Entrepreneur Role Stress

*Essays on the Travails of the Entrepreneur*

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The principle of stress, so often invoked in psychology, psychiatry and psychosomatics needs some re-evaluation. As everything in the world, stress too is an ambivalent thing. Stress is not only a danger of life to be controlled and neutralized by adaptive mechanisms; it also creates higher life. If life, after disturbance from outside, had simply returned to the so-called homeostatic equilibrium, it would never have progressed beyond the amoeba which, after all, is the best adapted creature in the world—it has survived billions of years from the primeval ocean to the present day. Michelangelo, implementing the precepts of psychology, should have followed his father’s request and gone into the wool trade, thus sparing himself lifelong anguish although leaving the Sistine Chapel unadorned.

—Von Bertalanffy, 1968
This thesis consists of an introductory text, presenting key issues, major rationales for doing this research, and seven appended papers (as per below):


**Paper II.** Örtqvist, D. Sources of Role Stress: A Narrative Review of Role Stress Antecedents. Manuscript submitted for consideration to peer-reviewed academic journal.


**Note:** The cover picture is created by Nina Wincent
ABSTRACT

This thesis aims to contribute to a better understanding of the social situation of the entrepreneur and the travails of entrepreneurship. More specifically, it examines the role of the entrepreneur by acknowledging that the role is influenced by expectations and proscriptions of stakeholders, scripts for social conduct, and norms. This influence opens up situations demarcated by demanding expectations and resource inadequacies—in terms of role stress—which complicate entrepreneurs’ role fulfillment. The detrimental consequences of role stress have been widely acknowledged in professions outside the entrepreneurship setting. Recognizing that role stress is a well-established field of research, the role of the entrepreneur is related to some unique characteristics but with limited prior focus earned. This study therefore aims at contributing to a better understanding of entrepreneurs’ role stress, traces possible antecedents, and maps some potential consequences.

The thesis is based on a selection of seven academic papers. A meta-analytic review of prominent role stress consequences, together with a narrative literature review of role stress antecedents, lays the foundation for a conceptual analysis of how role stress can be used in entrepreneurship research. A subsequent theoretical analysis of this material implied and strengthened the thesis that the inclusion of role stress is valuable in the study of entrepreneurs. Empirical examinations in different scholarly papers support the role of the entrepreneur and reveal that role stress is an important and prominent phenomenon among entrepreneurs. Role stress is found both to influence the likelihood of inclination for new venture termination and to reduce performance and satisfaction. In a two-year longitudinal data set, role stressors are shown to transform to a proclivity for venture withdrawal through feelings of burnout and dissatisfaction, which sustains over time once triggered. The effect of burnout feelings is direct but not sustained, while the effects from dissatisfaction are lagged.

Examining the origin and consequences of entrepreneurs’ role stress reveals the lack of fit between entrepreneurs’ personality traits and environmental characteristics to develop role stress, and that invested personal resources aiming to resolve role stress can increase venture performance at the cost of exhaustion and reduced self-satisfaction. Further examinations reveal that role stress experiences transform into functional outcomes depending on the coping strategies employed and the levels of role stress experienced. Results moreover reveal that negotiating expectations and/or working harder to meet expectations positively affect venture performance, whereas suppressing perceived expectations negatively influences venture performance.
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Luleå, April 2007

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PART II


Örtqvist, D. Sources of Role Stress: A Narrative Review of Role Stress Antecedents. Manuscript submitted for consideration to peer-reviewed academic journal.


Wincent, J., Örtqvist, D. & Drnovsek, M. Entrepreneur’s Role Stressors and Proclivity for Venture Withdrawal. Manuscript submitted for consideration to peer-reviewed academic journal.


PART I
1. RESEARCH RATIONALE
This chapter will outline the rationale and justification for the research topic pursued in this thesis. This rationale is based on a discussion of the importance, challenges, and potentials of current entrepreneurship research.

1.1 Entrepreneurship as a field of research
Although entrepreneurship has old roots, research within the field has significantly increased during the past decades (Shane, 2003; Shane and Venkataraman, 2000; Venkataraman, 1997). There can, of course, be several reasons for such an expansion. However, one belief is that much of this is because entrepreneurs have often been recognized as heroes of societal development and the creation of wealth. Policy makers and politicians often highlight the importance of new ventures and entrepreneurs, as is exemplified by the quote below:

“Most new jobs won’t come from our biggest employers. They will come from our smallest. We've got to do everything we can to make entrepreneurial dreams a reality.” —Ross Perot

Many people regard the importance of entrepreneurship as indisputable, and many view entrepreneurship as one of the most important drivers of our economy (Acs and Audretsch, 2003). At a high level of abstraction, “entrepreneurship is important because it is the economic mechanism through which inefficiencies in economies are identified and mitigated” (Baum, Frese, Baron, and Katz, 2007: 5). Entrepreneurs who decide to create new ventures and to expand them into established large corporations are therefore often the ones who lay the foundation for societal development and wealth and job creation (Davidsson, Lindmark, and Olofsson, 1994). Although few entrepreneurs will grow their ventures into large corporations, entrepreneurship through new venture creation has still become more important during the past decades as many large organizations have downsized their operations, which makes new and small ventures more important for job creation (see, e.g., Birch, 1987). In addition to the positive influence of entrepreneurship on societal development, it has been suggested that organizational establishment and performance also have a positive influence on individuals in the role of entrepreneur. It has been stated that individuals who are exposed to entrepreneurship experience benefits in, for instance, self-esteem, sense of control over their lives, and freedom (Dyer and Peay, 1989).

Recognizing the importance of entrepreneurs implies acknowledging the importance of crafting explanations and predictions that can help entrepreneurs themselves, support organizations, policy makers, and others succeed in contributing to societal development. If we believe in entrepreneurship, we need
to map and trace underlying mechanisms that help us create a better society. There are several possible research designs and questions that could be of guidance when attempting such contributions. Baron (2002), for instance, proposed that entrepreneurship research could benefit from studies focusing on explanations of why some become and succeed in being entrepreneurs (referring to opportunity recognition, exploitation, and new venture creation) and others do not. This present study will seek to contribute to entrepreneurship not so much in terms of why some become entrepreneurs but rather it will address the field of inquiry of what determines success vis-à-vis failure during new venture establishment. The following sections outline this contribution.

1.2 Situations as foci of entrepreneurship research

Until today, most research efforts in entrepreneurship have focused on the concept of the entrepreneur (see, e.g., Rauch and Frese, 2007), guided by research questions such as, Who is the entrepreneur? However, the definition of the entrepreneur as limited solely to a psychological profile has also received much criticism (e.g., Gartner, 1988; Shane and Venkataraman, 2000). There are numerous examples of studies defining the entrepreneur in terms of traits and characteristics, whether or not the studies differentiate the entrepreneur from others (e.g., managers). These types of studies have received mixed results from such approaches: some studies have found that entrepreneurs are different from managers, and others have found that entrepreneurs and managers are quite similar.

Gartner (1988) went so far to state that the question, Who is an entrepreneur? is the wrong question. Some have focused instead on opportunity as the foundation for entrepreneurship. Entrepreneurial opportunities are defined as “those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production” (Shane and Venkataraman, 2000: 220). Although opening up to studies on opportunities, “we must not abandon research efforts that provide a deeper understanding of this individual [the entrepreneur]” (Morris, 2002: 7). Rather, entrepreneurship involves the presence of both enterprising individuals and lucrative opportunities. Therefore, several researchers have deemed research efforts pinpointing the intersection between the entrepreneur and the activity/process of realizing opportunities through new venture creation as important for furthering our knowledge on entrepreneurship (Shane and Venkataraman, 2000; Venkataraman, 1997). Such a nexus of entrepreneur and opportunity is here argued to be mirrored in the specific situation in which the entrepreneur attempts to pursue and exploit an opportunity through new venture creation. There are several possible benefits of an approach that studies the situation in which the entrepreneur and the opportunity meet. This thesis attempts to study this interaction.
However, there are also many trends that are dominant in research. One such trend is that many studies have so far mostly focused upon only the positive aspects of entrepreneurship, thereby failing to take into account the challenges and impediments that the entrepreneur faces in establishing a new venture. This may be very natural. When pursuing questions on how the conditions for entrepreneurship can be improved, it is easy to focus solely on positive constructs or to try to map success stories without acknowledging any drawbacks or backfirings. However, a more recent line of research has focused on negative constructs and failures in attempting to understand and explain entrepreneurship conundrums (see, e.g., Mellahi and Wilkinson, 2004; Shepherd and Douglas, 2000; Wilkinson and Mellahi, 2005; Zacharakis, Meyer, and DeCastro, 1999). This approach has proved useful but is in its infancy.

This research may be positioned somewhere in the middle of these two approaches. It could be argued that it is of utmost importance to recognize the balance between success and failure. Our understanding of phenomena related to such situations is rather limited. In fact, we have spent much time focusing on aspects other than the situational characteristics forming the everyday reality of the entrepreneur. However, recent publications have stressed the importance of more studies of the entrepreneur’s situation to extend our current knowledge about start-up and new venture management (Baum, Frese, Baron, and Katz, 2007). Therefore, advancing entrepreneurship as a field is much about finding situational constructs that can be tied to the entrepreneur and the new venture with the aim of explaining and predicting how likely entrepreneurs are to be successful or to fail in transforming opportunities into goods and services for a market. Although it has potential, such focus in entrepreneurship research has so far been quite modest. This thesis is based on studying one such situational construct tied to social situations.

1.3 Involving stakeholders and challenging social situations
Sarason, Dean, and Dillard (2006) argued that entrepreneurship is a social undertaking. This implies acknowledgement of the social situation in which entrepreneurship is carried out. Almost everything the entrepreneur does is related to a social situation (Choi and Shepherd, 2004) in which the stakeholders’ commitment and participation have been deemed important, if not crucial, for understanding the performance and survival of a new venture (Clarkson, 1995). Although not studied to a large extent in entrepreneurship, situations in which the entrepreneur interacts with new venture stakeholders are likely not without problems and tensions.
Entrepreneurs are located in a situation demarcated by risk, which likely sets challenges on the social situation. This is evident in the entrepreneur’s having to assemble critical resources when risks appear high for venture stakeholders such as investors, customers, employees, and suppliers (Stevenson, Roberts, and Grousbeck, 1989). There are also several other examples in entrepreneurship literature that highlight how the social situation particularly influences the entrepreneur and the new venture establishment. Baum, Frese, Baron, and Katz (2007) mentioned the social situation between the entrepreneur and financiers. They argued that financiers often negotiate from a position demarcated by power and aggression, while the entrepreneur needs to resolve financial obstacles for further establishment and growth. In turn, retrieving financing from external sources also likely puts future demands on how to establish the venture and thus leads to a continuous stressful situation for performance and survival. Entrepreneurs’ social situations are often far more complex, involving demands and expectations related to multiple areas, including technology, service, and leadership, to mention a few (Baum, Frese, Baron, and Katz, 2007). Although on many occasions the entrepreneur has been referred to as acting in a complex situation where the entrepreneur’s social situation seems important for understanding the plausibility of their success or failure, research efforts and theories are not yet able to address the influence of these situations on the entrepreneur and the activities of new venture establishment.

1.4 Role stress and obtaining insights of challenges in social situations
To address, understand, and explain entrepreneurs’ challenging situations, and the origin and consequences of such situations, literature and theory on roles is useful. This perspective has its roots in psychology and sociology and has received much research attention since its inception in the first half of the twentieth century.

The literature of roles and role behavior postulates that each individual performs a set of roles in which his or her behavior is assumed to be guided by the expectations of individuals related to that role (Katz and Kahn, 1978). It is thus also possible to analyze the entrepreneur, and the social situation of the entrepreneur, using principles related to theories on roles.

To grasp the challenges of the social situation, role-related literature provides the construct of role stress, which in fact demarcates the situations in which expectations are challenging or even impossible to meet. In research on role stress, such challenges stem from conflicting, ambiguous, or overloading expectations guiding the focal person in attempting to perform well in the role. As such, the construct of role stress may help explain how characteristics of the entrepreneur’s social situation are created and how they transform and influence the entrepreneur’s cognition, behavior, and outcomes.
The examination of stress for entrepreneurs in particular has not received much attention. Some attempts and references have been made to general notions of stress (Ardichvili, 2001; Baucus and Human, 1994; Bird, 1992; Gibb, 1994; Jelinek and Litterer, 1995; Morris, Davis, and Allen, 1994; Wolfe, 2004) and only few attempts have examined how role stress influences entrepreneurs and entrepreneurship (Buttner, 1992; Harris, Saltstone, and Fraboni, 1999; McLean, 1974; Osipow and Spokane, 1983). Most of these studies do not focus specifically on role stress, which is why our current knowledge about the placement and effects of role stress in entrepreneurship are highly unsystematic and uncertain. Of the studies including entrepreneur role stress, we find that of Harris, Saltstone, and Fraboni (1999), who tested a scale of job stress, which has some resemblances to role stress but is different in other aspects, on entrepreneurs. Another study is the one of Buttner (1992), who compared and differentiated samples of entrepreneurs and managers in health problems and job satisfaction; some aspects of role stress were included in such comparisons. Also, some authors have focused on how entrepreneurs cope with stress, such as Akande (1994), Boyd and Gumpert (1983), and Miller (2000). These studies either discuss coping with respect to a more general notion of stress and a very specific type of role stressor (interrole expectations) or mainly substantiate arguments purely from conceptual reasoning. Although much can be learned from these research efforts, especially that role stress might be a fruitful lens for understanding entrepreneurs and entrepreneurship, they also denote the lack of a systematic and thorough examination of entrepreneurs’ role stress.

Overall, this presentation has forwarded the importance of entrepreneurs and entrepreneurship. The shift in focus in entrepreneurship research has opened focus on situations in which social situations are important for understanding the success and failure of entrepreneurial attempts. Derived from psychology, sociology, and organizational studies, role stress is proposed as a potentially important construct that holds potential for addressing how social challenges influence entrepreneurs. Therefore, the research efforts of this thesis are guided by the following research question:

- If and how can role stress literature contribute to a better understanding of the success and failure of entrepreneurs during new venture establishment?

1.5 Purpose
This chapter emphasizes that meaningful theories about entrepreneurship should be able to contribute to better understanding, explanations, and predictions about entrepreneurs and entrepreneurship. Such understanding and explanations should benefit from a focus on the entrepreneur’s conditions and should increase knowledge about what drives entrepreneurship and the challenges and
impediments for entrepreneurs to exploit opportunities. It is here argued that such knowledge comes from understanding the situational characteristics influencing the entrepreneur during new venture establishment, and literature on roles, where especially the construct of role stress is proposed to be a suitable lens for such research efforts.

On the basis of such a proposition, there are some aspects that need to be clarified as to how this study aims to contribute. It is here argued that the adoption and introduction of a well-studied construct in entrepreneurship requires a meticulous and extensive process, beginning with an extensive literature review and conceptual work before proceeding to construct explanations, to derive hypotheses, and to undertake empirical testing.

The rationale for the present design comes from the fact that role stress research has been published in a large diversity of journals in which no recent reviews of the field exist. Therefore, the first step is to perform a systematic review of the general literature on role stress to avoid the risk of not fully acknowledging and learning from the work that has already been done in the area. On the basis of the results from comprehensive reviews, it is possible to compare findings with those of entrepreneurship literature. In comparison to introducing one part—such as by testing a singular relationship—such designs have the potential to unmask conceptual and empirical problems at an early stage.

In a second step, empirical development and tests are important, specifically developing and adjusting the conceptual definition of the entrepreneurs’ role together with measurement to examine whether such phenomena exist among entrepreneurs. Since scholars have refined measures of role stress since at least the 1970s, it is possible to draw from existing measures, but the need to develop such measures and validate them particularly for the role of the entrepreneur is important. Once established that it is possible to measure role stress and that the phenomenon is actually present among entrepreneurs, it is of interest to conceptually model an abstract model of antecedents and consequences to entrepreneurs’ role stress and to test such a model using empirical data to understand how role stress is created and what it leads to for entrepreneurs. After having gained increased understanding of entrepreneurs’ role stress, antecedents, and consequences, the final stage is to model and empirically test how such role stress, or at least its consequences, can be reduced or diminished.

The design and approach put forward here illustrates how an established literature with a well-studied construct can be introduced and tested to benefit entrepreneurship research. This design also summarizes the process by which this thesis aims to contribute: systematic examination and introduction of a construct to entrepreneurship research. Therefore, further clarification of the
purpose of this thesis—that is, how it will be fulfilled and how the seven appended papers fit together with the introductory and summarizing text—can be summed up as follows:

- To review the general literature on role stress
- To compare this body of literature to craft how it contributes to the scholarly study of entrepreneurship
- To empirically test the construct properties of entrepreneurs’ role stress
- To develop and empirically test entrepreneurs’ role stress antecedents and consequences
- To develop and empirically test a selection of coping strategies for entrepreneurs’ role stress
2. DEFINITIONS AND A CONCEPTUAL INTRODUCTION

This chapter provides an introduction to the central literature and perspectives as well as the definitions of central constructs to conceptualize how the construct role stress can benefit entrepreneurship. The chapter begins by conceptualizing the entrepreneur, introducing literature on roles, and finally discussing the role stress construct. By beginning with a conceptual presentation of theory on roles and role behaviors, this chapter lays the foundation for how treating the entrepreneur as a role can benefit and extend entrepreneurship research. Thereafter, the role of the entrepreneur is conceptualized. When establishing the role of the entrepreneur, the construct role stress and entrepreneur role stress are introduced, described, and defined.

2.1 The role of the entrepreneur

2.1.1 An introduction to the literature on roles

Several researchers have acknowledged the metaphor of the theatre when describing the precepts of theories on roles (see, e.g., Biddle, 1986; Galletta and Heckman, 1990). The resemblance to the theatre comes from the assumption that individuals behave in different and predictable ways depending on their social identities and respective situations (Biddle, 1986). Stryker and Statham (1985) expressed, in other terms, that theory on roles is about individual behavior and social interaction, where social structure is assumed to influence the individual social person performing a role.

The assumptions about roles and individual identity have received extensive support over a number of studies (see, e.g., Galletta and Heckman, 1990). One such study was performed by Milgram (1965), who found that two-thirds of respondents willingly obeyed when they were asked to administer electric shocks to pleading victims. A number of other studies have found that people adjust to situations by performing what they perceive as expected from the role they are performing.

The concept role has in seminal work been defined as “the summation of the requirements with which the system confronts with the individual member” (Katz and Kahn, 1978: 186). It is therefore important to pinpoint that a role is “what social actors are expected to do as opposed to what they are or how they are labeled” (Galletta and Heckman, 1990: 172). In more recent developments, most researchers have argued that, in addition to requirements, expectations also define roles, “and that expectations are learned through experience, and also that persons are aware of the expectations they hold” (Biddle, 1986: 69). According to well-cited work, a role is composed of expectations and requirements about behavior (Rizzo, House, and Lirtzman, 1970) in a given setting (Solomon, Surprenant, Czepiel, and Gutman, 1985) whether formal or informal.
Katz and Kahn (1978) introduced the role episode model (see figure 1). This model has its basis in a sequential process describing how role expectations within a role set transform into role behavior. In this model, role expectations are rooted in the role set, which is the set of individuals (also labeled role senders) who influence or are concerned with the behavior of the person in a role. These role expectations demark the beliefs and attitudes held by members of the role set regarding what behaviors are appropriate for the person in the role. Role sending is the communication of role expectations by members of the role set. Role receiving refers to the perceptions and cognitions by the person in the role of the expectations that are sent by members of the role set. In turn, the perceptions and cognitions related to the received role influences role behavior, which refers to the role occupant’s recurring actions attributable to the role. Focal persons perform their roles to a greater or lesser extent with regard to the perceptions about expectations that define the role, which in turn feeds back to role expectations.

Figure 1: The role episode model (based on Katz and Kahn, 1978)

The usefulness of role perspectives is evident in the large number of published studies. Several relatively generic roles have been examined using precepts of literature on roles. For instance, the role of the manager has been defined by such recurrent behaviors as evaluating, rewarding, correcting, disciplining, and generally overseeing the work of subordinates in an assertive manner. Subordinates are expected to behave respectfully and responsively toward their bosses. Although some would assert that there are general characteristics of roles, there are also more specific and contextually dependent expectations. Contextualizing a role is therefore balancing between the abstract and the specific.
2.1.2 Attributed role characteristics of the entrepreneur

Although perhaps novel in its presentation, the assertion that being an entrepreneur is a role in itself is in fact not new. At least implicitly, several researchers have long asserted that being an entrepreneur is related to a role. Landström (2005: 15) and others have presented how different entrepreneurship scholars have defined the role of the entrepreneur in terms of their attributes, such as being a risk taker (Cantillon, 1755; Knight, 1921; Say, 1816), a capitalist (Marshall, 1890; Ricardo, 1817; Smith, 1776), an innovator (Baumol, 1993; Dahmén, 1950; Schumpeter, 1911), an alert opportunity seeker (Hayek, 1945; Kirzner, 1973; Mises, 1949), and a coordinator of limited resources (Casson, 1982; Say, 1816). On a conceptual level, these attributed role characteristics influence our conception and guide our perceptions of the entrepreneur.

There are also instances of entrepreneurship research describing stakeholders’ expectations and demands based on what the entrepreneur does, which, following role-related literature, also adhere to the foundation of role definition. Timmons (1978) suggested eight role demands and requirements that are important to consider for entrepreneurs, including accommodation to the new venture, total immersion and commitment, creativity and innovation, knowledge of the business, people and team building, economic values, ethics, integrity and reliability. Gartner (1985) suggested six common activities of entrepreneurs that also give rise to expectations and demands upon the role of an entrepreneur. These activities include locating a business opportunity; accumulating resources, market products, and services; producing the product; building an organization; and responding to government and society. These are just two illustrations of how entrepreneurship literature has suggested areas and activities that could be used to understand the expectations and demands upon the role of entrepreneurs. In the following section, the arguments related to expectations of entrepreneurs are transformed into the definition of the role of the entrepreneur.

2.1.3 Defining the role of the entrepreneur

Entrepreneurship scholars have long bickered over a precise definition of the entrepreneur (Bull and Willard, 1993). Following scholars such as Shane and Venkataraman (2000), the role of the entrepreneur is about combining resources to exploit a market opportunity, often through the creation and establishment of a new venture (Gartner, 1988). Implementing the precepts of role-related literature, the role of the entrepreneur is defined by the summation of expectations and requirements from stakeholders (i.e., role senders) to the new venture and the entrepreneur (Kahn, Wolfe, Quinn, Snoek, and Rosenthal, 1964; Katz and Kahn, 1978). The expectations and demands in turn shape the role of the entrepreneur and guide the entrepreneur in capitalizing on a business opportunity. While doing so, the entrepreneur is open to influence from stakeholders; namely, individuals, organizations, and institutions that impose
expectations or demands on the entrepreneur and the new venture. Therefore, stakeholders include, for instance, customers who expect products and services at a certain price and quality, suppliers who expect timely payment for supplies, and employees who expect salaries and certain working conditions for the time and effort invested in the venture. Stakeholders also include governments that expect, for instance, taxes and contributions to society in return for infrastructure, social security, and so on. In sum, the expectations and demands that stakeholders impose on the entrepreneur are likely related to the stakeholders’ goals with respect to the entrepreneur and the new venture (Freeman, 1984).

2.1.4 Evaluating the role of the entrepreneur

In line with assumptions about roles, the entrepreneur also depends on other individuals in several roles, such as those who are related to the entrepreneur on the basis of dependencies (cf. Freeman, 1984) and who develop expectations about the entrepreneurs’ role behavior. Thus, it is possible to extend literature on roles to entrepreneurs and assert that the expectations and proscriptions of role senders influence entrepreneurs.

Although it is possible to learn from theories on organizational roles when conceptualizing the role of the entrepreneur, a number of characteristics proposed in this stream of research seem less valid for the entrepreneur. In the development of organizational roles, Kahn and colleagues (1964) focused on formal organizations as preplanned, task-oriented, and hierarchical social systems. In recognizing this, there are some specific points on how the role of the entrepreneur differs from other organizational roles.

The role of the entrepreneur, unlike many other organizational roles, is not well defined because it involves responding to uncertain and dynamically changing demands and tasks. Rather, role expectations, demands, and tasks associated with the entrepreneur and the new venture are prospect for change.

The role of an entrepreneur is not predefined ex ante (e.g., the role of the clerk or accountant) and, in contrast to other studied organizational roles, may involve substantial latitude and flexibility such that it is not static or difficult to change ex post. As for the characteristics, it is implied that entrepreneurs know they can change their own situation and that change is a natural state. In fact, the role of the entrepreneur is demarked to a transition process that terminates when whatever that “something” is established (Sarasvathy, 2001). This has already been highlighted by Schumpeter (1911), who, in his definition of the entrepreneur as an innovator, distinguished between the entrepreneur and the person. Schumpeter argued that the person is an entrepreneur during the temporal transformation of new inputs; as such, he differentiated between a
manager of an established business and an entrepreneur who seeks to impose change by carrying out new combinations.

Although these mentioned role characteristics are distinctive to the role of the entrepreneur (some are even unique), the role of the entrepreneur is still associated with responsibilities and stakeholders’ expectations.

2.2 Entrepreneurs’ role stress
Few entrepreneurship studies have addressed stress as a topic. Of these, a majority has conceptually claimed that entrepreneurs are different from others in their abilities to endure and cope with a more general notion of stress, and have often asserted that entrepreneurs outperform others (see, e.g., Yarzebinski, 1992). Other studies have assumed that the situation and environment in which the entrepreneurs act is more prone to be subject to stress (Harris, Saltstone, and Fraboni, 1999; Morris, Davis, and Allen, 1994).

2.2.1 Role stress
In organizational settings, seminal work by Kahn and colleagues (1964), Katz and Kahn (1978), and others has set the foundation for understanding role stress. Role stress has its roots in the assumption that not all expectations and demands are possible to meet and are very challenging for the focal person as a result of conflicts, ambiguities, and overloads. Subsequently, the construct role stress is presented and in the following sections its facets are presented.

Role stress as a phenomenon was originally conceptualized as consisting of two facets: role conflict and role ambiguity (Kahn et al., 1964). Later a third facet, role overload, was recognized as a distinct facet and, as such, extracted from role conflict. This triple-faceted conceptualization of role stress is recognized herein, as depicted in figure 2 below.

The focus upon entrepreneurs’ role stress has been minimal to date. Only a few studies have hinted at the occurrence of role stress among entrepreneurs, and most studies have focused on either a very specific element of role stress or a very specific type of entrepreneur. Among the studies on the stress experienced by entrepreneurs, Buttner (1992) found that the absolute level of experienced role ambiguity is higher among entrepreneurs than among managers. Furthermore, the results of Buttner’s study suggest that entrepreneurs, as compared with managers, have more health problems, are less able to relieve work-related tension, and in general are less satisfied with their work. However, the study found that entrepreneurs report less stress from role conflict than do managers. Stoner, Hartman, and Arora (1990) focused on the specific tension between personal lives and career pursuits (i.e., work-home conflict) experienced by female owners of small businesses. In a study on a sample of
Singaporean entrepreneurs, Teoh and Foo (1997) focused on how tolerance for ambiguity and risk-taking propensity moderate the relationship between role conflict and perceived performance.

Overall, the findings on entrepreneurs’ role stress advocate that stress manifests in unique ways for entrepreneurs. Therefore, entrepreneurs do not necessarily perceive more or less stress than do people in other roles. In accordance with the principles of role stress, central to understanding entrepreneurs’ role stress are the expectations and requirements of stakeholders who are related to either the new venture or the entrepreneur. When expectations or requirements are challenging or impossible to meet because they are conflicting, ambiguous, or overload the entrepreneur’s resources, it is likely that those expectations influence the entrepreneur’s behavior and that the entrepreneur will experience role stress.

Figure 2: Role stress and its components

2.2.2 Role conflict
Role conflict has been conceptualized as the discrepant role expectations sent by members or external persons of an individual’s role set (Kahn et al., 1964). In organizational role stress, middle managers’ position between top managers and employees, and the tension carrying out top managers’ orders that are not in line
with employees’ expectations or demands, often exemplifies role conflict. Therefore, in further conceptualizations, role conflict has been viewed as the degree to which expectations or demands are incongruous or incompatible (Rizzo, House, and Lirtzman, 1970). Role conflict can arise from internal and external events, and it can be both objective and experienced (Kahn et al., 1964). The strength of the events, whether internal or external, determines the degree to which role stress is experienced.

Figure 3: A comparison of experienced levels of role conflict

Role conflict has been tested on a number of different roles. Figure 3 above illustrates the mean differences between entrepreneurs and other roles. As evident in the comparison, role conflict exists among entrepreneurs in similar magnitudes as it does in other roles. Conceptually, role conflict can be actualized among entrepreneurs when expectations and requirements from stakeholders are incompatible and make it difficult or even impossible for the entrepreneur to perform in the role. Given the nature of the entrepreneur’s role, it is likely that several stakeholders impose expectations and requirements, which means that expectations and requirements can differ (Kahn et al., 1964). For entrepreneurs, at least three kinds of role conflicts are likely, including (1)
conflicts between the role of the entrepreneur and regulatory or normative frameworks, (2) incongruence in expectations or demands from venture stakeholders, and (3) stakeholders’ expectations overriding of resources and materials at the entrepreneur’s disposal.

2.2.3 Role ambiguity
Role ambiguity as the second role stressor has been conceptualized as the degree of vagueness, ambiguity, or unclarity in desired expectations that makes it difficult or impossible for the focal person to respond to and fulfill expectations and demands related to the role (Kahn et al., 1964). As such, two forms of ambiguity are involved: one relates to the clarity of the role and the other relates to the clarity within the role (Rizzo, House, and Lirtzman, 1970). Therefore, proponents of organizational role stress argue that when a person knows how to perform a role, he or she avoids ambiguity (Sawyer, 1992). As such, the conceptualization of role ambiguity implies that knowledge about role expectations, how to respond to role expectations and demands, and the consequences of meeting expectations and demands are important to performing well in the role (Kahn et al., 1964).

Figure 4: A comparison of experienced levels of role ambiguity

Notes: To facilitate comparison between studies, levels of role conflict are calculated as the mean divided by the scale points.

3 Bauer & Green (1994)        9 Teas (1983)
Figure 4 compares the mean experienced role ambiguity of entrepreneurs with other roles and illustrates that role ambiguity exists among entrepreneurs as it does in other organizational roles. Role ambiguity is evident when the entrepreneur does not have sufficient information about expectations and requirements for role behavior or for role performance (Kahn et al., 1964). As such, role ambiguity is true and significant for an entrepreneur when the knowledge about or the existence of expectations and demands guiding and evaluating the entrepreneur’s behavior are poor or lacking. As such, ambiguities can include unclear expectations about how to behave and perform in the role and task office (i.e., the new venture), and demands and responsibilities ascribed to the role of the entrepreneur (e.g., tax legislation).

2.2.4 Role overload
Role overload was initially conceptualized as a subfacet of role conflict (Kahn et al., 1964). Empirical tests and further conceptualizations revealed that role overload is a distinct and separate facet that, together with role conflict and role ambiguity, constitutes the higher-order construct of role stress. Originally, role overload was considered a type of inter-sender role conflict that made it virtually impossible because of time constraints to meet all expectations and demands, even if such expectations and demands were legitimate, clear, and congruous. In further conceptualizations, role overload has been considered detrimental, as expectations and demands on a role are impossible to handle as a result of restricted amounts of time and energy (Abdel-Halim, 1981).

Role overload is present among entrepreneurs as it is in other roles, as illustrated in Figure 5 above. Role overload exists for entrepreneurs when expectations from stakeholders override the time and resources that the entrepreneur has to perform the role (Latack, 1981). When entrepreneurs realize an opportunity through new venture creation, it is possible that the level and magnitude of expectations and requirements will vary among entrepreneurs, as will time and resources available to meet role expectations and demands. Although the literature on entrepreneurship proposes that entrepreneurs often are exposed to heavy workloads, it is likely that role overload is present among some entrepreneurs and that some will experience higher degrees than others.
Figure 5: A comparison of experienced levels of role overload

Notes: To facilitate comparison between studies, levels of role conflict are calculated as the mean divided by the scale points.

2 Keenan & McBain (1979)  
3 Bacharach, Bamberger & Conley (1991)  
4 Klein & Verbeke (1999)  
5 Wincent & Örtqvist (2006)  
6 Singh (1998)  
7 Day & Livingstone (2001)
3. RESEARCH DESIGN AND METHODS
In the previous chapter, the concept of entrepreneurs’ role stress was forwarded through a process beginning with presenting parts and pieces of the conceptual background of “entrepreneur” and stretching that into how being an entrepreneur can be related to a role, a role that may be exposed to role stress. The conceptual work that relates literatures on roles and role stress to entrepreneurship supports the possibility of treating entrepreneurship as a role to be performed by the entrepreneur. Furthermore, the conceptual presentation also illustrates that entrepreneurs’ role stress is a construct that can influence the entrepreneur during new venture creation. In an attempt to illustrate how to proceed with studying role stress and entrepreneurship, this chapter is based on the presented research question and lays forth the research positioning, study design, information about literature reviews, empirical data collections, and study quality.

3.1 An introduction to the philosophical positioning
All research rests upon some philosophy, whether implicit or explicit (Burrel and Morgan, 1979). It is therefore important to address what kind of knowledge gain can be expected from pursuing the question under study. In an attempt to clarify what has been guiding the efforts in this study, some elaboration of ontology and epistemology is necessary.

This thesis is basically rooted in scientific realism, which asserts that there is a world that exists with a definite and mind-independent structure. The purpose of science is to describe and explain the observable and unobservable aspects of this independent world. In doing so, the researcher can disengage from the physical and social context under study through logic and reason and seek good approximations of the true world. For a theory to be a good approximation, it should be well confirmed and should describe, explain, and predict real and mind-independent phenomena. Therefore, in creating knowledge about this world, a theory’s claims are either true or false, depending on the accuracy with which the theory pinpoints the existence of and correctly describes the real phenomena. As such, an ideal scientific theory says true things about genuinely existing unobservable entities. However, the development of such a theory is progressive and strives to give approximately true descriptions, explanations, and predictions of both observable but also unobservable phenomena (Leplin, 1984). During its development, it is not unlikely that contemporary knowledge, in the form of particular theories, needs to be altered or even entirely replaced to make room for new ones that are more empirically adequate or more parsimonious.
Scientific realism was largely developed as an alternative to positivism and has been argued as a good substitute and replacement for positivist approaches, especially in social sciences (see, e.g., Bunge, 1993). Scientific realism is rooted in the idea that scientific theory usually gets successively better, and for this reason, a theory is considered valid upon its face value and until improved or replaced.

Scientific realists also hold that knowledge is possible even in those cases in which the phenomena under study are not directly observable. That is, there are reasons to believe that things said about unobservable entities are true. According to scientific realists, judgments of knowledge about unobservable things pertain to the development and sophistication of techniques and methods to appreciate such phenomena. Scientific realists argue that scientific methods are fallible and that an important area of scientific pursuit is the development of methods to extend the researcher’s senses and thus make possible the testing of conceptual assortments of the mind-independent world.

In its implications for this thesis, scientific realism holds that, if performed well, the claims put forth in this study will lead people to believe that what is presented is an approximate true account of entrepreneurs’ experiences of role stress. It should lead to the motivation that entrepreneurs’ role stress has the properties and relationships attributed in the conceptual work and empirical support as presented in this work. Furthermore, the existence of these attributes and the causal connections of entrepreneurs’ role stress would exist even without and independently of our theoretical conceptions.

3.2 Overall research design

The design of this study is influenced by the formulated research question and follows the thoughts associated with and the spirit of philosophical positioning. First of all, the idea that scientific knowledge is cumulative has been an underlying argument and rationale for searching for and adopting an established theory to better understand entrepreneurs’ social situations, precedents, and consequences. The research problem in this study allows for a design that can make use of an established theory, and the study also acknowledges the importance of drawing from cumulative research findings. Therefore, this study includes a comprehensive, structured literature review. This literature review is described in more detail in section 3.3.

Scientific realists believe that verification and possibility of falsification are important for theoretical development, which makes quantitative methods suitable and sometimes even preferable. Following such a design, this study consists of three large-scale quantitative surveys primarily analyzed by structural equation modeling and hierarchical regression techniques and one
study employing secondary empirical data analyzed using meta-analytic techniques. The samples for the three studies employing primary data are drawn from Swedish and Slovenian official new venture registers. The Swedish entrepreneurs were drawn from a population of one-year-old ventures and followed up with after a second year to study how time influences the mechanisms by which role stressors transform into proclivity for withdrawal (see section 3.4). The Slovenian sample of entrepreneurs was stratified with equal-sized strata over the first six years of venture existence, and inclusion in each stratum was selected random (see section 3.5).

In constructing the surveys, the importance of cumulative knowledge was acknowledged. All scales used in this study have been adopted from instruments that have proved valid and reliable over several samples and research settings. In fact, this study makes no claims of developing an entirely new construct or developing entirely new methods to measure the occurrence of phenomena; rather, it illustrates the contributions of including a construct new to a research setting. Therefore, it is also preferable to draw from existing methods and instruments when measuring and capturing the phenomena under study.

In adhering to a mind-independent world consisting of structures, analyses are preferably explanatory and aim to test causal relationships. In designing this study, this preference has been acknowledged. Analytical techniques employed in this study focus on testing either the internal structure of a construct or the relationships between two or more constructs in testing singular relationships or in more complex models. The analytic methods employed are briefly introduced in section 3.6.

Finally, the quality and limitations (see section 3.7) of the cumulative progress of this study are openly discussed to provide a picture of how valid and reliable the contributions of this thesis are and to allow for consideration of their inclusion in the cumulative progress of the field.

3.3 Literature search
In order to examine how role stress can be introduced to entrepreneurship this thesis is constructed around literature reviews of both role stress studies and entrepreneurship studies. The design of the literature review on role stress was very systematic and highly structured and was conducted primarily on one occasion during the research process, while the literature review for entrepreneurship studies was progressive and driven by specific questions.

The review of role stress studies was conducted by searching the databases listed below for any relationship to role stress, role conflict, role ambiguity, or role overload. The selected databases are especially prominent since they cover the
journals in which role stress studies normally have been published, such as psychological, sociological, organizational and management journals (Biddle, 1986). The searches were not limited to any specific discipline or knowledge area, specific fields (e.g., abstracts, keywords), or specific time. The databases are the following:

- Academic Search Premier
- Business Source Premier
- Psychology and Behavioral Science Collection
- PsycINFO
- Sociological Collection
- JSTOR
- PsycArticles

In the search, a total of 425 articles were identified as including role stress or one of its subdimensions. After reading the articles, 130 were classified as not relevant for the literature review on role stress. Reasons for this were that the article focused not on role stress or its subdimensions but on the role of stress (38 articles). Several articles were excluded since they were not within the focus and scope of the study, including 16 articles on gender role theory, 8 on role transitions (as this study focuses on one role rather than transitions between different roles), 7 that included different conceptualizations of role stress, and 15 that were context specific. A number of articles were excluded that did not focus on empirical tests of antecedents and consequences of role stress, or because empirical material failed to support hypotheses or models. Among these articles, 6 found no empirical results for their hypotheses or models of role stress, 12 focused solely on construct properties and measurement of role stress, 11 were strictly conceptual work, and 4 were meta-analyses. Another 13 articles did not focus on antecedents or consequences of role stress. As such, 295 articles were considered important to furthering an understanding of role stress and its relationship to antecedents and consequences.

In order to systematically review and present a complete illustration of the 295 articles, a database was constructed (see figure 6 below). By entering all relationships into an Excel spreadsheet, it was possible to trace and track results. In the spreadsheet, each row represented a study and each column represented a related construct. New columns were inserted for each new related construct, and in the corresponding cell linking the study (i.e., the row) with the construct (i.e., the column), a code was inserted for how the construct was related to role stress. To separate the results on the different dimensions of role stress, each cell contained within brackets a code for which role stress facets were studied in relation to the proposed construct: RC represented role conflict; RA, role ambiguity; and RO, role overload. If several of the role stress facets were
studied, they were reported together separated by a comma. Furthermore, before the brackets, a code was inserted identifying the relationship to the focused-on role stress facets: A represented that the construct was an antecedent to the studied role stress facets; C, that it was a consequence of the role stress facets; and M(A) and M(C), that the construct moderated antecedents or consequences, respectively, of the role stress facets. Also, background information on all studies was saved in a separate spreadsheet, including information on conceptual issues and definitions, sample size, and response rates.

Figure 6: Illustrating the classification of the literature

The systematic literature review laid the foundation for a comprehensive understanding of which relationships have been studied in role stress research. Besides including published journal articles, conceptual work in books was also tracked. These books include such seminal work as *Organizational Stress: Studies in Role Conflict and Ambiguity*, by Kahn and colleagues (1964), and *The Social Psychology of Organizations*, by Katz and Kahn (1978), to mention a few.
To understand the degree of contextual truth of identified prominent relationships, the findings were compared with results of entrepreneurship studies. Furthermore, by comparing the mechanisms of how role stress is created and its consequences, it was also possible to identify and track new and unexplored constructs that are likely to influence entrepreneurs. As such, it was possible to make not only an empirical contribution to role stress research but also extensions by considering new constructs and relationships.

As implied, the literature searches for entrepreneurship studies (articles and books) were content driven. Prominent work and classics in entrepreneurship were reviewed, special attention was given to work that focuses on the individual entrepreneur during new venture initiation and establishment, and literature on topics related to constructs or mechanisms related to role stress were included. Therefore, literature reviews were also conducted on the overlap of constructs in role stress and entrepreneurship research. As such, the review of entrepreneurship studies was not carried out as a single review, but considered an iterative process guided by specific questions focusing on more specified parts of the entrepreneurship literature. The literature review for entrepreneurship studies was iterated throughout the thesis process.

3.4 Collection of empirical data from Swedish entrepreneurs
To examine role stress levels and to test antecedents and consequences related to entrepreneurs’ role stress, a survey was administered to a sample of Swedish entrepreneurs. It should be noted that, by definition, entrepreneurs are new venture founders (see, e.g., Gartner, 1989). In recognizing that the psychological mechanism by which role stress transforms into withdrawal intentions is time dependent, a follow-up was made for the second year of this sample.

3.4.1 The sample
In order to capture whether role stress was present at the start-up stage, a survey was administered to new venture founders who had completed one year of venture operations. A benefit of such sampling is that external variance is reduced, especially since all ventures had the same length of existence.

In order to minimize retrospective thinking, the survey was administered in 2004 to a sample of randomly selected entrepreneurs from all ventures registered in Sweden during 2003. In order to capture registers of the population of all registered Swedish ventures (public and independent), address information, and objective data (including, e.g., number of employees, sales, value of short- and long-term assets, value of short- and long-term debts, equity size, results, return on investment) for the first year of venture existence, the Affärsdata database was consulted. On the basis of the population, a sample of 1,500 new ventures...
was randomly selected. A year later the respondents who had completed the first questionnaire were surveyed a second time.

3.4.2 Development and design of survey
In designing the survey, existing self-report scales were used to the fullest extent, because of the benefits from using already-developed scales. The constructs included had been extensively tested either in domains such as psychology, sociology, and organizational settings or in entrepreneurship. With extensive reviews and careful selections, it was possible to select scales and measurements that had proven high levels of reliability and validity. At the same time, it was possible to select the shortest scales possible to ensure practical usage and to increase the likelihood of decent response rates. Overall, all scales for composite constructs were measured on seven-point Likert scales (for more information on measurement, see the appended manuscripts).

Most scales were developed and tested in English, so translation of such scales into Swedish was necessary. To ensure correct translations, the scales were translated into Swedish, tested through interviews (see the subsequent paragraph), and then back-translated to English. The procedure rendered only minor modifications.

Although the scales were derived from existing scales and measures, the importance of modifications and contextualization should not be overlooked. The scales were discussed separately with five entrepreneurs and with research colleagues to ensure that the phrasing could be used for the role of the entrepreneur and still maintain its intended measurement. The interviews with entrepreneurs focused on the practical use of the scales, and the entrepreneurs were encouraged to mention which items were difficult to understand, either by wording or by transposing the idea to their operations. Entrepreneurs also were encouraged to speak openly while they read the items and about their interpretations of the items. Only minor adjustments were made on the basis of these interviews.

For the follow-up, the same survey and measurements were mainly used. Among the few exceptions, more static constructs were excluded, as they were already captured for the first year.

3.4.3 Response rate
After two reminders, a total of 541 surveys were received (36% response rate). This response rate is well in line with response rates of other role stress studies (Bedeian and Armenakis, 1981). However, because of the register used for sampling, two types of ventures were excluded from the responses because they did not fit the conceptual definition of entrepreneurship:
• Already existing ventures, including
  o Ventures conducting business prior to registration,
  o Acquisitions of existing ventures, and
  o Ventures that changed name or organization number.
• Ventures without operations, including
  o holding companies, and
  o registered ventures with no business activities

By excluding the mentioned responses from the sample, the final number of responses included for analyses was 282 ventures (usable rate of 22.5%).

Of the 282 entrepreneurs who responded to the first survey, the response to the follow-up questionnaire yielded a sample of 116 entrepreneurs (response and usable rate of 41%).

3.4.4 Sample characteristics
The characteristics of the sample are summarized in table 1 below. Of the 282 entrepreneurs, 73 percent of respondents were male. These numbers are representative when considering the population of new ventures started in 2003 (ITPS, 2004). Average age of new venture managers was 45 years, and about 56% responded that they had prior experience starting up a new venture. Of the entrepreneurs, 86 had started one venture prior to the current one, 41 had started two, 11 had started three, and 7 had started four new ventures. Besides the experience in starting up new ventures, the respondents replied that they had a mean of prior industrial experience of about 24 years (15 years in the same industry and 9 years in other industries).

The characteristics of the ventures report that the mean venture had sales of 4.8 million Swedish kronor (1 U.S. dollar ≈ 7.05 Swedish kronor), and a result, before taxes, about 300 thousand Swedish kronor after one year of venture operations. However, there are widespread differences among the ventures when considering the before-tax results. For example, some experienced a loss of about 13 million Swedish kronor in the first year, while other experienced a profit of 53 million Swedish kronor in the same time. With respect to size, most of the firms are rather small. As illustrated, the ventures had a mean of four employees (and a median two employees) after the first year of venture operations. The size of the ventures also corresponds to the numbers reported for the population of new ventures registered during 2003 (ITPS, 2004).
Table 1: Characteristics of the Swedish sample

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Venture characteristics</strong></td>
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<td></td>
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<tr>
<td>Sales</td>
<td>1,000</td>
<td>4,813</td>
<td>0 – 320,000</td>
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<td>Result before taxation</td>
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<td>314</td>
<td>-13,000 – 53,000</td>
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<td>23 – 75</td>
</tr>
<tr>
<td>Industry experience</td>
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<td>0 – 47</td>
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<tr>
<td>Experience in other industries</td>
<td>5</td>
<td>9</td>
<td>0 – 52</td>
</tr>
</tbody>
</table>

Notes: Sales and results are reported in thousands of Swedish kronor. Respondent characteristics are reported in number of years.

The characteristics obtained from official records of the new ventures were compared with two sets of records: those for the entrepreneurs and ventures that chose to not respond to the survey and the official records for the entire population of new ventures registered during the same year. All data was collected from the same database, which made it possible to make comparisons between these groups. T-tests were performed on a number of variables to determine nonresponse bias and representativeness of the sample. For example, the variables included number of employees, sales, results, solvency, and profit margin. The results reveal no differences (p < .05) between respondents and nonrespondents, or between respondents and the entire population of new ventures registered during 2003.

The mean sales for the second year were 43 million Swedish kronor, and the mean result was 15 million Swedish kronor. During the second year of venture existence, the mean number of employees was four. Following the procedure for analyzing the demographic characteristics of the sample for the first year, this procedure was also completed for the second year. There were no differences between the respondents who did not complete the questionnaire and those who did, which means that nonresponse bias is low. Similarly, there was no evidence of sampling bias when comparing respondents with the total sample of entrepreneurs who registered a venture during 2003.

3.5 Collection of empirical data from Slovenian entrepreneurs
The second sample of entrepreneurs for this thesis comprised Slovenian entrepreneurs. This sample was used to test hypotheses related to coping strategies for role stress and their relationships to new venture performance. Slovenian entrepreneurs were selected on the basis of the prevailing business environment, which is rich in opportunities and threats.
3.5.1 The sample
When designing the data collection, special consideration was given to the fact that the role of the entrepreneur is limited to the six first years of venture existence (see, e.g., Zahra, Ireland, and Hitt, 2000). With respect to the time limit, Brush and Vanderwerf (1992) and Shrader (2001) have argued on the basis of reports on new venture failure rates that the initial six-year period is crucial for determining firm survival, and this time frame has been employed in numerous entrepreneurship studies as a mark for when entrepreneurship translates into established businesses. As such, sampling from all six years helps avoid potential biases of sampling from only one year. The sample was drawn from the national statistical office database and comprised a stratified sample of ventures registered from one to six years from the point of data collection (early summer 2006), and the survey focused on issues related to the last year. Within each stratum, the cases were randomly sampled. In order to retrieve sufficient responses for conducting meaningful analyses, 1,800 surveys were distributed to entrepreneurs who registered a new venture between January 1, 1999, and December 31, 2004. Therefore, 300 surveys were randomly sampled for each year of venture existence for the described time period.

3.5.2 Development and design of survey
Similar to the first mailing, the survey of Slovenian entrepreneurs also was based on existing self-report scales to the fullest extent, where measures of composite constructs used seven-point Likert scales (for a more detailed description of the constructs measured, see the research methods of the appended manuscript “Entrepreneurs’ Coping with Challenging Role Expectations”).

The scales were adopted from English and translated into Slovenian following the same procedure as described for the survey of Swedish entrepreneurs (see section 3.4.2). The translated survey was tested through interviews with entrepreneurs in Slovenia who were asked to comment on the items used and their wordings. The survey was then back-translated into English and compared with the original version. No modifications were made to wordings, but more background variables were added as a result of the interviews.

3.5.3 Response rate
The survey, including one remainder, was administered using the national post service in Slovenia. In total, 300 surveys were returned (17% response rate). This response rate is deemed slightly higher than normal in Slovenia (Glas and Drnovšek, 2003). However, of the 300 surveys, 114 were deselected as a result of register problems or declined participation. In the end, 183 responses were used for analyses. The responses were evenly distributed among the strata, with
28 responses from entrepreneurs who registered a new venture in 1999 and 32 responses from entrepreneurs who registered a new venture in 2004.

3.5.4 Characteristics of respondents
Sample characteristics are summarized in table 2 below. In the sample of entrepreneurs, about 68% were male. The average age in the sample was 40 years, ranging between 24 and 64 years. Of respondents, 86 responded that they had started one venture prior to the current one, 41 entrepreneurs had started two, 11 had started three, and 7 had started four new ventures. The mean industry experience was 10 years, and mean experience from other industries is six years.

Venture characteristics reveal that the overall mean venture size was eleven employees, increasing with firm age with one exception. Overall mean sales were 206 million tollares (1 U.S. dollar ≈ 186 Slovenian tollares), while the mean result was 28 million tollares.

Table 2: Characteristics of the Slovenian sample

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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<td></td>
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<tr>
<td>Sales</td>
<td>205,676</td>
<td>415,166</td>
<td>129,416</td>
<td>152,220</td>
<td>106,971</td>
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<td>Results before taxation</td>
<td>28,201</td>
<td>4,231</td>
<td>68,885</td>
<td>24,400</td>
<td>7,219</td>
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<td>11</td>
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<td><strong>Respondent characteristics</strong></td>
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<td>Industry experience</td>
<td>10</td>
<td>9</td>
<td>13</td>
<td>9</td>
<td>11</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Experience in other industries</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes: Mean values; sales and results are reported in thousands of Slovenian tollares. Respondent characteristics are reported in number of years.

3.6 Analyses
Different analytic techniques were adopted to respond to the overall purpose of this thesis. As described, such techniques have been employed for their ability to perform deductive testing of logically and theoretically derived propositions and hypotheses, whether implicitly or explicitly formed. As role stress research is quite mature in terms of conceptualizations and operationalizations of central constructs and relationships, it was possible to make use of explanatory analysis techniques to a large extent.
To aggregate the findings from the literature review, the meta-analysis technique was employed in the appended paper titled “Prominent consequences of role stress: A meta-analytic review.” Pearson (1904) introduced this technique to address the consequential problem of reduced statistical power from a low sample size. However, the method has been refined by scholars such as Glass (1976), Hunter and Schmidt (1990), and others, and is often adopted either to test for moderating effects where sample size is an issue or to generalize findings across studied sample. For this study, meta-analysis was adopted to attempt to aggregate and generalize prominent consequences across the studied roles. In doing so, the second version of the software Comprehensive Meta-Analysis (Borenstein and Rothstein, 1999) was used to perform analysis. For the sake of testing and generalizing effect sizes across samples, Wolfe’s (1986) methods were employed. This implies averaging the raw Pearson correlation coefficients weighted by sample size. The results are reported as effect sizes transformed into general categories of weak, medium, and strong effects (see Cohen, 1988). The number of studies, total sample size, and range in terms of a 95% confidence interval were also reported for the studied relationships.

To analyze primary empirical data, several quantitative methods were used. Analysis was performed with the Statistical Package for the Social Sciences (SPSS) 11.0 for Windows (Pallant, 2001), AMOS 5.0 (Arbuckle, 2003), and LISREL 8.72 (Jöreskog and Sörbom, 2001).

Factor analysis was performed for all composite constructs included in empirical testings. For entrepreneur role stress specifically, this testing started with principal components analysis using varimax rotation to establish item loadings and factors extracted (see the appended paper titled “Analyzing the structure of entrepreneur role stress”). Thereafter, confirmatory factor analysis was performed to examine the model fit of the higher-order construct entrepreneurs’ role stress. Several goodness-of-fit indices were employed, as combining different fit indices reduces the shortcomings of a singular fit index (Bentler and Bonnett, 1980).

Structural equation modeling was used for analyses of models consisting of mediating constructs and multiple dependent constructs (see the appended papers titled “Entrepreneur’s role stressors and proclivity for venture withdrawal” and “Antecedents and consequences of stressors and exhaustion in the entrepreneurial role”). Analyses were performed following overall guidelines from Anderson and Gerbing (1988), Byrnes (2001), and others. After analysis of descriptive and confirmatory factor analysis, factor loadings and path coefficients were estimated, variance explained, and the models’ goodness-of-fit indices analyzed. A more detailed description of the analytic techniques employed is outlined in the separate papers.
To estimate the influence of a number of independent constructs on one dependent construct, linear regression techniques were adopted (see the appended paper titled “Entrepreneurs’ coping with challenging role expectations”). Regression techniques can be used for explanatory analyses and serve well for analyzing the relationships between a set of independent constructs (e.g., different coping strategies) and a dependent construct (e.g., new venture performance). In analysis, specific attention was given to the influence, direction, and significance of the relationship between the independent constructs and the dependent construct. Attention was also directed to model significance and explained variance in the dependent construct. To test for moderation effects, hierarchical regressions were performed by including and excluding one interaction effect at a time. Moderation was based on the significance of the interaction term together with results of increased explained variance in the dependent variable.

3.7 Study quality and limitations
Assessing the quality of a study is of great importance for the trustworthiness of a study’s results and generalizability, especially considering that there are no flawless studies, totally valid and reliable. Therefore, the goal has been to ensure the highest possible quality and to openly discuss limitations and flaws.

3.7.1 Study quality
Validity is a study’s ability to measure what it was designed to measure. Therefore, validity refers to the degree that an operational definition reflects the variable that it was designed to measure. Validity has been defined in different ways, but the definition normally at least includes internal, external, construct, and content validity. These are briefly discussed with respect to the measurement included in this study.

Internal validity refers to a study’s ability to demonstrate causality by temporal precedence (cause precedes effect), covariation (relationship between cause and effect), and nonspuriousness (no plausible alternative explanations for observed covariation). Supporting the internal validity is the reliance on a well-established literature, the previous multiple empirical tests, and examinations and replications that have been conducted on the relationships included. From the extensive literature review, it stands quite clear that conceptual and empirical work agree uniformly in how role stress is related to its antecedents and consequences, which facilitates the introduction and examination of role stress with respect to entrepreneurship.
External validity refers to a study’s possibility to render results that are valid for the larger population. The most common loss of external validity comes from effects of using a too-small sample size in relation to the population for which the results are generalized. In other words, it is important to not overstate the generalization from a study with a limited sample size. This study is based on decent-sized samples that were randomly selected and tested with a number of objective measures for representativeness to the population of ventures registered the same year. There is some support that such models, as examined in this thesis, are transferable to the same role in other cultural and geographical settings (cf., e.g., Bedeian and Armenakis, 1981; Boles, Johnston and Hair, 1997; Dubinsky, Michaels, Kotabe, Lim, and Moon, 1992). Although previous literature has found support that generalizations can be made for a role over cultural and geographical settings, there is a need for further tests of entrepreneurs’ role stress, its antecedents, and its consequences. Therefore, although some findings support the possibilities for within role generalizations, such generalizations should be done with care and preferably should be followed up by further empirical tests.

Construct validity refers to a scale’s ability to portray the underlying construct that it is supposed to measure. By composing a construct from multiple items (or indicators), we can appreciate a social phenomenon that otherwise would be unobservable. By means of statistical methods, it is possible to assess a measurement’s ability to portray such an underlying construct. There are variants of construct validity, such as convergent and discriminant validity. Convergent validity refers to the degree of similarity between measured items that are supposed to be similar (i.e., to represent a construct). By establishing high correlations between the items of a construct, it is possible to assess convergent validity. Discriminant validity refers to the degree of dissimilarity between operationalizations that, according to theory, should be different. With low correlations between operationalizations that are supposed to be different, it is possible to assess evidence of discriminant validity. Careful examination of correlational data for all included studies indicates that there are no obvious signs of threatened construct validity. Rather, by mere ocular inspection of correlations, the empirical data seem to support both convergent and discriminant validity. Furthermore, convergent and discriminant validity were also tested and supported by means of confirmatory factor analysis of all constructs used in this thesis.

Content validity refers to a measurement’s ability to represent all facets of a construct, such as the ability for a measurement of role stress to cover role conflict, role ambiguity, and role overload. Content validity is supported in the thesis by ensuring the use of well-established constructs and operationalizations
with careful introduction to and empirical examination of entrepreneurship specifics.

Reliability refers to a test’s consistency in terms of its ability to reproduce or deliver consistent results over repeated tests. There are several possible methods for assessing the reliability of a study’s results. In this study, the assessment was the study’s internal consistency, which is especially important when measuring constructs through multiple items. Internal consistency reflects how consistent the results are for different items for the same construct within the measure. Although several different statistics exist for assessing internal consistency, this study has adopted Cronbach’s alpha because of its wide usage. The included constructs all report acceptable alphas, as they are greater than the limit of .50 (Nunnally, 1978), while most constructs have alphas greater than .70.

3.7.2 Limitations

No study is devoid of limitations, and this thesis is not an exception. Therefore, the present study has certain limitations that need to be taken into account when considering its contributions.

Although building on a highly structured and systematic review, the results should be interpreted with some caution. There are some limitations that can influence the results when attempting to aggregate and abstract findings in a developed field by systematically reviewing the literature. For one thing, the attentive file-drawer problem is one such example that illustrates how results from literature reviews must be considered with caution. The file-drawer problem asserts the influence from studies that are not published, especially studies that are not published because they do not support expected relationships. Although a meticulous design was employed when reviewing the literature on role stress, there are likely additional studies not accounted for in this thesis. Therefore, all literature reviews, however carefully planned and designed, always leave the reader to consider any research that has not been published.

This study is based on samples of Swedish and Slovenian entrepreneurs, which may bias empirical findings because of specific environmental characteristics, such as changes in political system and legislation that could be distinctive for the time and samples studied. The transferability of these results to other countries is likely because of the potential to make literature generalizations from the underlying role stress studies. However, as the role of the entrepreneur is different from many of those studied, transferability or generalizability should not be taken for granted. Studies that compare and test differences based on culture and countries are recommended.
As several of the included empirical studies are cross-sectional in their designs, it is not possible to empirically determine their causal structure. However, the relationships studied have been conceptually elaborated on and empirically tested previously in role stress literature; thus, it is possible to assert the causal relations from previous literature. Nonetheless, further advancement of entrepreneurs’ role stress would benefit from more approaches that use longitudinal data, especially considering the findings illustrating that time may be of the essence for understanding how role stressors transform into outcomes.

It is also possible that the potential to generalize these results for entrepreneurs in other settings hinges on or is dependent on cultural and geographical influences. Although it is not the aim of this study, previous research on role stress has found that cultural and geographical differences influence experienced levels of role stress (Peterson et al., 1995; Van De Vliert and Van Yperen, 1996). It is possible that there are cultural and geographical differences in the flexibility and latitude of entrepreneurs, which, according to the results of this study, implies that entrepreneurs’ role stress may transform differently in different countries or regions, depending on, for example, cultural, legislative, and geographical differences.
4. A CONCEPTUAL BASE FOR STUDYING ENTREPRENEUR ROLE STRESS

This chapter summarizes the findings from the first three appended papers. While the most detailed understanding comes from reading the appended papers, this chapter gives but a summary of the appended papers and draws on the exhaustive literature review of journal articles published on role stress (for methods and selections underpinning this review, see section 3.3). This chapter introduces the most prominent studied consequences of role stress (see appended paper titled “Prominent consequences of role stress: A meta-analytic review”) and the emerging and prominent antecedents of role stress (see appended paper titled “Sources of role stress: A narrative review of role stress antecedents”). In conclusion, a discussion of how this literature can contribute to entrepreneurship is presented (see appended paper titled “Role stress and entrepreneurship research”).

4.1 Prominent consequences of role stress: A meta-analytic review

The first of the appended papers, “Prominent consequences of role stress: A meta-analytic review,” draws from the large body of literature on role stress presented in psychological, sociological, and organizational journals that attempts to discover the most prominent role stress consequences and to test the influence role stress asserts on these consequences. This is done in an attempt to systematize and accumulate the findings of prominent role stress consequences and to lay the foundation for a clearer picture about the consequences of role stress.

With the diversity of journals in which role stress research is published, the size and rapid growth of studies on role stress are both troublesome and positive for extending understanding. In fact, the diversity of journals seems to suggest that some relationships are replicated over and over again, with the contextual setting the only difference. As such, the accumulation of research findings seems to suffer when previous work is not cited and learned from. Therefore, the systematization of role stress research and the associated findings are important and can potentially contribute to role-related literature. Such systematization and accumulation can also facilitate theoretical development by addressing how constructs are related across and between different samples.

Meta-analytic techniques were adopted to address these concerns. In comparison with the far-more-published narrative literature reviews, meta-analysis has some advantages, including reducing the subjective part of the researcher and the ability to weight and accumulate research findings from fragmented proof. Therefore, meta-analytic techniques should be beneficial to synthesize literature on role stress.
This paper contributes to role stress literature by accumulating and synthesizing research on the most commonly studied role stress consequences. When performing the systematic literature review, a number of role stress consequences stand out as especially prominent. These are presented in table 3 below.

### Table 3: Prominent consequences of role stress

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>“Feelings of being emotionally overextended and drained by one’s contact with other people” (Leiter and Maslach, 1988: 297)</td>
<td>Experiences of role stress eventually deplete emotional resources and thereby increase emotional exhaustion (Posig and Kickul, 2003)</td>
</tr>
<tr>
<td>Reduced personal accomplishment</td>
<td>“A decline in one’s feelings of competence and successful achievement” (Leiter and Maslach, 1988: 298)</td>
<td>Reduced personal accomplishment increases when individuals recognize challenges and obstacles to perform at expected levels (Posig and Kickul, 2003), which is indeed similar to what would be experienced under the influence of role stressors.</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>Present among individuals who “take a cool, distant attitude toward work and the people on the job” (Maslach and Leiter, 1997: 18).</td>
<td>Maslach and Goldberg (1998) conceptualized depersonalization as a coping response. By taking a distance, the coping mechanism is supposed to protect the rate at which the individuals’ emotional buffer is drained. This coping response has been shown to be triggered by role stressors.</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>An individual’s attitude to conditions at work and organizational life (Behrman and Perrault, 1984; Wiener, 1982)</td>
<td>The experience of role stress is assumed to be a noxious stimulus that will lead individuals to feel less satisfied with their work (Walker, Churchill, and Ford, 1975).</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>The level of identification and involvement an individual has in an organization (Porter, Steers, Mowday, and Boulian, 1974)</td>
<td>The experience of role stressors will influence the attitudes to commit further efforts into an organization (Johnston, Parasuraman, Futrell, and Black, 1990)</td>
</tr>
<tr>
<td>Job performance</td>
<td>The degree to which an individual fulfills work tasks, responsibilities, and assignments (Dubinsky et al. 1992)</td>
<td>The prevailing argument in role stress research has been that role stressors influence job performance negatively because they challenge the possibilities to perform the role well.</td>
</tr>
<tr>
<td>Propensity to quit</td>
<td>The inclination to withdraw from a job (Bartunek and Reynolds, 1983)</td>
<td>The withdrawal function is in fact a coping mechanism that has been found to be triggered when individuals are under stressful situations (Babin and Boles, 1998; Stack, 1978)</td>
</tr>
<tr>
<td>Tension</td>
<td>A negative psychological experience that, in organizational literature, is related to the work setting (Keenan and Newton, 1984; Lyonski, 1985)</td>
<td>As is job satisfaction, job tension is a psychological reaction that is likely triggered under the impression of the noxious stimulus of role stress (Rhoads, Singh, and Goodell, 1994)</td>
</tr>
</tbody>
</table>
This paper, “Prominent consequences,” extends the knowledge on role stress consequences and specifically acknowledges the possibility that some role stress facets can have different influences on the consequences studied. The use of meta-analysis and the calculation and comparison of strengths of role stress facets in relation to the different consequences studied made it possible to discuss the consequences in terms of their effect size and to further evaluate the cumulative conclusions of the field. This study has several implications for role stress research. The most prominently tested consequences of role stress seem valid, at least in relation to some role stress facet (i.e., role conflict, role ambiguity, and role overload). After the meta-analysis, it stands clear that the overall picture is that what is often proposed as relating to role stress is also in fact associated with this concept. However, in role stress literature, the construction of hypotheses is often based on referring to role stress, without reference to specific facets. The meta-analytic review clearly advocates that studies admit complexity of the different role stress facets, since the different dimensions of role stress influence the consequences differently. Some consequences are heavily influenced by one or two role stress facets but are very weak in relation to other facets. This illustrates a complexity that arises in studying role stress, where detailed understandings can be achieved only by allowing the role stress facets to play unique roles in relation to their correlates. The results illustrate that role overload influences emotional exhaustion to a larger extent than the other role stress facets, while role ambiguity and role conflict are linked to consequences such as propensity to quit, job satisfaction, and organizational commitment.

4.2 Sources of role stress: A narrative review of role stress antecedents
The detrimental consequences of experiencing role stress have been widely acknowledged in research. Research on role stress consequences largely acknowledges and agrees upon the most prominent consequences and their causal order in relation to role stress. At the same time, research has proposed numerous different antecedents to role stress. Role stress consequences seem to be more general across different roles and samples, while antecedents to role stress are, to a large extent, based on the contextual and role characteristics that are investigated. To a limited extent, researchers have recognized and incorporated antecedents that have received attention in disciplines other than their own. At the same time, several antecedents have been proposed in different disciplines, indicating that there are some antecedents that, in general, are true with respect to the sources of role stress. Therefore, it seems important to synthesize, aggregate, and abstract the antecedents that have been previously related to role stress. In doing so, the second appended manuscript, “Sources of role stress: A narrative review of role stress antecedents,” sets out to respond to two general questions:
(1) Which are the most prominent antecedents to role stress? (This question concerns the degree to which similar antecedents have been studied and the maturity of the field)

(2) Are there any less-studied antecedents that bring important understanding that is transferable from one role (or study context) to another? (This question concerns the existence of emerging research that adds meaning to the field)

As such, the primary focus of the paper is to examine which antecedents to role stress have received conceptual and empirical support. Such a design is currently missing in role stress research. A history beginning in the 1950s and a rapid growth and development in several disciplines thus justify this specific design.

The antecedents were categorized and presented as hailing from the focal person, the task office, or role senders. For each category, both prominent and emerging antecedents were identified and presented. As such, the general question of the study was, Which are the most prominent antecedents to role stress, and are there any less-studied antecedents that bring important understanding that is transferable from one role to another? The following sections give a brief summary of the main results from the literature review.

Concerning variables related to the focal person, much attention has been given to the role of the individuals’ personality, experience, education, gender, age, self-esteem, and motivation when attempting to explain levels of experienced role stress. Some of these signal that certain people are more prone to be exposed to role stressors than others. Although it is possible to learn roles especially when motivated, it is also likely that part of role performance is judged more on the talent or conditions for performing the role. Besides the prominent antecedents, there are also some emerging antecedents that have received focus. A number of variables related to role characteristics, including role centrality (Martire, Stephens, and Townsend, 2000) and number of roles (Herman, 1977), indicate that characteristics of the role influence the levels of experienced role stress. There are also a number of role attributes that have been linked to role stress, including occupational prestige (Crouter, Bumpus, Maguire, and McHale, 1999). There are also attributes of the person, which influence the levels of experienced role stress, including such constructs as consideration (Singh, 1993).

In accordance with seminal work, a focal person acts within a task office. There are a number of prominent antecedents stemming from the task office that have been related to experienced levels of role stress. These include technology,
organizational climate, formalization, boundary spanning, autonomy, span of control, job objectives, participation in decision making, control, position in organizational structure, span of subordination, tenure, involvement, work-home relationship, and marriage characteristics. These antecedents include references to characteristics of the task office where links are present in terms of both what and how to perform. Moreover, boundary spanning, one of the prominent antecedents, is also expected to be performed outside the boundaries of the immediate task office. In accordance with the more emerging antecedents, sources of role stress are found in the characteristics of organizations and depend upon variables such as bureaucratic complexity (Fleming, 1966), financial health of the business (Stoner and Hartman, 1990), and organizational distance (Miles, 1977), to mention a few. Characteristics of the more specific work role have been found to be a source of role stress, including work pressure (Crouter, Bumpus, Maguire, and McHale, 1999), and job insecurity (Barling and Macewen, 1992). Similar studies have been undertaken of task offices related to home life rather than organizational life. There are many variables pertaining to characteristics of family and marriage that have been shown to influence role stress levels, including family size (Nevill and Damico, 1975), the masculinity-femininity gap between parents (Shenkar and Zeira, 1992), and many others. Some studies have also found memberships, such as in unions (Shirom and Kirmeyer, 1988), to be related to experienced levels of role stress, and that role transitions into predefined task offices are subject to role stress exposure (see, e.g., Ashforth and Saks, 1996; Hartline and Ferrell, 1996; Zahrly and Tosi, 1989). In an extension of the task office, environment and cross-sectional influences also emerge as sources of role stress, including dynamic environment (Floyd and Lane, 2000) and environmental uncertainty (Lyonsonski, 1985).

Role stress research is rooted in the expectations of others, and therefore role senders hold an important place in determining levels of experienced role stress. The following prominent sources of role stress related to role senders have been identified: feedback, communication, social support, leadership role clarity, leadership behavior, chain of command, and spousal characteristics. In sorting prominent antecedents related to role senders, it is obvious that some are related to attributes of general relationships between role senders and the focal person, while others focus on very specific relationships (i.e., leader-subordinate). For emerging sources of role stress, it is possible to identify characteristics of the relationships of leaders and subordinates, such as closeness of performance supervision (Walker, Churchill, and Ford, 1975). Similarly, there are a number of management characteristics that have been linked to experienced role stress, such as top management’s receptiveness (Senatra, 1980). Leaders’ communication style and authority have also been focused upon, including adequacy of authority (Bamber, Snowball, and Tubbs, 1989; Senatra, 1980) and frequency of communication with the closest manager (Walker, Churchill, and
Ford, 1975). Rewards have also been focused on to determine the magnitude of experienced role stress (Keller and Szilagyi, 1976).

The results of the literature review illustrate that there are several constructs to be classified as prominent antecedents to role stress on the basis of the recurrent conceptual and empirical support in role stress studies. Largest in numbers are the constructs related to the task office, which supports earlier research assumptions and propositions. At the same time, the importance and influence of antecedents related to the focal person and role senders should not be overlooked in models that cover role stress antecedents. In considering the less-studied antecedents, this manuscript finds several distinct areas and themes in which these constructs emerge as antecedents. It is proposed that such emerging antecedents are related to the focal person, task office, and role senders. Although merely a first attempt is made here, the results of forming emerging themes of role stress antecedents from less commonly studied constructs and variables indicate that further work is needed to develop more abstract and general antecedents to role stress.

4.3 Role stress and entrepreneurship research

Based on the two previous literature reviews, the third appended conceptual paper, “Role stress and entrepreneurship research,” provides a literature review on role stress and a conceptual framework illustrating how role stress can assist in entrepreneurship research. From the systematic and extensive literature review, the paper develops a causal model of antecedents and consequences to entrepreneurs’ role stress. While entrepreneurship research has neglected role stress, the third paper illustrates the importance, placement, and contribution of entrepreneurs’ role stress in determining not only the entrepreneur’s performance but also his or her withdrawal function.

It is argued that because entrepreneurship is a rather young research domain (at least in comparison to many other domains), it still benefits from more established research areas. Psychological, sociological, and organizational theories have proved important, as much of the focus in entrepreneurship is on the entrepreneur as an individual. In contrast to many previous approaches that introduce a new theory to entrepreneurship, this paper provides a conceptual discussion about how to introduce role stress in entrepreneurship research, and it un masks the potential pitfalls at an early stage rather than leave them for empirical evidence.

This manuscript recognizes the primary focus of previous entrepreneurship studies on positive constructs (i.e., what to strive for), and suggests that this focus fails to account for the entrepreneur’s real situation. Although the position of the manuscript is that it is important to examine positive constructs, it also
highlights the importance of understanding negative constructs (i.e., what to avoid), such as role stress. It is argued that knowing what to avoid is as important, if not more important, as knowing what to strive for when pursuing an opportunity through new venture creation.

This paper draws on assumptions from literature on roles and conceptualizes the role of the entrepreneur as about combining resources to create profit from a market opportunity. By recognizing the potential to analyze entrepreneurs using theories and literature on roles, and the fact that only a few studies have implied that role stress can be useful in entrepreneurship research, this paper proposes that the construct of role stress has not received significant attention in the entrepreneurship literature.

From the studies that focus on the causal structure of role stress, there is a clear pattern emerging as to its antecedents and consequences. A number of studies treat role stress as a key mediating construct (see, e.g., Bartunek and Reynolds, 1983; Fry and Hellriegel, 1987; Senatra, 1980) that facilitates the adoption and introduction of role stress to entrepreneurship. Role stress literature provides several potential antecedents and consequences to role stress that have been studied before in entrepreneurship (although without reference to role stress). The substantial number of constructs and variables tested provides a great number of potential opportunities that can transfer to role stress. However, far from all constructs and variables that have been related to role stress are of interest to entrepreneurship. Therefore, inclusion of constructs and variables should be made with caution.

The paper develops a model to illustrate how to model entrepreneurs’ role stress. This model is based on findings from role stress research and compared with findings in entrepreneurship studies. In conceptually modeling entrepreneurs’ role stressors, the point of departure is the mechanism through which role stress influences withdrawal through the mediation of satisfaction. This mechanism is valid for studying role stress for entrepreneurs, because understanding withdrawal functions and entrepreneurs’ failure is an important but underresearched topic (see, e.g., Shepherd and Douglas, 2000). Two role-related characteristics (role novelty and role advisors) and two personality traits (intolerance for ambiguity and internal locus of control) are assumed to be influential in determining levels of experienced role stress. Besides their apparent direct effects, the two personality traits are also modeled as having a moderating effect on the relationship between role stress and job satisfaction. In addition to influencing satisfaction, role stress also influence job performance and work-family conflict, which both have feedback effects on the experienced role stress; job performance likely also moderates the influence of the role-related characteristics and the personality traits on role stress. In turn, both job
performance and work-family conflict influences the experienced job satisfaction directly and by moderating the effects of role stress.

The conceptual examination of role stress and its possible placement and contribution to entrepreneurship supports future pursuits to empirically test entrepreneurs’ role stress. The possibility to draw from the extensive body of psychological, sociological, and organizational literature gives future empirical studies on entrepreneur role stress the opportunity to pursue deductive research on entrepreneurs’ role stress using causal modeling. Entrepreneurs’ role stress has the potential to address unanswered conundrums in entrepreneurship. The introduction of role stress to entrepreneurship also highlights how a more negative construct can mediate constructs well established in entrepreneurship research.
5. EMPIRICAL TESTS OF ENTREPRENEUR ROLE STRESS

The subsequent sections present the four appended studies that focus on empirical tests of entrepreneurs’ role stress, antecedents, and consequences. For a more comprehensive understanding about the studies, please read the appended papers. This chapter begins with an account of a study that conceptually develops and empirically tests the construct of entrepreneurs’ role stress (see the appended paper “Analyzing the structure of entrepreneur role stress”); the test is followed by a structural equation model that tests how role stressors influence proclivity for venture withdrawal, acknowledging time and mediating effects (see the appended paper “Entrepreneur’s role stressors and proclivity for venture withdrawal”). Then follows a paper that tests the influence of person-environment fit on the development of role stress, and how entrepreneurs’ role stress can have positive outcomes but negative self-satisfaction when controlling for the mediating effect of exhaustion (see the appended paper “Antecedents and consequences of stressors and exhaustion in the entrepreneurial role”). Finally, a paper is presented that analyzes how coping strategies relate to and influence new venture performance when moderated by role stress (see the appended paper “Entrepreneurs’ coping with challenging role expectations”).

5.1 Analyzing the structure of entrepreneur role stress

Entrepreneurs have a role to perform: to combine resources to create profit from a market opportunity. When doing so the entrepreneur is open to the expectations and demands of a number of stakeholders. Such expectations and demands can transform into role stress when they include conflicts, ambiguities, or overloads. Therefore, role stress is an inherent part of the entrepreneur’s role. However, such negative experiences have not received much attention in the literature on entrepreneurs and entrepreneurship. At the same time, studies on role stress have been performed on a multitude of roles and samples and include all sorts of work environments, except that of the entrepreneur.

Role stress has potential to advance entrepreneurship research by resolving existing unsolved conundrums and by opening up new areas for research. This paper, “Analyzing the structure of entrepreneur role stress,” contributes a conceptual development of entrepreneurs’ role stress and an examination of the psychometric properties of entrepreneurs’ role stress and the distinctions of three role stress facets (role conflict, role ambiguity, and role overload).

Entrepreneurs’ role conflict is conceptualized as the incompatible expectations that make it difficult or impossible for the entrepreneur to comply with expectations from one stakeholder while also complying with expectations of other stakeholders. In the endeavor to conceptualize and contextualize, three types of role conflicts are recognized: (1) conflict between the entrepreneurial
role and a regulatory or normative framework, (2) incongruence in the venture stakeholders’ expectations on the entrepreneur, and (3) expectations from the venture’s stakeholders that override the resources and materials that the entrepreneur has at his or her disposal.

Entrepreneurs’ role ambiguity is conceptualized as the existence or clarity of behavioral requirements that aim to guide and evaluate behavior, recognizing that the subscale predictability of outcomes should be dropped when focusing on roles similar to that of the entrepreneur. Therefore, role ambiguity for entrepreneurs is about the clarity of the expectations that the entrepreneur has of the job, knowledge of the responsibilities for being a new venture owner, knowledge of what is expected from the entrepreneurial role, and the clarity about how to take care of the venture.

That entrepreneurs can be exposed to role overload is quite clear in entrepreneurship literature. Entrepreneurs are often described as experiencing heavy workloads. Therefore, contextualizing role overload to entrepreneurship means that role overload can result from lack of time to finish job tasks, the entrepreneur being rushed to perform job tasks, and no free time on the job for the entrepreneur.

The triple-faceted solution of entrepreneurs’ role stress was tested on a sample of Swedish entrepreneurs with one year of venture experience. The measurement of entrepreneurs’ role stress was selected from a careful review of role stress measures. The criteria for measurement selection were that it should have been tested in various research settings and proved to have high levels of reliability and validity. At the same time, the measurement should be easily transferable and contextualized, implying the importance of selecting a measurement based on a role with similar characteristics to that of the entrepreneur. Therefore, the review explored measurements from organizational studies focusing on the role of CEO and management and their role stress. Finally, the employed role stress instrument consisted of eleven items measuring role conflict and role ambiguity scales, as based on the work of Rizzo, House, and Lirtzman (1970), and role overload, as based on the work of Beehr, Walsh, and Taber (1976).

Analysis began with examinations of descriptive statistics of the role stress construct, including means, standard deviation, Cronbach’s alpha, and item loadings. Principal component analysis of the eleven items including varimax rotation helped assess the structure of the role stress construct. Thereafter confirmatory factor analysis was performed with examination of chi-square statistics, fit indices, and homogeneity by means of multigroup analysis. The results of the factor analysis support the triple-facet factor of entrepreneurs’ role
stress: role conflict, role ambiguity, and role overload. Homogeneity tests also supported that the structure of role stress is not significantly different among entrepreneurs, including tests of serial versus novice entrepreneurs. This further strengthens the usability of an entrepreneurs’ role stress construct among entrepreneurs. Overall, the findings are not surprising; role stress measurements have been honed over three decades and the support for the measurement in terms of validity and reliability in numerous roles are plentiful. As such, the findings of this manuscript support the measurement of entrepreneurs’ role stress as consisting of three facets.

5.2 Entrepreneurs’ role stressors and proclivity for venture withdrawal

Given the important contribution of entrepreneurs and their ventures to economic development, it is exasperating to note that a nontrivial number of entrepreneurs withdraw from their ventures shortly after registration. By analyzing variables that lead to proclivity for withdrawal from venturing, this paper, “Entrepreneur’s role stressors and proclivity for venture withdrawal,” seeks to provide a better understanding of withdrawal from entrepreneurship. It is hypothesized that role stressors influence role-related feelings, which in turn has implications for the proclivity for withdrawal. Therefore, role-related feelings are acknowledged as necessary for the transfer of role stressors to venture withdrawal. The research model is developed from prominent research findings in the role stress literature (Bedeian and Armenakis, 1981; Jackson and Schuler, 1985; Solomon, Surprenant, Czepiel, and Gutman, 1985; Walker, Churchill, and Ford, 1975). A causal model of entrepreneurs’ role stressors—role conflict, role ambiguity and role overload, role-related feelings, and proclivity for withdrawal from a new venture—is tested. The hypothesized stressors are driven by expectations of venture stakeholders. The causal model probes the indirect mechanism of the mediating effects of role-related feelings of emotional exhaustion and satisfaction on the proclivity for withdrawal from venturing. Although role stressors are important, their influence on proclivity for venture withdrawal will be indirect through the essential elements of time and mediation of unpleasant role-related feelings.

The data used for empirical analysis were two-year longitudinal data of Swedish entrepreneurs engaged in new venture activities in their first two years after venture registration. Specifically, a two-year window of the dependent variable (proclivity for withdrawal from venturing) was employed because considerable variability in this particular variable was expected over time. A two-year data sample opened additional opportunities to explore the mediating effects of emotional exhaustion and satisfaction on proclivity for withdrawal from a new venture. The psychological mechanism that transfers role stressors to proclivity for withdrawal from a new venture may be time dependent, as prior work suggests that effects from emotional exhaustion are distinct and operate in close
time frames (Cordes and Dougherty, 1993) and that satisfaction can be influential in longer periods (Bagozzi, 1980; Chang and Hancock, 2003).

By means of structural equation modeling, the study’s results support the importance of role stressors and unveil the significance of emotional exhaustion and dissatisfaction in increased proclivity for withdrawal from venturing in real time and with time lag. Among the hypothesized role stressors, role ambiguity and role overload significantly contribute to emotional exhaustion and further threaten entrepreneurs’ satisfaction. Role conflict is not significantly related to entrepreneurs’ satisfaction or to emotional exhaustion. Feelings of emotional exhaustion influence the proclivity for withdrawal at narrowed time frames, and their effects are not sustained over time. In contrast, feelings of satisfaction do not immediately influence proclivity for withdrawal but do so over time.

There are several implications of these results. Since role stressors are not directly linked to proclivity for venture withdrawal, it is possible that the experience of role stressors is not harmful per se. Their negative outcomes are more likely consequences of the exhausting and unpleasant experience of not being able to meet goals. In following this argument, it is possible that role stressors have some positive benefits. However, such an examination would require a change in the dependent variable from proclivity for venture withdrawal to performance.

5.3 Antecedents and consequences of stressors and exhaustion in the entrepreneurial role
This study, “Antecedents and consequences of stressors and exhaustion in the entrepreneurial role,” models and tests the origin and consequence of role stressors for entrepreneurs. A conceptual model is developed based on logics from literature on role stress, person-environment (P-E) fit theory, and resource conservation theory.

It is suggested that role stress is actualized among entrepreneurs due to the lack of fit between their personality traits and the environmental characteristics. The study acknowledges the personality traits of need for achievement and internal locus of control, as well as the environmental characteristics of heterogeneity and hostility. On the basis of logics developed in the literature on P-E fit (Lewin, 1951), it is suggested that the direct effects of person and environment do not sufficiently explain stressors. Rather, and in extension, the interaction between personality and environment suggests that entrepreneurs with certain personality traits experience more or less role stress depending on the characteristics of their particular venture environments.
Further, role stress is suggested to have a potential positive effect on venture performance when the entrepreneur responds by investing personal resources (e.g., exhaustion). On the basis of arguments from resource conservation theory (Hobfoll, 1988, 1989, 1998) and the flexibility and latitude of the entrepreneur’s role, which allows for and motivates coping responses, it is suggested that the entrepreneur invests personal resources as a response to experienced role stressors. Investing such resources as taking time away from home and family life likely drains entrepreneurs’ energy levels and thus leads to exhaustion. The experience of such exhaustion will have a negative effect on an entrepreneur’s self-satisfaction but a positive effect on venture performance. The latter is supported, as exhaustion is viewed as a sign of effective coping.

Pertinent hypotheses related to the suggested model were tested employing structural equation modeling techniques in a sample of 282 Swedish first-year entrepreneurs. Results lend support to the importance of considering interaction effects of personality and environment characteristics when examining levels of experienced role stress among entrepreneurs. The results of the study also support that role stress can lead to positive outcomes for entrepreneurs in terms of venture performance. This effect is present when considering the mediating effect of exhaustion; likewise, investing personal resources to resolve role stressors leads to a negative vulnerability effect on entrepreneurs’ self-satisfaction.

There are several noteworthy implications of this paper. Examination of a role with specific (if not unique) characteristics reveals the possibility that role stress has positive outcomes. This also implies for entrepreneurs that role stress is not necessarily bad and to be avoided but rather acknowledged and learned. Techniques and strategies for responding to role stress seem therefore to be an important endeavor for further research on entrepreneurs.

5.4 Entrepreneurs’ coping with challenging role expectations
Recognizing the importance of coping strategies for role stress, this paper, “Entrepreneurs’ coping with challenging role expectations,” analyzes entrepreneurs’ coping strategies to manage challenging stakeholders’ expectations in the form of entrepreneurs’ role stress. Four coping strategies (structural role redefinition, personal role redefinition, reactive role behavior, and passive role behavior) are developed and tested to assess their influence on new venture performance. The analysis considers the potential moderating effect of entrepreneurs’ role stress.

Drawing on role literature, general management, and entrepreneurship literature, a set of four coping strategies are conceptually developed. These strategies assume that challenging expectations and demands from role stress experiences
can be resolved either by redefining the role or by altering behavior. When redefining the role, the entrepreneur can change either the externally imposed expectations (i.e., structural role redefinition) or the internal conception of expectations (i.e., personal role redefinition). In altering behavior, the entrepreneur can choose to work more efficiently and effectively to meet role expectations (i.e., reactive role behavior) or to get involved in diversions with the knowledge that role expectations cannot be met (i.e., passive role behavior). It is hypothesized that structural role redefinition and reactive role behavior positively influence new venture performance, while personal role redefinition and passive role behavior negatively influence new venture performance. Furthermore, it is also hypothesized that the level of experienced role stress moderates the influence of the coping strategies on new venture performance. This is hypothesized, as the severeness of the situation likely defines the potential influence of coping.

The four coping strategies’ influence on new venture performance and the moderating effect of entrepreneurs’ role stress is tested on data gathered from a survey administered to 1,800 Slovenian entrepreneurs. Results from hierarchical regression reveal that coping strategies focused on reducing expectations (structural role redefinition) and/or working harder to meet expectations (reactive role behavior) positively affect new venture performance. However, entrepreneurs’ focus on suppressing perceived expectations (personal role redefinition) negatively influences new venture performance. The relationship between passive role behavior and new venture performance was not significant. Furthermore, entrepreneurs’ role-related stress moderates the relationship between reactive role behavior and new venture performance.

This manuscript provides a better understanding of the types of coping strategies available to entrepreneurs and their consequences for new venture performance. By doing so, this study also offers implications for practicing and nascent entrepreneurs, support organizations, and policy makers in terms of how to manage challenging situations when aiming to improve new venture performance.

Overall, this study is among the first to illustrate how strategies for responding to challenging stakeholder expectations and demands (in the form of role stress) influence the entrepreneur’s outcomes such as new venture performance. Thus, this study also contributes to the understanding of how some entrepreneurs endure the establishment of a new venture while others withdraw either in person or by venture failure.
6. DISCUSSION, CONCLUSIONS AND IMPLICATIONS

In closing, this chapter lays forth the specific contributions, implications, limitations, and recommendations for further research based on the results of this thesis. This summary discusses the process and content of the thesis and its appended papers. Thereafter, the contributions to research are discussed, followed by practical implications. In final, recommendations for future research are presented.

6.1 Summarizing conclusions

This thesis has elaborated on the potential contribution of social psychology to entrepreneurs and entrepreneurship. Results of empirical tests illustrate that the examination of entrepreneurs’ role stress—including tracing and tracking antecedents and consequences—is fruitful; entrepreneurs’ role stress can further the understanding of entrepreneurs’ affections, behavior, and outcomes. The aim of this study was to review the general literature on role stress and to compare this body of literature with literature on entrepreneurship. Also, the purpose was to empirically test the construct properties of entrepreneur role stress and to trace possible antecedents and map some potential consequences of entrepreneurs’ role stress.

Departing from a structured, systematic, and comprehensive literature review of role stress articles, this thesis aggregates research from fields that include psychological, sociological, and organizational studies. The literature review is reported in the form of a meta-analytic review of the impact of the three role stressors on their most commonly studied consequences (see paper I), and in the form of a narrative review of prominent and emerging antecedents to role stress (see paper II). On the basis of these results, a conceptual study examines the relatedness of role stress and the entrepreneur, and lays forth a research agenda for how role stress can be applied to entrepreneurship by means of a conceptual model that illustrates antecedents and consequences of entrepreneurs’ role stress (see paper III).

To establish the prominence of role stress for entrepreneurs, the construct entrepreneurs’ role stress was conceptually developed and empirical analyzed in a sample of entrepreneurs. The study found not only theoretical but also empirical support for a triple-component scale of entrepreneurs’ role stress, consisting of role conflict, role ambiguity, and role overload (see paper IV). The empirical test supports the proposed short scale for measuring entrepreneur role stress, and the results reveal that it is possible to treat entrepreneurs as a rather homogenous group when considering the structure of entrepreneurs’ role stress. This thesis has also illustrated that the stressors might be used together as a higher-order construct or separated as three distinct stressors. Although findings indicate that the role of the entrepreneur is unique and separate from some of the
roles previously studied, the role stress literature can be applied to advance the knowledge on entrepreneurs.

Recognizing the prominence of role stress among entrepreneurs and the recurrently cited detrimental consequences of role stress also implies the potential to model unwanted entrepreneurial outcomes. Such outcomes can ultimately lead to entrepreneurs’ failure. Empirical results of a model illustrating how entrepreneurs’ role stress transforms into proclivity for withdrawal support the indirect influence of role stressors and highlight the direct significance of enhanced burnout feelings and reduced satisfaction to the proclivity for new venture withdrawal (see paper V).

Furthermore, results illustrate that entrepreneurs’ role stress is created by the lack of fit between the entrepreneurs’ personality traits and the characteristics of the environment (see paper VI). At the same time it is acknowledged that role stress can have positive effects on venture performance when considering the mediating effect of exhaustion. On the basis of resource conservation theory (Hobfoll, 1988, 1989, 1998) and building on the argument that entrepreneurs draw on their available resources when coping with role stressors, it is posited that coping is indicative of exhaustion. As a sign of effective coping, exhaustion is positively associated with venture performance, but at the cost of reduced self-satisfaction. Acknowledgment that coping efforts can be directed toward activities of role redefinition (structural and personal) and role behavior (reactive and passive) allows for a more detailed understanding of how entrepreneurs exposed to stressful situations can make use of potentials and find positive effects on venture performance (see paper VII). The results indicate that when coping strategies reduce expectations or require that the entrepreneur work harder to meet stakeholder expectations, the influence on entrepreneurs’ performance is positive. However, when the coping strategies focus on suppressing the perceived expectations, the influence on entrepreneurs’ performance is negative. The study also illustrates that entrepreneurs’ role stress moderates the relationship between reactive role behavior and performance.

6.2 Knowledge creation through adoption of established research
Research in entrepreneurship has long benefited from adopting theories from other disciplines (Zahra, 2007). In giving detail to how an established theory can be adopted and tested with respect to its possible contributions to entrepreneurship, this thesis makes a contribution also in terms of its design—especially by illustrating a meticulous process by which a well-studied construct can be systematically examined, related to entrepreneurship, and conceptually and empirically elaborated and tested. In developing and extending knowledge on entrepreneurship by applying mature research, this thesis provides implications for entrepreneurship research as well for role stress research.
When designing the present study, from a scientific realist perspective, the question of how to construe a research design that allows for the systematic and careful introduction of entrepreneurs’ role stress was of main concern. Because such a design includes how to examine and locate the causal place and contributions of relating role stress and entrepreneurship, role stress is applied to entrepreneurship by examining the conceptual fit between role stress and constructs central to understanding and explaining entrepreneurship conundrums, and by rearranging constructs that have been examined in entrepreneurship research with a focus on entrepreneurship. Role stress has proved to help explain such phenomena as performance (Beauchamp, Bray, Eys, and Carron, 2002), satisfaction (Jackson and Schuler, 1985), burnout (Cordes, Dougherty, and Blum, 1997), and withdrawal (Bedeian and Armenakis, 1981). These constructs are all of interest and of importance for understanding the entrepreneur and the creation and establishment of a new venture. In fact, all the constructs have been used in entrepreneurship research when attempting to explain entrepreneurs’ behavior and outcomes. As such, there are natural overlaps between role stress research and entrepreneurship that facilitate the inclusion, placement, and causal modeling of entrepreneurs’ role stress.

Furthermore, this study also indicates, at several points, the causal placement of role stress as a mediating construct in entrepreneurship research designs. A number of antecedents and consequences identified in prior role stress research are already central to entrepreneurship research. However, and not unusually, some of the relationships have revealed inconsistent findings in entrepreneurship. Take, for example, the relationship between personality traits and performance, which as a direct relationship has received mixed results in entrepreneurship but has received clear, consistent results in role stress research with role stress as a mediator. Such results hold implications for entrepreneurship research agendas—especially for stressing the importance of considering situation-specific constructs (e.g., entrepreneurs’ role stress) when determining how relatively fixed antecedents (e.g., personality traits) influence outcomes (e.g., performance). The prominence of such modeling is illustrated in this study by both conceptual and empirical means, and it is suggested that use of such a design in future studies can potentially resolve present conundrums in entrepreneurship research.

6.3 How does studying role stress influence entrepreneurship research?
The point of departure for this thesis was the assertion that entrepreneurship is important, a social undertaking not possible to understand in isolation from the social situation (Sarason, Dean, and Dillard, 2006). Although evidently important, our contemporary knowledge of the social situation of entrepreneurs,
its qualifiers, and its effects is at best underdeveloped. Therefore, this thesis adopts a rather novel perspective on entrepreneurship as a role to be performed by an entrepreneur. This role is influenced by the social surrounding of the entrepreneur, including expectations, demands, and proscriptions for behavior in the role. In drawing on this perspective, this thesis contributes to entrepreneurship by introducing and systematically examining the place, existence, and relationships of entrepreneurs’ role stress. The situational characteristic in terms of role stress emphasizes inconsistence, unclearness, and excessive expectations for performance. Therefore, the inclusion of role stress allows for analyses of situational characteristics and their influence on entrepreneurs’ intentions, affections, and outcomes. The appliance of role stress emphasizes the importance of a social stakeholder perspective to entrepreneurship (Ronald and Boyd, 2006).

Acknowledging the social situation of the entrepreneur also implies allowing for research agendas that examine the real conditions of entrepreneurs and entrepreneurship. The inclusion of role stress in entrepreneurship research designs contributes not only by focusing on aspects related to venture performance and growth but also by uncovering the realistic expectations and demands that influence the entrepreneur. Such designs can enrich entrepreneurship studies by also uncovering why some entrepreneurs are obstructed from performing well in the entrepreneurial role and some opportunities are not realized. Therefore, research designs focusing on the realistic situation of the entrepreneur are needed to understand the balance between potentials and pitfalls of entrepreneurs and entrepreneurship.

Results reveal that entrepreneurs experience role stress and that it is possible to model role stress by means of three role stressors (first-order constructs role conflict, role ambiguity, and role overload) and the second-order concept of role stress. As illustrated by the appended meta-analytic review, the three role stressors are similar; with very few exceptions it is impossible to determine significantly different effects from how these role stressors transform into outcomes. However, in appended empirical studies on entrepreneurs, it was evident that entrepreneurs’ role conflict was not as influential as role ambiguity and role overload in predicting exhaustion and reduced satisfaction. This might be role dependent and influenced by the characteristics of the entrepreneur. In fact, concerning role conflict, Schumpeter (1936) asserted that breaking and reframing rules is a specific characteristic of entrepreneurs, indicating that entrepreneurs might not experience as much distress when exposed to conflicts as what has been noted for other roles. Although this has great potential for analyzing differences and similarities of first-order effects, the possibility of using role stress as a second-order construct allows for examinations of the combined levels of role stressors. In acknowledging that the absolute level of
each role stressor in isolation might entail a reduced understanding for the entrepreneurs overall level of stress, this study also acknowledges the higher-order construct of entrepreneurs’ role stress in its conceptualization and empirical tests.

In modeling the antecedents to entrepreneurs’ role stress, this thesis especially acknowledges that person-environment fit is influential in determining the levels of experienced role stress for entrepreneurs. This largely represents the findings from the narrative literature review, which indicated that role stress stems from sources related to the focal person, the task office, and the role senders. These sources are also acknowledged among the proposed correlates to entrepreneurs’ role stress in the appended conceptual analysis of role stress and entrepreneurship research. As noted, a large number of antecedents have been proposed as influential for experienced role stress in the literature. This is likely due to the diverse contextual sets where they have been modeled. Inclusion of antecedents to role stress should therefore be made carefully and bearing the context in mind.

The inclusion of role stress in entrepreneurship also has implications for entrepreneurs’ outcomes. In this study it has been conceptualized and empirically determined that role stress can have a negative influence on entrepreneurs’ feelings and affections and influence entrepreneurs to reconsider their career choice (i.e., increase their proclivity to withdraw from the new venture). However, the specific characteristics of the role of the entrepreneur, including flexibility and latitude, can also lead to the resolution of role stress experiences through coping resources. Entrepreneurs’ efforts to cope with role stress experiences can, depending on the coping strategies employed, lead to increased performance. However, this comes at the cost of increased vulnerability of reduced self-satisfaction.

6.4 How does studying entrepreneurs influence role stress research
Besides from contributing to entrepreneurship research, this study through its design also contributes to general role stress research. By asserting a, for the role stress domain, new role this thesis also extends our contemporary understanding for how role stress transforms into outcomes. Also, by the systematic literature review this study contributes to a more synthesized conception of the role stress field, and by doing so also raising several insights for role stress research. Therefore, the accumulation of research findings is important to make cumulative progress and to serve theoretical development, which is dependent on relationships between constructs.

In order to study how role stress influences entrepreneurship, a comprehensive literature review was performed. The systematization and accumulation of role
stress research findings through narrative and meta-analytic reviews contributes to role stress research—especially considering the diversity of journals where role stress studies are published. Such contribution includes the systematic review and sorting of relations to and from role stress, and the empirical testing of the generalizability of the prominent consequences of role stress across different roles and samples. Such designs as meta-analytic reviews helped to test the prominence of commonly studied relationships from role stressors across the specific roles where they have been tested and to trace where role-related characteristics are likely to be important when attempting to understand the influence of role stressors on their consequences.

Also, the introduction and testing of role stress on a sample of entrepreneurs contributes to role stress research. By testing the role of the entrepreneur, this thesis tests and extends the boundaries of role stress research, as the role of the entrepreneur is different from what has been tested to date, especially considering that the role of the entrepreneur is not predefined, that expectations and demands are shaped in the role, and that the task office is defined by the person in the role. Moreover, this study also contributes to the literature by examining how to diminish the effects of role stress or reduce the experiences of role stress by developing and examining role stress coping strategies.

It is not so much argued that role stress is different for entrepreneurs or that it has very unique consequences. Rather, key constructs and theoretical underpinnings are likely the same for entrepreneurs as they are for some other organizational roles, such as business managers. However, because of the specific characteristics of the entrepreneur, the relationship and influence among constructs likely differs for entrepreneurs from other roles. As illustrated in this study, the flexibility and latitude of the entrepreneur’s role influence how experienced role stressors transform into effects on venture performance and entrepreneur’s self-satisfaction. As such, introducing the role of the entrepreneur also contributes to a better understanding of the importance of role characteristics and their influence on the origin and consequences of role stress.

6.5 Implications for practice
The study was designed to also include implications for entrepreneurs, their stakeholders, and their supporters. From the studies conducted, implications are relevant for entrepreneurs, stakeholders, educators, policy makers, and the greater society. Each of these is discussed in turn.

6.5.1 Implications for the practicing and prospective entrepreneur
Portraying entrepreneurship as a role to be performed by the entrepreneur and illustrating the influence of role stress in form of conflicting, ambiguous, or
overloading expectations from new venture stakeholders have implications for both practicing and prospective entrepreneurs.

Acknowledging the existence of role stressors is a first step to effective coping. As with the assumption of nomothetic fallacy, the first part of effectively solving a problem is naming it. However, naming alone is not the cure for the experience, although it provides temporal relief through increased awareness. Understanding the existence of the threat that role stress can impose for an entrepreneur through conflicting, ambiguous, and overloading expectations is central to dealing with such experiences. In the same spirit, the importance of better understanding stress beyond its label has also been portrayed by Hans Selye (1980: 697): “Stress, like relativity, is a scientific concept which has suffered from the mixed blessing of being too well known and too little understood.”

Understanding the consequences of conflicts, ambiguities, and overloads for the self, the venture, and the surrounding environment is important. The entrepreneur must realize the importance of responding to contradictory, unclear, or overloading stakeholder expectations, because stress stemming from these sources can reduce entrepreneurs’ rewards and instead increase their exhaustion.

By understanding the origin (antecedents) to role stress, the entrepreneur can learn to react to warning signals. By understanding where pressures in the form of expectations and demands come from, the entrepreneur can take action, particularly by pinpointing the actual source of the experienced role stress. To reduce role stress, it is important to cope with the sources of role stress, not just with the symptoms. By recognizing role stress sources in the individual, organization, and environment, the entrepreneur can learn to avoid some situations and properly prepare to enter stressful, inevitable situations. As found in this thesis, role stress found not only in the personality traits or environment alone but also in the fit between person and environment. This suggests the importance of awareness of the social surrounding and that certain individuals are better equipped for handling certain environments. In order to learn about the origin of role stressors, it is valuable to use such tools and techniques as keeping a stress diary about recent experiences and symptoms.

By understanding and employing coping strategies when necessary, the entrepreneur can avoid role stress or at least reduce its experienced consequences. It is important to consider that coping strategies to reduce role stress and/or its consequences can influence the individual and the new venture differently. As such, the entrepreneur can learn how to best cope with role stressors to avoid detrimental consequences for him- or herself and for the
venture. It is also important to consider the importance of being able to say no and to negotiate challenging role expectations and demands in order to keep up performance and reduce stress levels. Similarly, making sure and learning to delegate tasks is also a way to reduce stress levels while improving venture performance.

6.5.2 Implications for stakeholders and their relation to entrepreneurs
This thesis has illustrated the consequences of entrepreneurs’ exposure to challenging expectations and demands from stakeholders, which role stress symbolizes. Entrepreneurs’ role stress can potentially explain the creation of long-term disablement and venture withdrawal, as well as the negative influences on feelings and satisfaction and the possibility for positive performance. As such, an entrepreneur’s exposure to challenging expectations and demands also influences the stakeholders’ imposition of such expectations and demands. In the end, if exposure to role stress transforms into detrimental consequence for the entrepreneur and the venture, role stress can lead to economic strains not only for the entrepreneur but also for venture stakeholders (e.g., customers and suppliers). As such, attempting to acknowledge the entrepreneur’s role and the situation for the entrepreneur can help the stakeholder achieve a rewarding long-term relationship.

In role stress research, social support has been deemed very influential when attempting to understand the influence from so-called role senders (i.e., stakeholders). Thereby, if venture stakeholders are supportive, there is a greater possibility of good performance and sustained entrepreneurship. In the end, it is, according to role stress research, the stakeholders who influence the form and shape of expectations and demands and who determine the performance of entrepreneurs and the establishment of ventures.

6.5.3 Implications for education of entrepreneurs
Recognizing that role stress might both influence negative feelings and positive outcomes implies the importance of considering tools and techniques in entrepreneurship education that can help the entrepreneur overcome obstacles and reduce tension over benefits or rewards. Specifically, such tools should include stakeholder management, or restructuring the role by negotiating stakeholder expectations and demands, which has been illustrated as one successful coping strategy to increase performance. Also, time management tools and techniques should be learned as reactive role behavior (implying working harder or longer), and these have been found to be an important coping strategy to positively influence performance.

In entrepreneurship, a central question has been whether entrepreneurs are made or born. According to the literature on identities and roles, there is support for
the fact that some entrepreneurs are more suited to become entrepreneurs (e.g., personality traits), while they gain other characteristics from experiences and education. In fact, experiences and education have received support for being related to focal persons performing well in the role. Treating entrepreneurship as a role therefore also opens up to more recent findings on how to educate entrepreneurs. As education and experience are important for well-performing entrepreneurs, educational methods such as deliberate practice (Baron and Henry, 2006) are valuable in the formation of educational programs for entrepreneurs.

An important feature of an entrepreneurship educational program is educating and training entrepreneurs to realize and learn to make a difference with both realistic and unrealistic expectations and demands. It is favorable that training to a large degree should take place in simulations and experiments, where the conditions are as similar as possible to those that the entrepreneur will experience in real life. Training should prepare the entrepreneur for professional and psychological matters.

6.5.4 Implications for policy making and society
The importance of entrepreneurs to society is indisputable. Entrepreneurship fosters the production of wealth for a nation, in terms of the financial returns from producing goods or services as well as employment. Therefore, facilitating entrepreneurship is a crucial topic.

As illustrated by this study, not all endeavors to fame and fortune go without challenges. In fact, role stress is a reality for most entrepreneurs during their venture establishment process. Such challenging expectations and demands can also stem from the actions of policy makers and the society. Therefore, it is important to consider how rules and regulations influence entrepreneurs who are attempting to realize an opportunity through new venture creation. If rules and regulations pose demands that conflict with other stakeholder expectations, if the accessibility to information about rules and regulations exist, or if rules and regulations force the entrepreneur to work harder and longer than what is possible, then there are built-in challenges for entrepreneurship in the society. To foster entrepreneurship, according to role stress research, challenges stemming from bureaucratic systems that impose conflicts, ambiguities, and overloads on the performing entrepreneur should be kept to a minimum.

6.6 For further research
There are several paths for future inquiries considering the findings and limitations presented herein. In addition, there are several areas in which further research is needed. Expanding on the results of the literature review and testing the transferability of antecedents and consequences to the entrepreneurship
setting is one avenue, but more general is developing new models and expanding on existing ones. The results from this thesis’s highly systematic literature review and conceptual and empirical work on the entrepreneurs’ role and role stress lays a foundation; however, continuing with deductive work and examining rich information on entrepreneurs’ real-life experiences can help further our understanding and explanations of entrepreneurs’ role stress.

Although this thesis supports the idea of treating entrepreneurs as a homogenous group, it is still of interest to test the boundaries of such a statement. Further studies could examine whether the structure and levels of entrepreneurs’ role stress is similar for different types of entrepreneurs, by breaking down the facets of entrepreneurs’ role stress into subfacets. Further studies could also examine how different types and kinds of role conflicts, ambiguities, and overloads are similar or different among different categories of entrepreneurs. Furthermore, further studies are encouraged to test the influence of sample-related moderating effects. Given the results from the meta-analytic review, it is obvious that role stress transforms differently into consequences based on role characteristics. The modeling of how exhaustion partially mediates the effects of role stressors on performance and satisfaction provides further support. Therefore, it is also important to examine whether such differences exist among different categories of entrepreneurs.

On a related note, an additional avenue for further research is the examination of gender differences in experiences and effects of entrepreneurs’ role stress. Conventional research on role stress has indicated that women are more likely to experience higher levels of role stress because of higher responsibilities in other roles, such as family life. However, these results are mostly based on research conducted post-wartime, studies that characterized women’s transitions into work life. Societal development and specifics of the role of the entrepreneur further call for more attention to the possible gender differences in role stress experiences and effects.

Examining the relationships and exposure to role stress in entrepreneurial teams is another path for further research. There are also multiple designs that could be of interest in considering team-based entrepreneurship, such as whether belonging to a team reduces exposure to role stress and its consequences.

Future research on entrepreneurs’ role stress could benefit from examinations of cultural and geographical differences in experienced levels of role stress. Previous research (see, e.g., Peterson et al., 1995; Van De Vliert and Van Yperen, 1996) has found that culture and geography explain variance in individuals’ experiences of role stress. It is also possible that such differences exist among entrepreneurs, as systems in different cultural and geographical
contexts will to different degrees invoke the flexibility and latitude of entrepreneurs, and thereby also influence their potential in acting upon role stress experiences. As such, the examination of cultural and geographical effects on entrepreneurs’ experience of role stress may be important to gaining an understanding of the influence of, for instance, policy and social systems, which is important for future research.

The use of a longitudinal research design can advance knowledge about entrepreneurs’ role stress. It is possible that levels of role stress are different during the entrepreneurial process of venture establishment (i.e., the first six years of venture existence). A longitudinal design may also, as suggested by the results of one of the appended studies, be important to illustrate whether entrepreneurs’ role stress has prolonged or delayed influence on its consequences. Furthermore, longitudinal designs can also be helpful in furthering knowledge on how role stress transforms. Indications of a complex interplay between role stressors and process constructs (e.g., burnout) are signs that the concept built from cross-sectional designs on role stress transformation lacks detail.

The results of including entrepreneur role stress reveals that role stress research can challenge prior conceptual work in entrepreneurship. For instance, the results revealed that entrepreneurs’ personality is indirectly related to performance through situational constructs such as entrepreneurs’ role stress. Such results require further attention and replication.

Incorporating other well-studied role stress antecedents and consequences can also further understanding of and explanations for entrepreneurs. For instance, proclivity for withdrawal is a frequent and natural reaction to role stress; future empirical studies should also incorporate such constructs to examine entrepreneur sustainability and venture failure. Longitudinal designs could incorporate venture closure as a final consequence of role stress experiences.

Using role theory as a lens for understanding and explaining entrepreneurial behavior and outcomes brings several possible implications. Considering role theory as a fruitful perspective, it is possible to draw from studies focusing on role change (Turner, 1990), how the role relates to the person (Turner, 1978), and others to further advance knowledge about the entrepreneur. As such, general use of role theory could address several different entrepreneurship conundrums. Also, by testing the assumptions of role theory, it is likely that entrepreneurs (i.e., entrepreneurship roles) are created on the basis of expectations and requirements. Using role theory to understand the origin of why some entrepreneurs experience more expectations or requirements to become entrepreneurs as well as the driving forces (i.e., role senders directly or indirectly) can help further our understanding of entrepreneurship and its drivers.
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