuals have come to be seen not only as important functions, but also as important ends, of social and economic processes. This new state of affairs, which is surely welcome for the freedom it offers individuals to mind their own business, has nonetheless left people facing ever greater economic, social, and political uncertainties, as witnessed over the past decades.

An increase of freedom in its negative conception, as the freedom from social limitations and governmental interventions, has thus left humans exposed and vulnerable both to the actions of others and to their own circumstantial conditions. Therefore, what is required more than ever from people today, as individuals and as members of society, is responsibility; the responsibility to enact this freedom in ways that are good for themselves, as well as for others. Taking a stance towards one’s own conditions in serving

others by creating new economic activities, which is what entrepreneurship is essentially about, signifies a major personal endeavor, and is an important marker of responsibility in our societies today. In that sense, entrepreneurs, relative to individuals engaged in non-entrepreneurial work alternatives, are ultimately self-determining, but also other-focused. Unlike regular employees, entrepreneurs do not simply work, but constantly decide what their work will be, whom to serve, whom to work with and whom not to work with, and what they themselves are to become, at every step of the way.

Accordingly, entrepreneurs may ultimately experience success and well-being very differently than non-entrepreneurial employees. "For success, like happiness, cannot be pursued; it must ensue, and it only does so as the unintended side-effect of one's dedication to a cause greater than oneself." (Frankl, 1992) Entrepreneurship not only promises the individual a viable escape from the "existential vacuum" and the employment hierarchy that looms over everyday work life, but also presents a multitude of options to create and live a meaningful life. Despite, or even due to, the inevitability of the hardship and uncertainty they face, entrepreneurs can ultimately attain a deeper meaning in some of the most demanding, stressful, and difficult of situations. It is perhaps this inevitability of the constraints of entrepreneurial life that empowers entrepreneurs to find great meaning and well-being in their lives through the active initiative they take towards their own position in order to change their own circumstances, as well as others'.

Surely, as motives vary in intensity, in content, and over time and space, the well-being effects of entrepreneurship may differ between individuals and across contextual circumstances, as different motivational concerns underlying the process of business creation may have varying consequences on individuals' entrepreneurship and well-being. Nevertheless, organizing one's own approach to work in creating new social and economic activities is an exceptional personal undertaking, which not only entails freedom from the day-to-day constraints of a life spent working within an organization, but most importantly enables them to enact this freedom in learning, as well as in developing themselves and their relationships to others.

Notwithstanding this realization, previous conceptions of entrepreneurship have mostly considered the individual entrepreneur as one of several functions of the venture creation process, rather than as an important end

of that process which she both originates and upholds. This is important. If we wish to understand the drives and motivations behind the entrepreneurial process, we must consider the individual entrepreneur as more than just a set of means to the end of creating new business activities. In the long run, the success of a venture is dependent upon individual needs, wants, and desires being met and addressed by the very process they engender.

Previous research by economists and business scholars into the relationship between entrepreneurship and well-being has not considered the effects of entrepreneurship on working individuals' well-being, which is taken here to mean the presence of mental health. As its focus lies on self-employment and job satisfaction, this line of research has not explored the intricate and dynamic causal links between entrepreneurship and well-being. Given that more and more people outside and inside established organizations are seeking to promote or engage in entrepreneurship, as a vehicle for innovation, profit making, social impact, and/or as a process through which to realize personal development, growth, and well-being, this thesis sheds light on some of the most important considerations facing those who turn to entrepreneurship in the hope that it will lead to the fulfillment of their desired goals.

By paying closer attention to the ways in which entrepreneurship results in well-being, that is, through needs and wants being met and addressed, as evident by their effects on mental health, this thesis brings us much closer to understanding the drives and motivations behind the process of venture creation. Complementing and advancing previous research, I theorized and tested a number of complementary perspectives aimed at unravelling the complex mechanisms through which entrepreneurship and well-being are intimately related to each other. The theoretical developments and the empirical findings both substantiate my claim that entrepreneurship uniquely impacts the lives of working individuals in terms of well-being, while the well-being arising from the process of venture creation has a strong influence on individuals' mental health, and on their selection of, and continuous engagement in the creation of, new business activities.

Below, I develop the discussion above in more detail, as I summarize my main empirical findings and theoretical contributions in response to the research questions posed in the beginning of this thesis. On this basis, I

outline a number of implications addressing a variety of different stakeholders.

## Empirical Findings, Theoretical Contributions, and Implications

### Does Entrepreneurship Pay Off? What are the Mechanisms Involved?

This thesis makes it clear: entrepreneurship has a significant, meaningful, and positive impact on well-being over and beyond monetary returns and job satisfaction. As study 1 demonstrates, the well-being gains that result from entrepreneurial activities are largely due to entrepreneurs' freedom and opportunity to exercise their *agency*, enhance their *competence*, and, perhaps most importantly, *relate to others* in meaningful ways and on their own terms. Positive subjective experiences (psychological functionings) in all these three central domains of the human condition have been found to be significantly higher for those who are actively engaged in entrepreneurship, and to substantially mediate the positive effects of entrepreneurship on working individuals' well-being.

While previous research has indeed highlighted some of the well-being benefits of independence from employment hierarchies, this study is the first to draw attention to the plausibility of the notion that entrepreneurship, rather than self-employment, strengthens individuals' core efficacy and core affiliation – two aspects directly connected to well-being. It seems that the notion of independence, in which freedom is defined in negative terms, needs to be complemented with a positively defined counterpart. And, as it happens, taking responsibility for one's relationships to others' and for one's own personal development, as they emerge from the self-organized process of venture creation, is precisely the positive complement required.

This specific feature of entrepreneurship causes it to stand in sharp contrast to other forms of employment in terms of the promotion of individuals' growth and well-being. While previous conceptions of entrepre-

neurship have mainly focused on its profit-making features and independent character as explanations for variations in job and life satisfaction, they typically have not regarded overall well-being as something that emanates from the very process of self-organizing one's enterprise. This goal-directed self-organizational approach thus extends the standard and procedural approaches in economics and entrepreneurship (Benz & Frey, 2003, 2004, 2008ab; Binder & Coad, 2013; Block & Koellinger, 2009) in at least three important respects.

First, I theorize on the well-being effects of entrepreneurship – not those of self-employment – relative to those of non-entrepreneurial employment. Indeed, more and more entrepreneurs work in organizations as employees, and are thus not considered self-employed (e.g., corporate entrepreneurs, intrapreneurs, and employees). Entrepreneurship, unlike self-employment, fundamentally entails an active and goal-directed self-organization of new business activities, regardless of whether these are pursued inside or outside of existing organizations.

Second, and more importantly, whereas in the procedural approach differences in well-being are assumed to be solely due to individuals' preferences for independence from employment hierarchies, I do not equate the sources of individuals' well-being with the absence of any condition, but rather with the presence of the opportunities entrepreneurs enjoy to enact this freedom with psychological autonomy, competence, and relatedness. Institutional theory tries to separate itself from intimate feelings. To appreciate freedom is one thing, but to experience it is something quite different.

Third, while both the standard and procedural approaches equate well-being with utility, most often measured as job satisfaction, I define it as the presence of mental health. Thus, I regard well-being from a broader perspective than that of previous studies on entrepreneurship and self-employment. While life satisfaction has only recently been introduced as a measure of subjective well-being in these domains, I take a still broader view on well-being, which aside from positive life evaluations also includes the presence of positive feelings and positive functionings as components of the overall well-being of individuals.<sup>128</sup>

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<sup>128</sup> In chapter 8 I also distinguish between the concepts of utility and well-being on theoretical and practical grounds. Importantly, the assumption that people are rational in that they judge the consequenc-

The aforementioned theoretical developments and the empirical findings supporting them have a range of implications relevant for the roles of policymaking, organizational management and organizational work design, as well as for individuals' career choices. Entrepreneurship, it seems, can provide positive need-satisfying experiences, which in turn promote well-being.

First, modern states striving to advance people's quality of life should think carefully before limiting opportunities for entrepreneurial engagement. An important example in this respect concerns laws and regulations that limit entrepreneurs' opportunities to employ and lay off workers. While some control in this respect may be called for, these laws might also have the unintended consequence of limiting entrepreneurs' opportunities to self-organize their relationships and attain self-determination. This seems especially relevant for transnational and immigrant entrepreneurs limited to the local pool of employees, as they lack the discretionary power to employ from beyond the borders of their new states.

Secondly, organizations seeking to bolster their employees' motivation and well-being should consider the importance of active involvement in self-organized pursuit of personal goals in the workplace, and the discretionary power and freedom of choice that comes with it. Accordingly, the freedom to strive for meaningful activities and engage in behaviors that are self-organized, rather than self-chosen, and the opportunities to relate to others through one's work, on one's own terms, ought to be highly valued by organizational management, and this valuation ought to inform any activities aimed at work design.

Finally, from the perspective of the individual, the findings establish the importance of striving for a meaningful personal goal in one's working life, and the potential benefits that self-organization through entrepreneurship promises the individual; despite or even due to the hardship that plays an integral part in its day-to-day dynamics. Entrepreneurs, as long as they can meaningfully be referred to as such, are ultimately dedicating their lives to

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es (i.e., the processes as well as the outcomes) of engaging in entrepreneurship as beneficial, and act on this evaluation, is not necessary to maintain when well-being is construed as the presence of mental health.

an important purpose by creating new business activities and organizations, either as ends in themselves or as means to higher ends.

### How does Well-Being Evolve During the Entrepreneurial Process? What are the Mechanisms Involved?

Although the self-organizational perspective considers specific positive features of entrepreneurship which promote well-being, it overlooks one crucial aspect of its nature and payoff structure: its unfolding character over time. As a goal-directed process of business creation, entrepreneurship has a beginning, and usually also an end. And although contemporary entrepreneurship research is based on the process perspective (Davidsson, 2012b; Gartner, 1988; Shane & Venkataraman, 2000), relatively little is known about the experiences of the individual as the venture takes form and evolves (Schindehutte et al., 2006). In other words, we know very little about how and why well-being evolves throughout the process of venture creation. In response to this, the *action phase approach* developed in this thesis theorizes the mechanisms through which well-being evolves along the entrepreneurial process – from the inception of the intention to establish a venture to the active implementation and realization of that goal.

Informed by the works of Gollwitzer and colleagues on mind setting (e.g., Gollwitzer & Bayer, 1999), I developed a set of propositions concerning the ways in which involvement in the different action phases of the entrepreneurial process impacts well-being through the various mindsets that are likely to dominate each phase of the process. In brief, while active engagement and goal accomplishment in entrepreneurship was hypothesized to be supportive of well-being, although the underlying dimensions of well-being differ, I suggested that the downside of entrepreneurship might reside in its early inception in deliberation and planning. I argue that the complex and uncertain nature of entrepreneurship may cause individuals to fail to progress from a deliberative state of mind as they transition from deliberation over an engagement to planning it, which in turn is likely to impede their well-being.

Study 2 put these propositions to the test by exploring the dynamics of well-being experiences as they evolve throughout the entrepreneurial pro-

cess, focusing on intended (planning) entrepreneurs, active entrepreneurs, and established business owners, for whom the course of enterprising had come to an end.

The findings are remarkable, and shed light on the emotional difficulties involved in moving from thought to action in entrepreneurship. An intended entrepreneur's plans to start up a business seem to incur a heavy cost in terms of individual well-being, even as compared to the average employee, and even after other meaningful theoretical explanations are factored for in the analysis. On the other hand, those who are actively engaged and those who have realized their ventures display markedly high well-being, although it stems from different mechanisms in each case. While established business owners derive high satisfaction from their work and lives, the actively engaged entrepreneur enjoys a heightened state of mind associated with a greater sense of vitality. Thus, while the results support a general positive evolution of well-being along the process – from the post-decisional but pre-actional phase of planning to the actional and post-actional phases of implementation and evaluation of goal attainment – they also differ from predictions made based on previous research on the psychology of personal goal pursuit in general, and in entrepreneurship in particular.

Although this will require much further study in the future, the question most in need of an answer is *why* planning to initiate new business activities is so costly in terms of well-being. Is it simply a matter of selection bias into this phase of the entrepreneurial engagement; stemming from dissatisfaction with current work arrangements, current economic situations, or current unemployment? Or is it really something integral to entrepreneurship, as predicted?

Given that the analysis has controlled for these and other factors, it seems at least plausible that planning to start up a business, unlike the planning of other personal goals which have been the object of previous studies, may involve a high cognitive load, and require continuous deliberation within a complex goal system, which may both in turn cause a subsequent failure to optimally transition from a mindset of deliberation to one of im-

plementation, and as a result, a great decrease in well-being.<sup>129</sup> This may help to explain why so many intended entrepreneurs never move beyond their good intentions to create a business; a puzzle which has been pointed out in recent studies on action regulation and entry motivation in entrepreneurship (Van Gelderen et al., 2015). This may also help explain why business action-based interventions are so important for sustainable entrepreneurship (Gielnik et al., 2015).

Crossing this divide, and moving from goal setting to implementation, seems to be the most challenging aspect for many prospective entrepreneurs in striving to establish their ventures, rather than “crossing the Rubicon”, as suggested by goal researchers. Taking stock of these findings, governments and organizations should provide proper support to those who are planning to establish ventures. For instance, strengths-based interventions aimed at empowering intended entrepreneurs and reducing the uncertainty they face can constitute crucial contributions towards their success in realizing their ideas. Organizations and practitioners may be further advised to carefully envision their action plans before deciding to embark on any particular initiative. The waste of effort resulting from this reversed approach may be much smaller than that resulting from planning without realizing.

### Who Benefits the Most from Entrepreneurship? Life Goals and Entrepreneurial Motives

Although entrepreneurship results in greater well-being, individuals may experience the venture creation process quite differently in terms of well-being. On the basis of the *life goal and motive approach* developed in this thesis, study 3 explored aspects of well-being *in* entrepreneurship by examining the

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<sup>129</sup> One might suggest that since entrepreneurship provides a meaningful occupation, by virtue of being self-organized and goal-directed, it may also attract people who are especially vulnerable as they seek to escape their boredom and their dull existences. That may of course indeed be the case. However, the analysis also controls for satisfaction with one’s freedom to realize one’s capabilities and skills, which may reflect such motives, with no substantial differences in the results. This lent further credence to our supposition that there is something about the pre-enactment stages of entrepreneurship which impacts individuals’ well-being in this way. In fact, the action phase approach to well-being in entrepreneurship differs in its predictions from theories of personal goal pursuit by pointing to the difficulties involved in transitioning from one mindset to another as one goes through the venture creation process.

roles played by people's life goals, their entrepreneurial motives, and the interrelationships between these two motivational forces on people's well-being as they strive to establish a business venture.

The findings suggest that relative to extrinsic motivational forces, holding intrinsic life goals and intrinsic entrepreneurial motives has a consistent positive effect on the well-being outcomes of intended (i.e., planning) as well as actively engaged entrepreneurs. However, the negative effects of extrinsic life goals and entrepreneurial motives on well-being seem to be more complex. While the effects of extrinsic life goals were generally negative and marginally significant, as expected by a long tradition of psychological research, I also noted unprecedented positive effects of extrinsic entrepreneurial motives on individuals' well-being once extrinsic life goals and the matching conditions between these two motivational concerns were inserted into the regression model. Although this effect was not systematic across all regressions, it seems that in entrepreneurship contexts which offer good incentives for extrinsic approaches, the negative effects of extrinsic concerns do not simply follow the predictions made by psychologists working within the SDT framework, although the mechanisms behind this remain to be uncovered.

Thus, having explored the effects of life goals and motives separately, I turned to an examination of their matching conditions in order to untangle the well-being effects of these motivational pressures in entrepreneurship. I hypothesized and tested the effects of two different kinds of discrepancies between life goals and entrepreneurial motives on well-being: intrinsic discrepancy (the calculated distance between stated intrinsic life goals and intrinsic motives) and extrinsic discrepancy (the calculated distance between stated extrinsic life goals and extrinsic motives). Consistent with my theoretical predictions, extrinsic life goal/motive discrepancy showed signs of having a positive impact on well-being relative to intrinsic discrepancy, which had no effect, as expected. This finding is consistent with SDT, even though the matching conditions between life goals and motives are not typically emphasized in SDT. More importantly, it shows that SDT and the more agnostic *match perspective* do not necessarily contradict each other, but can in fact complement each other, as discussed and suggested in chapter 11.

More specifically, whereas I found no significant effects on well-being from intrinsic discrepancy, as predicted by theory, I found strong *positive* effects on well-being from extrinsic discrepancy, even after all covariates had been introduced into the model. This effect further seemed to be robust, as indicated by the significant and positive direct correlation between extrinsic discrepancy and well-being. It seems that rather than being in harmony with one's extrinsic motivational concerns, experiencing extrinsic discrepancy, and any tension that may follow from it, is particularly positive in domains for which extrinsic motivational approaches are especially incentivized. Such a finding is interesting not only for its immediate implications for individuals' goal striving in entrepreneurship, but also for its theoretical consequences, as it contradicts a long tradition of research suggesting the value of motivational fit (e.g., Higgins, 2000). If it holds true, entrepreneurship as an applied field of research may be especially promising for developing our understanding of more general goal-directed processes in which certain motivational conditions work in harmony despite seemingly disharmonious or paradoxical motivational orientations.

But how are we to explain the motivational value of such a mismatch between one's extrinsic life goals and entrepreneurial motives, and can these findings inform the actions of those interested in entrepreneurship? As evidenced by years of research within the SDT framework, extrinsic concerns do not benefit well-being. Thus, while not having integrated them into the self is generally beneficial, in entrepreneurship, some extrinsic concerns may actually prove necessary. Therefore, given that some extrinsic concerns are essential, *not* integrating both extrinsic motives and aspirations will lessen the risk of full integration with the self. Thus, provided that *some* extrinsic concerns are unavoidable, this is compatible with the extrinsic discrepancy. If anything, motives are less stable and more concrete, and can thereby serve the market needs in the entrepreneurial domain without infecting other domains, which implies that having extrinsic motives is preferable over having extrinsic aspirations.

Such peculiarly incongruent motivational orientations might be thought to result from some self-regulatory and self-affirmation efforts aimed at protecting the individual as she strives to achieve the important extrinsic outcomes necessary for attaining the venture creation goal, but once again

are not in themselves necessarily meaningful to, nor supportive of, the more authentic self (Sheldon & Elliot, 1998).<sup>130</sup> Thus, given this necessity, rather than being distracting, as is commonly assumed by researchers of motivational fit, the relation is such that the greater the difference between life goals and motives, the greater one's success in *not* integrating extrinsic concerns into a cohesive set of extrinsic life goals and motives, and thus, the better one is able to maintain one's orientation towards more valued aspects of the self or of life (Steele, 1988). In any case, the value of resistance rather than fit may be an equally decisive motivational factor here, since the individual can "rise above himself" (Frankl, 1969) in striving after and attaining a greater meaning from the creation of an entrepreneurial venture. Surely, since there is nothing in the data that suggests directly that resistance has occurred, this remains a speculation and potential focus for future research.

To date, most motivational models of entrepreneurship have typically started with the assumption that the strength of one's intention to realize a certain opportunity determines one's goal attainment. Although there is accumulated empirical evidence which supports this idea (Krueger et al., 2000) there is also emerging evidence indicating that initial intentions may linger on for a long time without ever resulting in any concrete action (Delmar & Davidsson, 2000; Reynolds, 2000; Van Gelderen et al., 2015). According to the *life goal and motive approach* developed in this thesis, such difficulties are related to one's motives and life goals, and the relationship between these two qualitatively different constructs or aspects of will (Deci & Ryan, 2000). Moreover, while prior research has examined how the intensity of various specific motives influence firm-relevant outcomes (e.g., the influence of growth motivation on firm growth) it has considered neither general life goals and general motives for engaging in entrepreneurship, nor the extent to which the content and congruence of these motivational concerns impact the well-being of enterprising individuals.

Since the mental health of those who aspire to establish their ventures is a critical element of their capacity to perform well, an understanding of

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<sup>130</sup> According to both SDT and the self-concordance approach we are naturally NOT oriented towards extrinsic motivational concerns, but rather towards intrinsic ones, which are also said to be more adaptive and in line with what Sheldon and Elliot (1998) call the authentic self.

the role of individual choices of life goals and motives in promoting well-being not only sheds light on who benefits the most from entrepreneurship in terms of well-being, and why, but also helps entrepreneurs and those who support them in their pursuit of their entrepreneurial goals, which is equally valuable. In general, as in self-determination theory, the extent to which life goals and reasons for engagement in entrepreneurship are aligned with the three basic needs for autonomy, competence, and relatedness, is related to greater well-being in entrepreneurship. However, these predictions concerning the importance of intrinsic motives and intrinsic life goals seem to contradict much of what we know about why people pursue entrepreneurship. To a great extent, entrepreneurs strive for extrinsic returns such as profit and financial gains, if only as a means to “stay in the game”.

On this basis, the life goal and motive approach suggests, and the data seem to confirm, that whereas intrinsic life goals and motives are positively and independently supportive of well-being relative to extrinsic ones, the extent to which life goals and motives match each other has separate effects on well-being depending on the type of life goal/motive discrepancy in question. Overall, some form of tension between extrinsic motivational concerns seems beneficial to the psychology of those seeking to create new business activities.

### Entrepreneurial Well-Being: What it is, Why it is Important, and How to Measure it

Finally, a central theoretical development of this thesis is the conceptualization and validation of entrepreneurial well-being (EWB) as a context-specific positive mental state, and a central component of entrepreneurs' overall well-being, which results from active engagement in entrepreneurship. In essence, EWB entails experiencing the overall creation of new business activities as pleasing and fulfilling, and is not restricted to specific cognitive-affective experiences in entrepreneurship (e.g., Cooper & Artz, 1995; Cardon et al., 2009), nor does it confound those with the overall construct. In line with the *entrepreneurial well-being as resource perspective*, which is also developed in this thesis, EWB is theorized to constitute a vital source of information and to provide important motivational nutrients through

its promotion of continued entrepreneurship. By providing entrepreneurs with affective resources and cognitive information about their preferences, expectations, and progress, EWB is argued to represent an important antecedent variable in the entrepreneurial process, rather than being simply an important outcome of individual volition and entrepreneurial success.

Revealing the existence of EWB is thus an important contribution to entrepreneurship and economic research, which have so far not identified the effects and antecedents of context-specific well-being experiences in entrepreneurship, or linked entrepreneurship to outcomes in terms of mental health. Although previous research and theory mostly linked entrepreneurship and well-being on the grounds that entrepreneurship entails greater independence, or otherwise considered the effects of highly activated forms of positive affect on the entrepreneurial process (e.g., Baron, 2008; Cardon et al., 2009; Foo et al., 2009), the idea that active engagement in entrepreneurial activities leads to greater well-being, as argued by the *self-organizational* and *action phase* approaches, further identified this context-specific experience and source of well-being as an important mediator of the link between entrepreneurship and well-being, as well as an important entrepreneurial antecedent, as I argued above.

In fact, as greater entrepreneurial well-being fuels continued entrepreneurship, which in turn results in continuous stimulation and support of mental health outcomes over time, EWB is not only theorized to affect and be affected by continuous engagement in entrepreneurship, but furthermore to have particular benefits for individuals' overall well-being.

Supportive by these pre-conceptualizations, study 4 reported on the validation of the Entrepreneurial Satisfaction Scale (ESS); a context-specific measure of EWB. The scale was based on the idea that one must ask individuals for an overall judgment of their lives as entrepreneurs in order to measure the concept of EWB. ESS thus constitutes an important, yet previously ignored, psychological outcome in the entrepreneurial process: the overall satisfaction that entrepreneurs derive from their engagement in entrepreneurship. As predicted, the ESS was shown to have favorable psychometric properties, including high internal consistency and high temporal reliability. The ESS further correlated moderately to highly with other measures of well-being, and was correlated predictably with specific moti-

vational processes in entrepreneurship. The result thus not only supported the assumption that ESS is a reliable measure of EWB, but also the supposition that EWB is an important and distinct component of entrepreneurs' overall well-being, as well as a central motivational variable in entrepreneurship.

Since entrepreneurs' motivation is goal-directed, and occurs within the context of self-regulation, ESS thus seems to be an important facet of the self-regulation of entrepreneurs. Although this should be more directly assessed in future research, the pattern of correlations between ESS and a variety of motivational outcomes and processes lends support to the idea that EWB in general, and ESS in particular, are important motivational concerns in entrepreneurship.

To conclude, while the growth of business is an important drive in the economy, we know surprisingly little about what drives entrepreneurs *in* entrepreneurship, as opposed to what drives individuals *into* entrepreneurship (Carsrud & Brännback, 2011). As theorized in this thesis, EWB, or, in other words, the experiences of wellness and pleasure derived *from* entrepreneurship, are not only important components of individuals' overall well-being, but are also likely to provide context-specific motivational nutrients and important feedback concerning preferences, expectations, and goal progress in entrepreneurship. Such information serves as an important reference criterion, and affects both actual motivation and the process and outcome of goal setting and goal striving in entrepreneurship. One could say that EWB offers a comprehensive barometer for entrepreneurs who wish to monitor themselves and their progress in entrepreneurship, as well as a useful approach to understanding and managing entrepreneurship. Understanding the mechanisms behind EWB is thus of great interest to entrepreneurship researchers, practitioners, and policymakers.

## Limitations

One of the most immediate limitations of this thesis concerns its empirical setup, which relies solely on Swedish data. While this is obviously an important concern, there are several reasons to believe that the results obtained on the basis of such data could be generalized more broadly. First,

the largest cross-country examination ever performed of the relationship between entrepreneurship and well-being (GEM 2013) indicates an overwhelmingly positive relationship between well-being and entrepreneurial engagement, in both developing nations and in more developed nations such as Sweden. Second, with its dual character of collectivism and individualism; previously termed horizontal individualism (Triandis, 1995), or state individualism (Berggren & Trägårdh, 2006), Sweden may constitute a good testing ground for some of the more universal propositions concerning the self-determining effects of entrepreneurship in terms of well-being. Third, the results obtained in this thesis are in line with previous research on the effects of self-employment on individuals' job satisfaction (Benz & Frey, 2003, 2004, 2008ab), which has covered more than 23 countries with diverse geographies, cultures, and economies.

Another limitation of this thesis concerns its empirical methods. Most of the analysis conducted is correlational (with just a few exceptions), and a more careful analysis of the temporal dynamics between entrepreneurship and well-being would have further substantiated the results of this thesis. Nevertheless, a post hoc analysis of the panel structure of the data has shown that most of the findings are in fact supported longitudinally. However, this analysis is based on a relatively small sub-sample, and was conducted too late to be included explicitly in the thesis. Most importantly however, backed by theory, I have used an extensive battery of robustness checks to prove each one of the predicted findings reported in this thesis. Finally, despite it being an explicit objective of this thesis to focus on the positive side of the human condition, a complementing approach taken to illuminate its negative side in terms of mental illness would be beneficial for further theoretical and empirical advancements concerning the relationship between entrepreneurship and well-being.

Last but not least, this thesis displays another obvious limitation or bias by mostly concerning itself with one side of the entrepreneurship/well-being nexus, and focusing on well-being as the chief dependent variable. While this limitation was addressed theoretically, and quite extensively so, it remains up to future research to delve more seriously into the other side of this complex yet fascinating nexus.

## Future Research

The perspectives and findings presented in this thesis provide plenty of opportunities for further research on the link between entrepreneurship and well-being. In fact, there are so many more questions to ask, and so many important aspects to uncover, that any attempt at a complete list would be too long and cumbersome. Hence, I will merely outline some of what I consider to be the most important general questions which remain unanswered:

1. What other features and mechanisms are responsible for the well-being effects of entrepreneurship? While this thesis has pointed towards a variety of such mechanisms, there is a remaining variance that requires alternative explanations. For instance, as pointed out elsewhere in this thesis, entrepreneurship may have a direct impact on well-being enhancing self-attributions, social comparison processes, or otherwise impact personality traits which are supportive of well-being (e.g., being extraverted). We also need to know more about how exactly the process circumstances of entrepreneurship are dynamically related to well-being, and about the person-situation contingencies involved.
2. Another set of questions worth considering concerns the differential effects of entrepreneurship on well-being. While this thesis partially answered that question by pointing to the role of motives, life goals, and their matching conditions, future research could examine a variety of other factors and conditions which moderate the effects of entrepreneurship on well-being. Importantly, whether entrepreneurship is equally well-being supportive for males and females, the educated and the non-educated, or across age groups, is still unknown. As study 4 shows, there are reasons to believe that male and female entrepreneurs may experience entrepreneurship very differently, as made evident by their differing responses to the ESS questionnaire. We also need a better understanding of the contextual con-

tingencies in which entrepreneurship takes place (e.g., industry, family etc.).

3. How does entrepreneurial well-being impact individuals' overall well-being in general, and the entrepreneurial process in particular? While I have started to outline the *entrepreneurial well-being as resource perspective* by theorizing on the effects of EWB on key motivational processes and outcomes in entrepreneurship, future empirical and theoretical research could contribute much by studying further the context-specific construct of well-being in relation to motivational and performative aspects of entrepreneurship, and as an overall approach to sustainable entrepreneurship and human flourishing in general.

## Concluding Remarks

My main objective in this thesis has been to explore the intimate relationship between entrepreneurship and well-being. I have asked whether entrepreneurship is worth pursuing in terms of well-being, and if so, what the mechanisms involved are and how they function. In other words, I have not only sought to establish a certain relationship between entrepreneurship and well-being, but also investigated the ways through which entrepreneurship promotes well-being, and in return, the role that well-being experiences play in entrepreneurship. To that end, a solid framework for understanding and measuring well-being in entrepreneurship has been offered, in the hope that it will foster a more integrated approach to assessing and optimizing entrepreneurial performance, in terms of both business and mental health outcomes.

This thesis thus responds to the call made by labor economists (Hamilton, 2000; Hundley, 2001; Blanchflower, 2004), happiness economists (Benz, 2009; Frey, 2008), entrepreneurship scholars, and management scholars (Baron, 2008; Cardon et al., 2012) for an examination of the links between entrepreneurship and individuals' experiences of well-being. I hope that I not only succeeded in giving answers to important theoretical

questions and empirical problems which concern each of these streams of research, but also in sending an important and more general message.

In his book *An Intimate History of Humanity*, Zeldin (2012) gives a historical account of six major ways in which individuals have navigated the uncertainties of life: obeying, burgeoning, withdrawing, searching for knowledge, talking, and creating. While the history of man shows us that people following one or the other approaches might achieve well-being for themselves and others, and at times also despair, Zeldin realizes that in our time, something different is demanded. Today, the way to well-being involves moving through different paths. By taking a stance towards our own conditions and, by doing so, encouraging the formation of new meanings and new links between individuals and institutions, entrepreneurs move and help us move down each of these paths, cementing the continuous formation of new encounters as well as their own personal well-being. The high well-being they enjoy is, naturally, a by-product of this. For in the process of enterprising, entrepreneurs discover, perhaps more so than others, that the meaning of one's life lies not in some state or condition of being, but in an active and continuous pursuit, discovery, implementation, and realization of meaningful activities.

And many seem to want to follow in their footsteps for these reasons rather than for others. Every year, around 70,000 people enter into entrepreneurship in Sweden alone. As of 2013, there were about 770,000 self-employed people in Sweden, making entrepreneurship and self-employment one of the largest employment categories in Sweden. This also seems to be the case in most of the developed world, while the numbers are even greater for most developing countries (although more often for reasons of necessity). Consequently, understanding which factors of the entrepreneurial process drive well-being offers new and valuable insights, not only for researchers analyzing and working with entrepreneurship, but also for those analyzing and working with employees in large and established organizations, as well as for families and individuals who wish to get the most out of their lives. As this thesis shows, for various reasons and under certain conditions, acts of entrepreneurship provide important tools for improving personal well-being and motivation in work and life.



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# Appendix A

VARIABLE NAME	ROUND	DESCRIPTION (Incl. the survey question)	ANSWER	REMARK
Notes: The full description of the variables and items sampled in Round 1 is available from the Swedish GEM team, and the items and variables sampled in Rounds 2 and 3 are available from the author. Variables not used in this thesis are not reported in the table below unless they were used in the calculation of other measures employed in the empirical analysis. Additionally, as I kept the original (GEM) names for the general demographics and work-related variables, as well as for measures of entrepreneurial and business activities included in the table, the names may not correspond to the variable names used in the thesis (e.g., SEHHINC is referred to as Income in the empirical studies).				
<b>GENERAL DEMOGRAPHICS AND WORK-RELATED VARIABLES</b>				
<b>WEIGHT_A</b>	1	WEIGHT ADJUSTED TO 18+ ACCORDING TO AGE AND GENDER CATEGORIES PROVIDED BY CENSUS		THIS WEIGHT IS USED IN THE ANALYSIS TO ARRIVE AT COUNTRY LEVEL RESULTS
<b>GENDER</b>	1	RESPONDENT GENDER (What is your gender?)	FEMALE=1 , MALE=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE FEMALE=1, MALE=0
<b>AGE</b>	1	RESPONDENT'S AGE (What is your current age?)	RESPONDENT'S EXACT AGE IN YEARS	
<b>SEHHINC</b>	1	RESPONDENT'S HOUSEHOLD INCOME  (Which of these ranges best describes the total annual income of all the members of your household, including your income, as one combined figure?)	1=UNDER 100,000 SKR; 2=100,000-200,000 SKR; 3=200,000-300,000 SKR; 4=300,000-400,000 SKR; 5=400,000-500,000 SKR; 6=OVER 500,000 SKR	
<b>SEREDUC</b>	1	RESPONDENT'S LEVEL OF EDUCATION  (What is the highest level of education you have completed?)	FROM 0=INCOMPLETE COMPULSORY SCHOOLING OR LESS THAN 9 YEARS OF EDUCATION, TO 8=DOCTORAL DEGREE	
<b>IPORGTYPE</b>	1	TYPE OF SECTOR (ORGANIZATION) WITHIN WHICH WORK IS PERFORMED  (What type of organization are you working for: for a private for-profit firm, for the government or for a not for-profit organization?)	1=PRIVATE; 2=GOVERNMENTAL; 3=NOT FOR PROFIT; 4=OTHER	IN THE ANALYSIS A DUMMY WAS CREATED WHERE THE CATEGORY OTHER WAS SET TO 0 WITH ALL OTHER CATEGORIES RETAINING THEIR NUMERICAL VALUE
<b>OCCUFULL</b>	1	FULL-TIME EMPLOYMENT  (Are you employed by others in	YES=1, NO=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE FULL-EMPLOYMENT=1, OTHER=0

		full-time work?)		
<b>OCCUPART</b>	1	PART-TIME EMPLOYMENT (Are you employed by others in part-time work?)	YES=1, NO=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE PART-TIME EMPLOYMENT=1, OTHER=0
<b>OCCURD</b>	1	RETIRED/DISABLED (Are you not working because you are retired/disabled?)	YES=1, NO=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE RETIRED/DISABLED =1, OTHER=0
<b>OCCUSTU</b>	1	STUDENT (Are you a student?)	YES=1, NO=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE STUDENT=1, OTHER=0
<b>OCCUHOME</b>	1	HOME MAKER (Are you full-time homemaker?)	YES=1, NO=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE HOMEMAKER =1, OTHER=0
<b>UNEM</b>	1	UNEMPLOYMENT (Are you currently unemployed?)	YES=1, NO=2	IN THE ANALYSIS A DUMMY WAS CREATED WHERE UNEMPLOYMENT=1, OTHER=0
<b>ENTREPRENEURIAL AND BUSINESS ACTIVITIES</b>				
<b>BSTART</b>	1	NEW INDEPENDENT STARTUP EFFORT (Are you, alone or with others, currently trying to start a new business, including any self-employment or selling any goods or services to others?)	YES=1, NO=0	
<b>BJOBST</b>	1	NEW EMPLOYMENT-BASED STARTUP EFFORT (Are you, alone or with others, currently trying to start a new business or a new venture for your employer as part of your normal work?)	YES=1, NO=0	
<b>SUACTS</b>	1	ACTIVE STARTUP ENGAGEMENT DURING THE PAST 12 MONTH (Over the past twelve months have you done anything to help start a new business?)	YES=1, NO=0	
<b>SUOWN</b>	1	SHARE OF OWNERSHIP IN THE STARTUP	1=ALL; 2=PART; 3=NONE	

		(Will you personally own all, part, or none of this business?)		
<b>SUWAGE</b>	1	INCOME GENERATING STARTUP FOR MORE THAN 3 MONTHS  (Has the new business paid any salaries, wages, or payments in kind, including your own, for more than three months?)	YES=1, NO=0	
<b>SUREASON</b>	1	STARTUP MOTIVE: OPPORTUNITY VS. NECESSITY ENTREPRENEURSHIP  (Are you involved in this startup to take advantage of a business opportunity or because you have no better choices for work?)	1=TAKE ADVANTAGE OF BUSINESS OPPORTUNITY; 2=NO BETTER CHOICE FOR WORK; 3=COMBINATION OF BOTH OF THE ABOVE; 4=HAVE A JOB BUT SEEK BETTER OPPORTUNITY; 5=OTHER	
<b>OWNMGE</b>	1	OWNER MANAGER OF AN EXISTING BUSINESS  (Are you, alone or with others, currently the owner of a business you help manage, self-employed, or selling any goods or services to others?)	YES=1, NO=0	
<b>OMOWN</b>	1	SHARE OF OWNERSHIP IN THE BUSINESS  (Do you personally own all, part, or none of this business?)	1=ALL; 2=PART; 3=NONE	
<b>OMWAGEYR</b>	1	FIRST YEAR OF PAYMENT FROM THE BUSINESS  (What was the first year the founders of the business received wages, profits, or payments in kind from this business?)	RESPONDENT'S EXACT YEAR	
<b>OMREASON</b>	1	PAST STARTUP MOTIVE: OPPORTUNITY VS. NECESSITY ENTREPRENEURSHIP  (Were you involved in this startup to take advantage of a business opportunity or because you had no better choices for work?)	1=TAKE ADVANTAGE OF BUSINESS OPPORTUNITY; 2=NO BETTER CHOICE FOR WORK; 3=COMBINATION OF BOTH OF THE ABOVE; 4=HAVE A JOB BUT	

			SEEK BETTER OPPORTUNITY; 5=OTHER	
<b>FUTSUP</b>	1	PLAN TO START UP A BUSINESS IN THE NEXT THREE YEARS  (Are you, alone or with others, planning to start a new business, including any type of self-employment, within the next three years?)	YES=1, NO=0	
<b>SUB</b>	1	NEW STARTUP EFFORT TOTAL	YES=1, NO=0	SUB=1: ALL RESP WHO ANSWER YES TO EITHER BSTART OR BJOBS
<b>SUBA</b>	1	ACTIVELY INVOLVED IN STARTUP EFFORT	YES=1, NO=0	SUBA=1 IF SUB=1 AND SUACTS=1
<b>SUBO</b>	1	OWNER IN STARTUP EFFORT	YES=1, NO=0	SUBO=1 IF SUB=1 AND (SUOWN=1 OR SUOWN=2)
<b>SUBOA</b>	1	ACTIVELY INVOLVED IN STARTUP EFFORT AND OWNER	YES=1, NO=0	SUBOA=1 IF SUBO=1 AND SUBA=1
<b>SUBOANWC</b>	1	OWNING AND MANAGING A BUSINESS RECLASSIFIED INTO SETTING UP A BUSINESS	YES=1, NO=0	SUBOANWC=1 IF OWNMGE=1, OMOWN=1 OR 2, OMWAGEYR=9997 ("NO PAYMENT YET")
<b>SUBOANW</b>	1	ACTIVELY INVOLVED IN STARTUP EFFORT AND OWNER, NO WAGES YET	YES=1, NO=0	SUBOANW=1 IF SUBOA=1 AND SUWAGE=0; ALSO INCLUDES RESPONDENTS IN OM-SECTION WHO ARE RECLASSIFIED AS NASCENTS (SUBOANWC)
<b>BABYBUSM</b>	1	MANAGES A BUSINESS THAT IS UP TO 42 MONTHS OLD	YES=1, NO=0	BABYBUSM=1 IF OWNMGE=1 AND OMWAGEYR BETWEEN 2007 AND 2010
<b>OMBABYX</b>	1	INVOLVEMENT IN STARTUP EFFORT RECLASSIFIED INTO OWN-MAN YOUNG BUSINESS	YES=1, NO=0	OMBABYX=1 IF SUBOA=1 AND SUWAGE=1 AND SUWAGEYR BETWEEN 2007 AND 2010
<b>BABYBUSO</b>	1	MANAGES AND OWNS A BUSINESS THAT IS UP TO 42 MONTHS OLD	YES=1, NO=0	BABYBUSO=1 IF BABYBUSM=1 AND (OMOWN=1 OR OMOWN=2); ALSO INCLUDES RESPONDENTS IN SU-SECTION WHO ARE RECLASSIFIED AS BABY BUSINESS OWNERS (OMBABYX)

<b>TEA</b>	1	INVOLVED IN TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY	YES=1, NO=0	THIS VARIABLE IDENTIFIES TEA  TEA =1 IF SUBOANW=1 OR BABYBUSO=1
<b>ESTBBUSM</b>	1	MANAGES A BUSINESS THAT IS OLDER THAN 42 MONTHS	YES=1, NO=0	ESTBBUSM=1 IF OWNMGE=1 AND OMWAGEYR<2007
<b>OMESTBX</b>	1	INVOLVEMENT IN STARTUP EFFORT RECLASSIFIED INTO OWN-MAN ESTABLISHED BUSINESS	YES=1, NO=0	OMESTBX=1 IF SUBOA=1 AND SUWAGE=1 AND SUWAGEYR < 2007
<b>ESTBBUSO</b>	1	MANAGES AND OWNS A BUSINESS THAT IS OLDER THAN 42 MONTHS	YES=1, NO=0	ESTBBUSO=1 IF ESTBBUSM=1 AND (OMOWN=1 OR OMOWN=2); ALSO INCLUDES RESPONDENTS IN SU-SECTION WHO ARE RECLASSIFIED AS ESTABLISHED BUSINESS OWNERS (OMESTBX)
<b>WELL-BEING, PSYCHOLOGICAL, AND BEHAVIORAL MEASURES</b>				
<b>HAPPINESS</b>	1,2,3	SINGLE ITEM OVERALL HAPPINESS IN LIFE  (Taking all things together, how happy would you say you are?)	FROM 1=NOT AT ALL HAPPY, TO 7=VERY HAPPY	
<b>LIFE-SATISFACTION</b>	1,2,3	SINGLE ITEM LIFE SATISFACTION  (All things considered, how dissatisfied or satisfied are you with your life as a whole these days?)	FROM 1= NOT AT ALL SATISFIED, TO 7=VERY SATISFIED	
<b>ECONOMIC SATISFACTION</b>	1,2,3	SINGLE ITEM ECONOMIC SATISFACTION  (All things considered, how dissatisfied or satisfied are you with your current financial situation?)	FROM 1= NOT AT ALL SATISFIED, TO 7=VERY SATISFIED	
<b>WORK SATISFACTION</b>	1,2,3	SINGLE ITEM WORK SATISFACTION  (All things considered, how dissatisfied or satisfied are you with your current work?)	FROM 1= NOT AT ALL SATISFIED, TO 7=VERY SATISFIED	
<b>LEISURE SATISFACTION</b>	1,2,3	SINGLE ITEM LEISURE SATISFACTION  (All things considered, how dissatisfied or satisfied are you with the amount of leisure time you have?)	FROM 1= NOT AT ALL SATISFIED, TO 7=VERY SATISFIED	
<b>FREEDOM SATISFACTION</b>	1,2,3	SINGLE ITEM FREEDOM SATISFACTION	FROM 1= NOT AT ALL SATISFIED, TO 7=VERY	

		(All things considered, how dissatisfied or satisfied are you with your freedom to realize your capabilities and skills?)	SATISFIED	
<b>SUBJECTIVE VITALITY</b>	1,2,3	SINGLE ITEM SUBJECTIVE VITALITY  (Thinking about your life please indicate how true the following sentence is to you: I feel alive and vital)	FROM 1= NOT AT ALL TRUE, TO 7=VERY TRUE	THIS IS THE FIRST ITEM IN THE SUBJECTIVE VITALITY SCALE DEVELOPED BY RYAN AND FREDERICK (1997)
<b>THE BASIC PSYCHOLOGICAL NEEDS SCALE</b>	1,2	THE BASIC PSYCHOLOGICAL NEEDS SCALE INCLUDES 21 ITEMS DIVIDED BETWEEN THE THREE SUB-SCALES OF RELATEDNESS, COMPETENCE, AUTONOMY  (Please listen to each of the following items carefully; thinking about how it relates to your life, and then indicate how true it is for you)	FROM 1= NOT AT ALL TRUE, TO 7=VERY TRUE	ROUND 1 SAMPLED THE SHORTER VERSION OF THE SCALE (10 ITEMS), AND ROUND 2 SAMPLED THE ENTIRE SCALE  THE FULL SCALE CAN BE FOUND ON:  <a href="http://www.selfdeterminationtheory.org/">http://www.selfdeterminationtheory.org/</a>
<b>SELF-EFFICACY</b>	1	SINGLE ITEM GENERAL SELF-EFFICACY  (To what extent do you agree with the following statement: I can do anything I set my mind on doing?)	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	
<b>OPTIMISM</b>	1	SINGLE ITEM GENERAL OPTIMISM  (To what extent do you agree with the following statement: In uncertain times I usually expect the best)	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	
<b>ASPIRATION (LIFE GOAL) INDEX</b>	2	THE ASPIRATION INDEX INCLUDES 6 CATEGORIES OF INTRINSIC AND EXTRINSIC LIFE GOALS AND 30 ITEMS EQUALLY DIVIDED BETWEEN THEM  (Everyone has long-term Goals or Aspirations. These are the things that individuals hope to accomplish over the course of their lives. Please indicate the extent to which the following goals are important to you)	FROM 1= NOT IMPORTANT AT ALL, TO 7=VERY IMPORTANT	ROUND 2 SAMPLED THE SHORTER VERSION OF THE INDEX WHICH INCLUDES 18 ITEMS EQUALLY DIVIDED BETWEEN THE 6 CATEGORIES. THESE WERE USED IN ORDER TO CALCULATE INTRINSIC AND EXTRINSIC LIFE GOAL ORIENTATIONS  THE FULL INDEX CAN BE FOUND ON:  <a href="http://www.selfdeterminationtheory.org/">http://www.selfdeterminationtheory.org/</a>

<b>ENTREPRENEURIAL MOTIVE INDEX</b>	2	<p>THE ENTREPRENEURIAL MOTIVE INDEX INCLUDES 19 ITEMS CAPTURING A VARIETY OF REASONS UNDERLYING THE BUSINESS ESTABLISHMENT</p> <p>(To what extent are the following reasons important to you in establishing this new business?)</p>	FROM 1= NOT IMPORTANT AT ALL, TO 7=VERY IMPORTANT	IN THE ANALYSIS ONLY 8 ITEMS WERE RETAINED IN ORDER TO CALCULATE INTRINSIC AND EXTRINSIC MOTIVATION SCORES
<b>THE SATISFACTION WITH LIFE SCALE</b>	2,3	<p>THE SATISFACTION WITH LIFE SCALE INCLUDES 5 ITEMS ASSESSING RESPONDENTS' GENERAL LIFE SATISFACTION</p> <p>(To what extent do you agree with the following statements?)</p>	FROM 1= STRONGLY DISSAGREE, TO 7=STRONGLY AGREE	THE SCALE IS DEVELOPED IN DIENER ET AL., (1985)
<b>THE SUBJECTIVE VITALITY SCALE</b>	2,3	<p>THE SUBJECTIVE VITALITY SCALE INCLUDES 7 ITEMS ASSESSING RESPONDENTS' GENERAL SENSATIONS OF VITALITY AND ENERGY AVAILABLE TO THE SELF</p> <p>(Please listen to each of the following items carefully; thinking about how it relates to your life, and then indicate how true it is for you)</p>	FROM 1= NOT AT ALL TRUE, TO 7=VERY TRUE	THE SCALE IS DEVELOPED IN RYAN AND FREDERICK (1997)
<b>THE ENTREPRENEURIAL SATISFACTION SCALE</b>	2,3	<p>THE ENTREPRENEURIAL SATISFACTION SCALE INCLUDES 5 ITEMS ASSESSING RESPONDENTS' GENERAL SATISFACTION WITH THEIR LIVES AS ENTREPRENEURS</p> <p>(To what extent do you agree with the following statements?)</p>	FROM 1= STRONGLY DISSAGREE, TO 7=STRONGLY AGREE	THE SCALE IS CONSTRUCTED AND VALIDATED IN STUDY 4
<b>ENTREPRENEURS' BUSINESS SATISFACTION SCALE</b>	2,3	<p>THE BUSINESS SATISFACTION SCALE INCLUDES 5 ITEMS ASSESSING RESPONDENTS' SATISFACTION WITH THEIR BUSINESS (E.G., SALES, PROFIT, ETC)</p> <p>(To what extent do you agree with the following statements?)</p>	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	THE SCALE IS CONSTRUCTED ON THE BASIS OF THE BUSINESS SATISFACTION SCALE DEVELOPED BY COOPER AND ARTZ (1995). SEE STUDY 4 FOR MORE DETAILS
<b>ENTREPRENEURIAL SELF-EFFICACY SCALE</b>	2,3	<p>THE ENTREPRENEURIAL SELF-EFFICACY SCALE INCLUDES 5 ITEMS ASSESSING RESPONDENTS' CONFIDENCE TO SUCCESSFULLY PERFORM THE TASKS AND ROLES OF AN ENTREPRENEUR</p>	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	THE SCALE IS DEVELOPED IN ZHAO ET AL., (2005)

		(To what extent do you agree with the following statements?)		
<b>ENTREPRENEURIAL TIME COMMITMENT</b>	2,3	HOURS OF WORK PER WEEK  (How much time do you devote to the business per week on average?)	RESPONDENT'S EXACT NUMBER OF HOURS	
<b>ENTREPRENEURIAL GOAL COMMITMENT SCALE</b>	2,3	THE ENTREPRENEURIAL GOAL COMMITMENT SCALE INCLUDES 6 ITEMS ASSESSING RESPONDENTS' DETERMINATION TO ESTABLISH THEIR BUSINESS  (To what extent do you agree with the following statements?)	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	THE SCALE IS CONSTRUCTED ON THE BASIS OF THE MORE GENERAL GOAL COMMITMENT SCALE DEVELOPED BY HOLLENBECK ET AL., (1989)
<b>ENTREPRENEURS' PROPENSITY TO EXIT SCALE</b>	2,3	THE SCALE INCLUDES 3 ITEMS ASSESSING RESPONDENTS' PROPENSITY TO DISENGAGE FROM THE BUSINESS ESTABLISHMENT  (To what extent do you agree with the following statements?)	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	THE SCALE IS CONSTRUCTED ON THE BASIS OF WINCENT ET AL., (2008)
<b>ENTREPRENEURIAL INTENTION</b>	2,3	SINGLE ITEM ENTREPRENEURIAL INTENTION  (To what extent do you agree with the following statements: I prefer having my own company rather than having a promising career elsewhere)	FROM 1= COMPLETELY DISSAGREE, TO 7=COMPLETELY AGREE	