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CORPORATE ENTREPRENEURSHIP IN HEALTHCARE ORGANIZATIONS

**An explorative study of employees' corporate entrepreneurial
behavior, job satisfaction and turnover intention**

Master's Thesis
in Entrepreneurship

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1 INTRODUCTION

1.1 Background

The Finnish healthcare industry has been the focus of an on-going policy debate during the previous years. The Finnish Parliament is currently preparing a new bill, the purpose of which is to reform the social and healthcare services in Finland. In addition to the structural reforms, the healthcare industry has seen significant changes over the past decade mainly due to new technology, cost cutting, globalization, increased networking, and the aging population. These changes have undoubtedly influenced the industry in various ways. The structural reforms and economic crises have caused changes not only in the performance of healthcare organizations, but also in job conditions and satisfaction. Due to cost-cutting and structural reforms, Finnish healthcare professionals are forced to act under a sense of urgency, despite the growing number of patients. New nurses often report fatigue, bad job conditions, urgency, and the lack of career opportunities as reasons for dissatisfaction and leaving the profession. (Flinkman 2014.) These same reasons also encourage older nursing professionals to yearn for retirement sooner than necessary. In addition, research suggests that doctors are alarmingly dissatisfied with their jobs, with stress, sleep problems, and the lack of empowerment causing poor health, decreased ability to work, and increased sick leave. (Heponiemi, Sinervo, Räsänen, Vänskä, Halila & Elovainio 2008.)

While several healthcare professionals are experiencing dissatisfaction in working conditions and showing interest in switching jobs or even leaving the entire industry, unemployment in the Finnish health care industry is growing relatively faster than in any other industries (Nykänen 2014). These findings suggest that not only are healthcare professionals dissatisfied with their jobs, but also inclined to consider leaving the profession or retiring sooner than the average, which is problematic since skillful and vibrant staff is necessary for all organizations. Healthcare organizations have tried to tackle these issues by introducing various projects to improve existing practices. However, the industry is highly controlled both financially and politically, and by a number of laws and regulations, leaving very little room for creative and innovative undertakings, and hampering the implementation of new practices. (Laaksonen, Lemström, Virtanen, Heinonen & Hytti 2012.) Nonetheless, all this suggests that healthcare organizations are in significant need of coming up with new proactive strategies to sustain and improve their performance, as well as their working conditions (Hinz & Ingerfurth 2013).

The importance of entrepreneurship and its positive influence on the economy is widely accepted. Although the concept of entrepreneurship previously included mainly the foundation of new firms and self-employment, the phenomenon can also occur within

existing organizations. This is defined as corporate entrepreneurship, which refers to an entrepreneurial orientation within established organizations. Highly entrepreneurial organizations are often described as innovative and proactive. Corporate entrepreneurship in a broad sense includes all entrepreneurial behavior and activities within the organization (Holt, Rutherford & Clothessy 2007, 40), and it has been linked to increased organizational performance, profitability and growth (Antoncic & Hisrich 2004). Corporate entrepreneurship is a process that stimulates innovation and, thus, contributes to the development of new products, services, technologies, ways of organizing and strategies, amongst other things. Firms that are more innovative cannot only overcome the challenges brought about by the external environment with less effort, but can also create change in that environment (Kuratko 2012, 226). Several researchers suggest that corporate entrepreneurship is the necessary strategic response to today's highly complex, competitive and continuously changing business environments (Hinz & Ingerfurth 2013). Despite of the healthcare industry being generally unfavorable for new and improved practices, corporate entrepreneurship could very well be the much needed solution for organizations in this field to be able to respond to the continuous changes more efficiently and to witness better levels of job satisfaction and turnover intention.

Previous research on corporate entrepreneurship has mainly focused conceptualizing the construct and examining the antecedents leading to this phenomenon. A large part of corporate entrepreneurship literature examines how this type of behavior and activity can be promoted in organizations. Some studies have also examined the consequences of corporate entrepreneurship, suggesting that it has a positive influence on the financial measures of organizational performance. More recently research has also discovered a positive relationship between corporate entrepreneurship and the non-financial measures of performance, such as job satisfaction and turnover intentions (Holt et al. 2007; Rutherford & Holt 2007.) While corporate entrepreneurship, its antecedents and outcomes have been studied to a reasonable extent in previous literature, the research in the field has predominantly examined the concept from the perspective of organizations. Thus, less emphasis has been put on examining corporate entrepreneurship from the perspective of individual employees, which is rather strange considering the vital role that the individual employees' actions play in the construct (Holt et al. 2007). Furthermore, corporate entrepreneurship and its various dimensions have mostly been addressed within the context of large private organizations, while only a small amount of research has studied the phenomenon within the public sector. Finnish healthcare, however, is mostly publically produced, so studying corporate entrepreneurship within this context also facilitates the lack of research about the concept across sectors.

Despite there is a recognized link between corporate entrepreneurship, job satisfaction and turnover intentions, there are still few studies that empirically examine this relationship, especially in the context of healthcare organizations. Additionally, as most research

in the field focuses on private organizations, it neglects to consider the differences between public and private sector organizations (Sadler 2000). This indicates that there is a research gap, which this thesis aims to mend. Hereby this thesis will examine the relationship between individual employees' corporate entrepreneurial behavior in healthcare organizations and job satisfaction and turnover intention. The study will include public and private healthcare organizations, which will provide an opportunity to examine whether the nature and level of corporate entrepreneurial behavior differs when comparing these organizations. Because most research in the field examines the construct from the organization's point of view, this thesis will aim to discover how the concept is manifested in individual behavior, focusing more on the perspective of individual employees.

To understand corporate entrepreneurship and how it is manifested in individual behavior, a literature review will be provided, after which the concept and its relationship with the chosen outcomes, job satisfaction and turnover intention, will be studied empirically within the context of Finnish healthcare organizations. While corporate entrepreneurship may provide healthcare organizations a means of sustaining and enhancing organizational effectiveness and performance during challenging times, this study will provide evidence on whether or not the corporate entrepreneurial behavior of an individual employee is associated with their job satisfaction and intention to leave the organization, showing whether the concept can also be considered valuable from the perspective of individual healthcare employees. Corporate entrepreneurial behavior and these effects are examined in this research with a survey study, which was participated by 120 employees of four different Finnish healthcare organizations, out of which three are public and one is a private organization.

1.2 Research purpose

As described in the previous chapter, the goal of this thesis is to study the relationship between corporate entrepreneurship, or more specifically corporate entrepreneurial behavior, job satisfaction, and turnover intentions in Finnish healthcare organizations. The thesis will provide a literature review to demonstrate what corporate entrepreneurship is about and how it has occurred in previous research. In addition the theoretical part will address how corporate entrepreneurship is manifested in individual behavior and what the outcomes of such behavior are. The empirical part of the thesis will study the concept and its relationship between job satisfaction and turnover intention, in practice. What is more, the study will also examine the differences in the nature and level of corporate entrepreneurial behavior between the studied organizations, as previous research in the field suggests that private and public organizations may actually be characterized differently. Thus, the purpose of this research is to study the entrepreneurial behavior of

healthcare employees in both private and public sector organizations, and examine whether this type of behavior is associated the job satisfaction and turnover intentions of those employees. The purpose of this thesis can be divided into the following sub-objectives:

- How is corporate entrepreneurship manifested in individual behavior?
- Is the corporate entrepreneurial behavior of an individual employee associated with their job satisfaction and turnover intention?
- Does the nature and level of corporate entrepreneurial behavior differ when comparing the examined private and public sector health care organizations?

1.3 The structure of the thesis

This thesis begins with an introduction, which shows the background to the subject and recognizes the research gap and research questions that the thesis will address. To understand the concept of corporate entrepreneurship, research related to entrepreneurship will briefly be discussed in the beginning. After providing a brief review about the concept of entrepreneurship, we will move to corporate entrepreneurship, which is the main area of interest in this study. This section will provide a review of previous literature in the field, which mainly focuses on the organizational aspects of the concept, such as factors that promote entrepreneurial behavior within organizations. After this the thesis will move towards a narrower view and examine how the concept occurs on an individual level and how it is manifested in individual behavior. Finally, the theoretical part will provide a review about the literature of the outcomes of corporate entrepreneurship, by briefly explaining the main financial outcomes, and then examining the non-financial outcomes in greater depth. The main findings of the theoretical part are summarized at the end of the theoretical framework chapter. The research approach, the sample and the research methods are discussed in the third chapter, after which results are presented in the fourth chapter. The results are discussed more profoundly in chapter five. The thesis is finalized with a conclusion that includes a review about the limitations of this study and suggestions for future research. A list of references can be found at the end, as well as attachments that complement the content of this thesis.

2 THEORETICAL FRAMEWORK

2.1 Concept of entrepreneurship

To examine corporate entrepreneurship, one must first understand the concept of entrepreneurship in general. Previous research in entrepreneurship has mainly focused on explaining what kind of people engage in entrepreneurial activities and, whether or not they discover and exploit opportunities (Shane & Eckhardt 2003a, 334.) Many researchers have attempted to create a conceptual framework for the phenomenon of entrepreneurship. Despite of this, the research in the field is still very fragmented and incomplete, which has resulted in some researchers questioning the legitimacy of the field. (Shane & Venkataraman 2000, 217.) Previously entrepreneurship solely meant the creation of organizations (Gartner 1989, 47). However more recently it has also been acknowledged that despite the creation of new organizations is part of entrepreneurship, it does not require this (Shane & Venkataraman 2000, 219). The most cited definition in entrepreneurship research seems to be the one by Shane and Venkataraman, which defines *entrepreneurship as an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods, services, ways of organizing, markets, processes and raw materials through new organizing efforts* (Venkataraman 1997; Shane & Venkataraman 2000).

One of the largest problems in the field of entrepreneurship is that some researchers only focus on individuals, seeking to explain which members of the society can be considered as entrepreneurial individuals, while others exclusively focus on external forces, seeking to explain the phenomenon by reference to the environment. While both of these approaches presumably explain some variance in entrepreneurial activity, neither of them alone has been successful in defining the phenomenon. (Shane 2003, 2–3.) For decades the entrepreneurship research focused solely on studying why some people become entrepreneurs, while others do not. Gartner (1989, 47) suggests that the behavioral approach, in which the entrepreneur is seen as a person who is involved in a set of activities related to the creation of organizations, is more relevant and productive than the trait approach, in which the entrepreneur is seen as a person with certain personality traits and characteristics. After all, this approach, which focuses on the personality traits and characteristics of entrepreneurs, has been largely unsuccessful in defining the entrepreneur and explaining the concept of entrepreneurship. Shane and Venkataraman (2000, 218) argue that since a lot of different people engage in entrepreneurial activities, it is futile to try to explain the concept merely by the characteristics of individuals.

Shane and Venkataraman (2000, 218) argue that defining entrepreneurs as people who create new organizations fails to include the differences in opportunities that they may

identify. According to this view, entrepreneurship research should focus more on the sources of opportunities and the processes of discovery, evaluation and exploitation of those opportunities, in addition to the individuals who participate in these processes. For entrepreneurship to occur, there must first exist entrepreneurial opportunities (Shane & Venkataraman 2000, 219). There is, however, a continuous debate, whether entrepreneurial opportunities exist regardless of the entrepreneurs who discover them, or whether they are created as a result of the entrepreneurs' actions. In case opportunities are treated as objective phenomena, the task of the entrepreneurs is to use whatever resources and strategies available and required to exploit these opportunities. On the contrary, if opportunities are created by the entrepreneurs, these entrepreneurs must engage in rather different activities such as an iterative learning process that leads to the formation of the opportunity. (Alvarez & Barney 2007, 11–12.)

Entrepreneurship comprises of all the activities related to the discovery, evaluation and exploitation of entrepreneurial opportunities (Shane & Venkataraman 2000; Kuratko, Ireland, Covin & Hornsby 2005, 704). Entrepreneurial opportunities are situations, in which the enterprising individuals can create new means-ends that are believed to yield profits. Even though opportunities are essential to entrepreneurship, research long overlooked this aspect of the phenomenon. (Shane 2003, 18.) Shane (2003) argues that entrepreneurship comprises of both the enterprising individual and the entrepreneurial opportunity. Therefore opportunities are an important part of the entrepreneurial process. Compans and McMullen (2006, 306–307) identified three types of entrepreneurial opportunities based on strategic management and entrepreneurship literature. Economic opportunities arise from the discovery and exploitation of new information such as new technology. Cultural-cognitive opportunities on the other hand are related to human behavior and perceptions. The society and culture are constantly evolving which leads to new behavior models. This, in turn, creates new problems that require new solutions. Lastly, sociopolitical opportunities manifest themselves in existing social relations and network structures.

Shane and Venkataraman (2000) stress that entrepreneurship is particularly the discovery of entrepreneurial opportunities. The process of discovery is cognitive and cannot be achieved collectively. As a result, it is individuals who discover entrepreneurial opportunities. The reason some people are more likely to discover opportunities, is because of their access to information and ability to recognize opportunities. Previous literature provides evidence that there are three aspects that influence an individual's likelihood of accessing information that is important for discovering opportunities. These are life experiences, information search and social ties. Additionally, researchers argue that people differ in their ability to recognize opportunities. This ability is influenced by two aspects, which are the individual's ability to recognize the opportunity in the information they

possess, i.e. absorptive capacity, and the individual's cognitive processing, i.e. their ability to formulate new ends-means relationships. (Shane 2003, 45–55.) Even though entrepreneurial opportunities are discovered individually, the opportunities themselves may be objective phenomena that could be discovered by anyone. In addition to discovery, entrepreneurial opportunities can also be created. Thus, suitable entrepreneurial activities and their effectiveness depend on the nature of the opportunities. (Alvarez & Barney 2007, 11.)

While the discovery of an opportunity is necessary, entrepreneurship also requires action (McMullen & Shepherd 2006, 132). After an opportunity has been discovered, the entrepreneur must make the decision to exploit it. The process of exploitation is influenced by the nature of the opportunity and individual differences. (Shane & Venkataraman 2000, 220.) The individual differences can be any variation among people from demographic characteristics to psychological factors, such as motivations and personalities. Hence, individual differences comprise of both stable and constantly changing aspects, as well as of things that can be acquired (e.g. market knowledge) and those that cannot be influenced (e.g. age). (Shane 2003, 61.) Some researchers stress the importance of cognitive and emotional processes as the antecedent of entrepreneurial exploitation. As potential entrepreneurs differ in their tendency to pursue opportunities, it could be useful to examine these individuals' inner processes. Exploitation tendencies have been associated with subjective cognitive evaluation of the opportunity, as well as with both positive and negative emotions, such as joy, anger and fear. Therefore, even highly positive characteristics of an opportunity cannot alone indicate, whether or not the opportunity will be exploited. (Welpe, Spörrle, Grichnik, Michl & Audretsch 2012.) Entrepreneurial opportunities are also characterized by a high degree of uncertainty. Several researchers argue that because of this uncertainty, it is impossible to know the outcomes of an opportunity at the time of its discovery. (Shane & Eckhardt 2003b; McMullen & Shepherd 2006.) Some have even argued that the presence of uncertainty in the economy is, in fact, the actual source of entrepreneurial opportunities (Sarasvathy, Dew, Velamuri & Venkataraman 2003).

2.2 Concept of corporate entrepreneurship

Several studies suggest that entrepreneurship can also occur within existing organizations. The concept of corporate entrepreneurship has developed over the last four decades and the definitions have varied during this time (Kuratko 2012, 227). As the field is relatively new, there remains to be limitations in the corporate entrepreneurship research. In this thesis the definition by Holt et al. (2007, 40) is used to define corporate entrepreneurship as entrepreneurial behavior and activities within already established organizations.

Generally corporate entrepreneurship is known as the development and implementation of new ideas into an existing organization. At the core of corporate entrepreneurship is the ability of the organization to acquire and utilize the innovative skills and capabilities of its employees. (Hornsby, Kuratko & Zahra 2002; Rutherford & Holt 2007.) In practice corporate entrepreneurship consists of all the entrepreneurial actions of individual employees that may enhance the firm's performance. Therefore corporate entrepreneurship is simultaneously influenced by the individuals' characteristics, the organizational context, and the process used to promote it. Due to this it is a complex and multi-dimensional phenomenon. (Holt et al. 2007.)

Many organizations have recognized corporate entrepreneurship as entrepreneurial behavior that stimulates innovation (Kuratko et al. 2005, 699). Innovation is the process of generating, accepting and implementing new ideas, processes, products or services (Kanter 1988, 20). Innovation is a key element in corporate entrepreneurship where the ultimate purpose is to come up with an idea or invention and to create something new of value from it (Finkle 2012, 879). Some researchers have linked these two concepts together and define it as corporate innovation (Kuratko, Covin and Hornsby 2014a). Even though corporate innovation is recognized as a means of sustaining good performance, few companies truly know how to successfully implement this concept. Kuratko et al. (2014a) suggest that corporate entrepreneurship and innovation research proves that there are four main reasons that prevent corporations from implementing effective corporate innovation. These reasons are understanding what kind of innovation is sought, the coordination of managerial roles, the effective use of operating controls, and the proper training of individuals. Nonetheless, these researchers argue that, if the issues mentioned above are understood and handled appropriately, an organization may create an internal environment that supports effective corporate innovation.

Corporate entrepreneurship can occur within an organization regardless of its size, and it is not only related to the creation of new ventures, but also to other entrepreneurial activities (Antoncic & Hisrich 2004, 520). Corporate entrepreneurship occurs in two types of situations, in the presence of internal innovation and strategic renewal. Internal innovation refers to the birth of a new business within an existing organization, and strategic renewal is related to the incremental changes in an organization through innovation behavior among employees. (Guth & Ginsberg 1990, 5; Åmo & Kolvereid 2005, 8.) Innovation behavior concerns the employee initiatives to introduce new ideas into the organization, and it is closely related to corporate entrepreneurship (Åmo & Kolvereid 2005, 8).

As corporate entrepreneurship is above all associated with individuals' actions, it is reasonable to examine individual characteristics that may determine which employees in the organization act entrepreneurially (Holt. et al. 2007). There are several studies in entrepreneurship research that have examined the personality traits and characteristics of

entrepreneurs, and those that have examined the behaviors of such individuals (Gartner 1989). Entrepreneurship literature suggests that there are certain individual characteristics that can be associated with engagement in entrepreneurial activities. Shane (2003, 61–62) distinguishes non-psychological, such as education, experience and age, and psychological factors, such as motivation and cognition, as attributes that are associated with entrepreneurial action. In their integrated model of corporate entrepreneurship Holt et al. (2007) recognized five characteristics in previous literature that are associated with those individuals who are asked to be entrepreneurial. These characteristics are extraversion, openness, agreeableness, conscientiousness and neuroticism. However their study suggests that these individual characteristics alone, on the contrary to earlier findings, are not associated with corporate entrepreneurship. This is consistent with other studies that also suggest that the differences in individual characteristics alone are not adequate enough in explaining the variance in entrepreneurial activity (Shane & Venkataraman 2000; Shane 2003).

The main reason that corporate entrepreneurship cannot solely be explained by individual characteristics is because it is a highly context-dependent phenomenon. While individuals and their behavior are naturally important parts of corporate entrepreneurship, most research on the concept focuses on how firms can direct these individuals' actions to encourage entrepreneurial behavior and action. Thus, many researchers have examined what organizational characteristics that facilitate entrepreneurial activity and how organizations can create an environment that promotes sustainable entrepreneurial behavior. (Holt et al. 2007; Ireland, Kuratko & Morris 2006b.) There have been findings that organizations can influence the level of entrepreneurial activity among individual employees and managers by creating an internal work environment, in which individuals can take personal risks, challenge existing practices, take new approaches, and endure organizational resistance, uncertainty and stress related to entrepreneurial behavior (Kuratko, Hornsby & Covin 2014b, 39). Hornsby et al. (2002) even introduced a Corporate Entrepreneurial Assessment Instrument (CEAI), which can be used to measure a firm's internal entrepreneurial environment. This instrument and the factors that support corporate entrepreneurship have received wide support in previous research and, hence, are discussed in chapter 2.3.

As corporate entrepreneurship is a fairly new concept, it is not surprising that it has not been extensively studied in different industry contexts. Traditionally corporate entrepreneurship has mainly been treated as a private sector phenomenon (Kearney, Hisrich & Roche 2008.) Knowing that the healthcare industry in Finland is mostly government owned, it may be relevant to look at research about corporate entrepreneurship in public sector organizations, which indicates that there are differences in the factors that stimulate corporate entrepreneurship in organizations, as well as in its outcomes, when comparing private and public sector organizations. (Sadler 2000; Hinz & Ingerfurth 2013.) This

means that the results that have occurred in private sector corporate entrepreneurship research may not apply to public sector organizations. The differences mainly stem from the fact that government owned organizations do not usually have the same kind of freedom in their strategic decisions and operative practices as private organizations (Eskildsen, Kristensen & Juhl 2004), although environmental conditions and circumstances naturally also play a role here, whether an organization is publically or privately owned (Hinz & Ingerfurth 2013).

There is a clear understanding that organizations should promote corporate entrepreneurship in order to achieve positive results (Holt et al. 2007). Corporate entrepreneurship strategy is a useful tool for integrating the different elements of corporate entrepreneurship (Ireland, Covin & Kuratko 2009, 19). In turbulent and competitive business environments, corporate entrepreneurship strategies offer established companies a way to solve problems related to issues such as growth and performance (Peltola 2014, 43). Corporate entrepreneurship strategy is a means through which an organization can allow its employees to engage in entrepreneurial behaviors and achieve better results through continuous innovations. The purpose of corporate entrepreneurship strategy is to create an organizational environment that encourages employees to engage in entrepreneurial behaviors and to innovate. When an organization implements a corporate entrepreneurship strategy, it should make sure that it is vision-directed, as well as guides employees to engage in entrepreneurial behavior and activities. (Ireland, Kuratko & Morris 2006a, 11.)

2.3 Factors that support corporate entrepreneurship

Research suggests that organizations should promote corporate entrepreneurship to achieve better results. Therefore most literature in the field focuses on what organizations should do to support and promote the entrepreneurial behavior of their employees. Because entrepreneurship always involves some degree of uncertainty, institutional support is often necessary, if not essential, to overcome the uncertainty (Sarasvathy et al. 2003, 150). Previous literature argues that corporate entrepreneurship reflects an organization's innovativeness, proactivity and risk-taking propensity, all of which are influenced by a number of factors (Holt et al. 2007). In their research, Hornsby et al. (2002) identified five possible factors, recognized in previous literature, which may encourage entrepreneurial activity in organizations. These factors are the appropriate use of rewards, management support, resource availability, supportive organizational structure, and risk taking and tolerance for failure. Even the results of their research support the observation that there are, in fact, five different internal organizational factors that foster corporate entrepreneurship. These factors, although similar, are slightly different to those men-

tioned above. Based on their research Hornsby et al. label the five factors as entitled management support, work discretion, organizational boundaries, rewards/reinforcement, and time availability. These factors may be useful when examining the level of corporate entrepreneurship in organizations, as well as when developing strategies to promote corporate entrepreneurial behavior among individual employees. (Hornsby et al. 2002, 253–254.)

Researchers stress the importance of managers in encouraging entrepreneurial behavior in organizations, suggesting that managers affect the level of corporate entrepreneurship through their actions. (Holt et al. 2007.) Numerous previous studies emphasize the role of the manager in stimulating and encouraging corporate entrepreneurship (e.g. Hornsby et al. 2002, Kuratko et al. 2005). There is a growing recognition that managers play an important role in encouraging, enhancing and maintaining corporate entrepreneurship (Hornsby et al. 2002, 255), and that the effective entrepreneurial behavior of managers is necessary for achieving the goals of the firm's corporate entrepreneurship strategy (Kuratko, et al. 2005). It is therefore clear that management support should be a primary concern when the aim of an organization is to foster corporate entrepreneurship (Antonicic & Hisrich 2004). In a study about innovation behavior in healthcare, Åmo (2006) found that managers' opinion about entrepreneurship and innovation is positively related to the employee's own innovation behavior. This implies that management support is critical for an employee's decision to behave entrepreneurially.

One of the most important aspects of management support is creating a work environment that promotes entrepreneurial behavior. (Ireland et al. 2006a, 12). This is where management support relates to the other four factors mentioned here that foster corporate entrepreneurship. As the fundamental issue in corporate entrepreneurs is to promote entrepreneurial behavior within the organization (Åmo & Kolvereid 2005, 8–10), managers should naturally encourage risk-taking and accept failures (Kuratko et al. 2005). This is key in creating the environment, in which employees have the opportunity to act entrepreneurially (Ireland et al. 2006a). The roles that managers play in fostering corporate entrepreneurship, however, vary across different managerial levels (e.g. Kuratko et al. 2007; Hornsby, Kuratko, Shepherd & Bott 2009). In the healthcare industry it has been recognized that managers' impact on the decision to behave innovatively varies across hierarchy levels. While those that are ranked higher in the hierarchy are more influenced by their managers, those ranked lower seem to be more concerned with their colleagues' opinions when considering the option of behaving entrepreneurially. (Åmo 2006.)

Especially middle-level managers' actions have been linked to successful corporate entrepreneurship. Kuratko et al. (2005) argue that it is specifically middle-level managers, who promote and define entrepreneurial opportunities, as well as recognize, secure and harness the resources needed for the pursuit of those opportunities. Hornsby et al. (2002)

also recognized in their research that middle-level managers notably influence the organization's entrepreneurial activities, and that this influence may determine the success of these activities. Åmo and Kovereid (2005), on the other hand, suggest that it is the top-level management that initiates and evaluates an organization's entrepreneurial activities. What differentiates the two different management levels discussed here is that the latter mainly focuses on making strategic decisions. While these decisions also play an important role in organizational success, it is the middle-level managers who effectively communicate the information between top-level and operating-level managers. Due to this, it is the middle level management where the actual development and implementation of corporate entrepreneurship activities occurs. (Kuratko et al. 2005, 701–702.) All of this indicates that the influence that managers have on the entrepreneurial activities of an organization varies across the different managerial levels. Consequently, corporate entrepreneurship strategies should be adjusted to fit the needs of each specific managerial level. (Hornsby et al. 2009, 237.)

In their study, in which they recognized five distinct factors that influence corporate entrepreneurship activities, Hornsby et al. (2002, 264–265) entitled one of these factors as work discretion. In this particular study, work discretion was closely related to such attributes as autonomy, creativity, freedom and taking responsibility of one's own job. Based on previous literature, work discretion can be defined as the manager's commitment to tolerate failure, provide freedom for decision-making, reduce over-regulation and control, and delegate authority and responsibility (Hornsby et al. 2002; Kuratko et al. 2005). Researchers have found a positive relationship between work discretion and the number of implemented ideas in an organization (Hornsby et al. 2009, 244). Additionally, research suggests that entrepreneurial opportunities are recognized by those who have discretion, and who are encouraged to be experimental in their work (Kuratko et al. 2014b, 39.)

Work discretion is closely related to organizational control, which can only create value in case it can provide balance between stability and flexibility as the firm exploits its current competitive advantages and explores for future opportunities. Naturally, controls that prevent employees from behaving entrepreneurially, negatively affect the level of corporate entrepreneurship in the organization. However, some controls have been linked to performance, discretion, and producing and sharing knowledge, which indicates that there is a need for some control, even when the goal of the organization is to increase the level of entrepreneurial activity among its employees. (Ireland et al. 2006a, 15). Researchers even suggest work discretion most positively affects innovation performance when the risks are highly controlled (Goodale, Kuratko, Hornsby & Covin 2011, 124). It is reasonable to assume that this is the case in healthcare organizations, as it is an industry that involves people and their health, and so risks should be highly controlled.

Another factor that influences the level of entrepreneurial activity within an organization is organizational boundaries. This concept relates to the rules, procedures and standards that prevent employees from acting entrepreneurially (Hornsby et al. 2005). This factor is defined as the extent to which one perceives the existing organizational boundaries. To create an entrepreneurially friendly internal environment, organizational boundaries should be perceived as flexible and such that they promote entrepreneurial activity, as well as increase the flow of information both externally and internally in the organization. (Kuratko et al. 2014b, 39.) In the existence of excessive organizational boundaries, employees may not have the opportunity to be innovative. For example, when employees are required to follow specific standard operating procedures in their tasks, there is little room for entrepreneurial behavior in those tasks. (Hornsby et al. 2005.) In addition, if there are precise expectations for work outcomes, it will direct employees to complete their tasks in ways that will most likely result in these outcomes (Kuratko et al. 2005, 704). This may also reduce the level of corporate entrepreneurship in an organization.

The most significant reason to why healthcare organizations have traditionally been seen as static and less entrepreneurial is simply that the industry is highly regulated. As the lives of people are at stake, most would agree that it is necessary to have a certain set of standards that regulate the safety and quality in healthcare services, whether they are produced publically or privately. (Borkowski & Gordon 2006.) Entrepreneurial behavior requires opportunity identification and exploitation, and there can be a wide range of barriers to these activities, especially in the healthcare industry. Healthcare organizations often have a culture and structure that prevents employees from behaving entrepreneurially. Employees are expected to carry out narrow and well-defined responsibilities that leave very little room for proactive and innovative behavior. That is because these roles and responsibilities are highly regulated by standards and regulations that control the healthcare environment. Furthermore, the measures and policies of healthcare organizations are firmly linked to service, education and research, which all place certain boundaries for the organizations working in the field. (Phillips & Garman 2006.)

Despite the fact that flexible organizational boundaries generally support an innovation-friendly environment, innovative outcomes emerge most predictively when the innovation process is purposeful and well structured. This is due to the findings that it is easier to achieve productive outcomes in organizational settings when uncertainty is kept at a reasonable level. This in turn can only be achieved by setting realistic organizational boundaries that ensure the productive use of resources and encourage appropriate innovative behavior. (Kuratko et al. 2014b, 39.) As in work discretion, organizational boundaries are most positively related to innovation performance when risks are highly controlled. Despite an organization pursues a more innovative work environment through flexible organizational boundaries, it should still deal with innovative behavior and initiatives critically. That is to say the organization should not excuse deviant behavior just

because it aims to achieve a more innovative environment. Some organizational boundaries combined with risk controls may help in making sure that the innovative behaviors and their outcomes are consistent with the organization's best interests. (Goodale et al. 2011, 120–124.)

The appropriate use of rewards is one of the factors that may encourage corporate entrepreneurial activity. An effective reward system will consider goals, feedback, individual responsibility, and result-based incentives. (Hornsby et al. 2002.) Rewards and reinforcement encourage entrepreneurial behavior when the reward systems are perceived to reward based on entrepreneurial activity and success. There has been concrete evidence on the fact that reward systems that encourage innovative behavior and risk-taking have a strong positive effect on individuals' entrepreneurial behavior. (Kuratko et al. 2014b, 39.) Greater rewards and positive reinforcement have been associated with a greater number of ideas (Hornsby et al. 2009, 242), as well as total satisfaction (Kuratko et al. 2005, 709). Additionally, previous research suggests that appropriate rewards for those individuals who engage in entrepreneurial activities should maintain such actions (Kuratko et al. 2005, 709). Rewards can be divided into intrinsic and extrinsic by nature. The extrinsic rewards center on the financial and other tangible rewards, while the satisfaction that individuals receive after developing an idea, being more in control and from having more responsibility are examples of intrinsic rewards (Kuratko et al. 2005, 707–708). Hayton (2005, 32) argues that one of the ways in which human resource management can influence corporate entrepreneurship is with intrinsic rewards. He also suggests that extrinsic rewards can prevent entrepreneurial activity by limiting the benefits of intrinsic rewards. There is, however, a need for some extrinsic rewards, as they are related to the greater acceptance of risk in the individuals engaging in corporate entrepreneurial activities. The agency theory suggests that corporate entrepreneurs act in the context of uncertainty, and bear risk related to their corporate entrepreneurial activities. It also suggests that employees may be risk averse in case they are only rewarded based on their normal performance, i.e. regular salary. For this reason, it is important to develop a reward system that acts as an incentive for entrepreneurial behavior. (Jones & Butler 1992, 736.)

Time availability is also an internal organizational factor that may foster entrepreneurial activity within existing organizations (Hornsby et al. 2005, 269). Time availability can be defined as the perception that work schedules allow time for the pursuit of innovations. It also includes that the jobs are structured in such ways that they support entrepreneurial activity and support organizational goals. Naturally, for entrepreneurial initiatives to take place there needs to be time available that enables this. It has been demonstrated that when free time is available, corporate entrepreneurs are more likely to consider opportunities for innovation than when their work schedules are very tight and well structured. (Kuratko et al. 2014b, 39.) This may be one reason behind the less proactive and innovative nature of the healthcare industry, as it is often a hectic and busy environment, where

decisions and measures need to be completed immediately. There has however been contradictory results about whether or not time availability is associated with corporate entrepreneurship, as some research indicates that these two are, in fact, not related to each other (Holt et al. 2007, 46). Furthermore, Goodale et al. (2011, 123) argue that there is no support for the assumption that time availability affects innovation performance. With that being said, there has been some evidence that time availability is related to the level of total satisfaction in the job (Kuratko et al. 2005, 709).

2.4 Corporate entrepreneurial behavior

As corporate entrepreneurship has mostly been examined as an organizational-level phenomenon, it is not surprising that most research in the field focus on how companies can promote entrepreneurial behavior among employees. (e.g. Hornsby et al. 2002; Ireland et al. 2006b; Holt et al. 2007.) Considering the importance of the role that individual employees' actions play in corporate entrepreneurship (Holt et al. 2007), it is somewhat strange that the concept has not been thoroughly studied from this point of view. One explanation may be that the individual level research has sought to explain the concept with the help of personality traits and characteristics, while fewer have looked at the behaviors and activities of the entrepreneurial individuals. However, even general research on entrepreneurship suggests that neither individual characteristics nor external forces alone explain why some individuals engage in entrepreneurial activities while others do not. (Shane 2003.) This takes us back to even earlier arguments by Gartner (1989), who suggested that the research on entrepreneurial individuals should be approached from a behavioral perspective.

Åmo and Kolvereid (2005) suggest there are two competing models related to individuals' entrepreneurial behavior within existing organizations. The first one is based on the traditional corporate entrepreneurship literature that focuses on organizations' deliberate strategies to promote employees' entrepreneurial behavior. The second model focuses more on the independent entrepreneurial initiatives of the employees. So instead of looking at corporate entrepreneurship as a top-down process, such as the majority of the research in the field, there are some studies that suggest that the process is also influenced bottom-up (e.g. Heinonen & Toivonen 2007). Most of these studies, however, point out that the concept is best explained by combining both top-down and bottom-up influences (Åmo & Kolvereid 2005; Heinonen & Toivonen 2007). This is not surprising, as the concept is simultaneously influenced by various factors (Holt et al. 2007).

One feature of autonomous corporate entrepreneurial initiatives is that they may or may not be appreciated by managers, or in some cases, managers may not even be aware of these initiatives. Additionally the effects of such initiatives may be incremental, or they

can profoundly change the organization. (Åmo & Kolvereid 2005.) Some studies that have looked at the entrepreneurial behavior in organizations suggest that entrepreneurial initiatives come from people who have an entrepreneurial personality. (Åmo & Kolvereid 2005). This again is consistent with entrepreneurship research that has distinguished entrepreneurs from non-entrepreneurs, and investigated the differences in their personality characteristics (Gartner 1989). Individual characteristics often associated with entrepreneurship include risk-taking propensity, need for autonomy and achievement, goal orientation, and internal locus of control (Hornsby, Naffziger, Kuratko & Montagno 1993, 33). Out of these, need for achievement, locus of control, and risk-taking propensity have received notable support in previous research. More recently characteristics, such as opportunity recognition, self-efficacy, social competence and intuition have also been added to the long list of entrepreneurial traits. (Chell 2008.) While the characteristics mentioned above are defined as entrepreneurial, none of them represent actual activity or behavior, which is the focus of this study. As recognized earlier, many researchers argue that it is useless to try to explain the concept solely by the personality characteristics of individuals (Shane & Venkataraman 2000). So instead of assuming that entrepreneurial initiatives come from people who possess certain personality characteristics, it should be considered that anyone could have the potential to behave entrepreneurially, but the decision to do so is influenced by various environmental, organizational and individual level factors.

Job autonomy has been linked with not only entrepreneurial behavior, but also job performance and satisfaction. Research suggests that job autonomy directly improves an employee's urge and ability to behave entrepreneurially. As employees have more control over their work environment, they are also more motivated and willing to engage in entrepreneurial activities. (de Jong, Parker, Wennekers & Wu 2015.) Employees who have autonomy are also better able to experiment in the work environment, which will allow them to be more creative, come up with new ideas, and possibly develop the ideas even further (de Spiegelaere, Van Gyes, De Witte, Niesen & Van Hootegem 2014). This is in line with the study of Hornsby et al. (2009), which suggested that there is a positive relationship between work discretion, a concept strongly related to autonomy, and the number of ideas implemented in an organization. Autonomy has also been positively linked to opportunity recognition (Kuratko et al. 2014b). Thus, drawing from previous research, pursuing increased autonomy and freedom at one's job can be considered as part of entrepreneurial behavior. Although job autonomy has been recognized as a component of entrepreneurial behavior, what remains a matter of debate is whether the relationship is direct or whether it is mediated by other factors (de Spiegelaere et al. 2014).

Entrepreneurial behavior is defined as an individual employee's engagement in the creation, introduction and implementation of changes in the organization, however incremental they may be. Entrepreneurial behavior is often linked to features such as innovativeness and proactivity. (Okhomina 2010; de Jong et al. 2015) Innovation is considered

as an important part of the entrepreneurial process and, according to Shane (2003), innovation of some sort is always a feature of entrepreneurial behavior. Entrepreneurial behavior is sometimes even defined as innovative work behavior of individual employees that contributes to organizational success. (de Jong & den Hartog 2010). Innovativeness refers to one's willingness to engage in and create new ideas that may lead to new organizing ways. Proactivity on the other hand is about being self-imposed and taking responsibility for shaping and creating future opportunities. (Lumpkin & Dess 1996; Shane 2003.) Innovativeness and proactivity are both related to an employee's urge and ability to think creatively and outside the box, and take initiatives to solve and prevent both present and future problems and possible threats, while simultaneously seeking for new opportunities and ideas. The abilities to look forward, challenge existing practices, and take responsibility for shaping one's future are therefore also critical components of entrepreneurial behavior. (Okhomina 2010; de Jong et al. 2015.)

Entrepreneurial opportunities always involve some degree of uncertainty, as the outcomes of these opportunities are unknown at the time they present themselves (e.g. Shane & Eckhardt 2003b). Therefore entrepreneurial behavior will always include taking risks (de Jong et al. 2015). The impact of uncertainty on entrepreneurial behavior, however, remains a matter of debate. Some suggest that the decision to exploit an opportunity is an outcome of less perceived uncertainty, while others believe it is the outcome of the willingness to bear uncertainty. Despite of this, it is clear that uncertainty creates doubt, which may prevent individuals from pursuing entrepreneurial opportunities. (McMullen & Shepherd 2006.) As entrepreneurial behavior requires the decision to act on the discovered opportunities under high degree of uncertainty, it could be perceived as risky activity. Hence, entrepreneurial individuals are often defined as people with a high risk-taking propensity. (Shane 2003, 103.)

There are a few studies that examine corporate entrepreneurial actions on an individual level. Most of these studies, though, focus on individuals in managerial positions, once again neglecting the role of individuals regardless of their position in the organization. (e.g. Hornsby et al. 2002; Hornsby et al. 2009.) Kuratko et al. (2005) argue that corporate entrepreneurship activities are developed and implemented in the middle-level management, while Hornsby et al. (2002) suggest that corporate entrepreneurship activities are initiated by the middle-level managers. Nonetheless, studies that examine the corporate entrepreneurship actions of middle-level managers, stress the supportive role of these individuals, emphasizing that managers often find themselves in an evaluative position, while the actual entrepreneurial initiatives emerge from individuals in lower organizational levels (Kuratko et al. 2005, 705). Additionally, some of the researchers who have focused on the entrepreneurial actions of managers propose that studies in corporate entrepreneurship have previously managed to ignore the different groups within an organi-

zation (Hornsby et al. 2009). So, even though it is reasonable to assume that entrepreneurial activity occurs in different ways depending on the position and role of the individual in the organization, there seems to be quite limited research that takes this into account.

Shane and Venkataraman (2000) argued that the process of discovering entrepreneurial opportunities is cognitive and, therefore, it is individuals who discover the opportunities. Moreover, these researchers suggested that the decision to exploit an opportunity is also influenced by individual differences. Hereby, it may be fruitful to examine the individual differences in e.g. access to information, ability to recognize opportunities, and demographic and psychological characteristics, that may determine whether the individual acts entrepreneurially also within an organizational setting. While the cognitive processes of entrepreneurial individuals have been of interest in entrepreneurship research, the subject has been less studied in the field of corporate entrepreneurship. Although the studies about entrepreneurial cognition could be applied to the context of corporate entrepreneurship, researchers argue that there exist certain role expectations within organizations, which makes this difficult. This is because these role expectations impact the entrepreneurial cognitions resulting in differences between the cognition of corporate entrepreneurs and independent entrepreneurs. (Corbett & Hmieleski 2007, 104–105.) This stems from the social cognitive theory, which suggests that human behavior, cognition and personal factors, as well as the environment, are all connected and have significant impact on each other. Changes in the environment, for example, will therefore result in changes in cognition and behavior as well. (Corbett & Hmieleski 2005, D2.)

Emotions have also been linked to the decision to act entrepreneurially (Welpe et al. 2012). Research suggests that individual cognition and behavior are both influenced by the emotions and feelings that these individuals experience (Baron 2008). Grichnik, Smeja and Welpe (2010) argue that emotions change perception and decision-making by influencing an individual's cognition. Emotional experiences can therefore have significant impact on cognitive biases, which influence the decision to behave entrepreneurially. Emotions have also been linked to creativity and opportunity recognition, as well as the ability to cope with stress. They also impact an individual's ability to create social networks and negotiate, as both of these require some amount of emotional intelligence (Baron & Markman 2000; Baron 2008). Naturally, one would assume that positive emotions foster entrepreneurial behavior, while negative emotions prevent it. In reality, however, the matter is not so straightforward. Some researchers have found a positive correlation between positive emotions and opportunity evaluation. Nonetheless, the researchers have also found that neither positive nor negative emotions predicted the willingness to actually act upon an opportunity. (Grichnik et al. 2010.)

Welpe et al. (2012) studied specific emotions, fear, joy and anger, as antecedents of entrepreneurial behavior. Their study suggests that fear reduces the decision to exploit an

opportunity, while joy and anger increase it. Baron (2008) also suggests that although emotions influence many aspects of cognition and behavior, the effects of these can be various, especially in the domain of entrepreneurship, in which individuals often act under a high degree of uncertainty. Especially the fear of failure has been widely discussed in entrepreneurship research. The fear of failure is often examined as a barrier to entrepreneurial behavior, although research shows that the impact of fear on individual cognition and behavior is dualistic in nature. This means that fear can actually have both beneficial and harmful impacts on the decision to behave entrepreneurially. (Cacciotti & Hayton 2015.) Even though the roles of emotions in entrepreneurial processes have been acknowledged, there are still quite few studies that comprehensively examine this area, which indicates that further investigation is required to receive more reliable results (Grichnik et al. 2010).

Leyden and Link (2015) argue that the entrepreneurial process requires the creation of a social network. In their paper, these researchers suggest that the entrepreneurial process consists of the individual's entrepreneurial characteristics, the creation of a social network, the search for the desired opportunity and eventually the success or failure of this process. This implies that social networks are just as important for the process as individual characteristics and the search and recognition of the actual opportunity. Social networks have been found to promote innovation and reduce uncertainty, and may therefore also increase entrepreneurial behavior (Leyden, Link & Siegel 2014). Previous research has recognized that social skills play a vital role in the success of entrepreneurs (Baron & Markman 2000). One aspect of the entrepreneurial process is the acquisition of resources, and acquiring these resources often requires the persuasion of others regarding the value of the idea. Therefore extensive social networks, as well as persuasiveness are essential for entrepreneurial behavior. (Baron 2008.) Baron and Markman (2000) argue that persuasion and influence, the skills for changing other people's behavior and attitudes, are important for success for not only entrepreneurs, but in various other occupations as well.

One of the aspects of corporate entrepreneurship is that it creates new knowledge, which is the source of competitive advantage. This knowledge is created by individuals or groups, who then diffuse the created knowledge throughout the organization, after which it becomes the foundation for new organizational competencies. (Zahra, Nielsen & Bogner 1999.) During the creation of new knowledge the individual or group converts this knowledge into ideas, which they then share with other organizational members (Zahra 2015, 728). Therefore seeking new knowledge, converting it into ideas and sharing these ideas with others can be considered as part of corporate entrepreneurial behavior. As the creation of new knowledge is such an important part of corporate entrepreneurship, it has also created an interest in the potential links between the phenomenon and organizational learning (Sambrook & Roberts, 2005, 141). Crossan, Lane and White (1999)

created a framework for organizational learning, in which it occurs in three different levels: individual, group and organizational. But while all of these levels are part of the organizational learning process, the pattern starts with the individual, who is the main actor in the process. This is because intuition is a uniquely individual process, which is why the recognition of an opportunity always comes from an individual.

As corporate entrepreneurship has been less studied from an individual's perspective, it is not surprising that there is also scarcity in the research that examines corporate entrepreneurship from this angle specifically in the healthcare context. That is to say, there is very little research about the matter from the perspective of individual healthcare employees, such as nurses, doctors, and other professionals in the field. Most research in this field focuses on unfolding the measures that will enable these professionals to behave more entrepreneurially, considering the concept as a top-down process, which is the prevailing practice in the vast majority of corporate entrepreneurship research. Fortunately, there are some studies that address the issue from an individual and behavioral approach. Åmo (2006) proposed that the innovation behavior of healthcare employees is influenced by their managers and colleagues. The study suggests that the influence of managers is important when an employee is ranked higher in the hierarchy, while the influence of colleagues is more significant in lower hierarchy levels. Phillips and Garman (2006) on the other hand recognized a clear conflict with entrepreneurship when they looked at the career motivations and job satisfaction of healthcare employees. As the healthcare industry is known to be rather stable, industry professional often consider job security and employment stability as important factors for choosing to work in the field. This may indicate that not only is the industry environment less fertile for entrepreneurial behavior in general, but it may also invite individuals with little entrepreneurial motivation and characteristics to work in the field.

2.5 Outcomes of corporate entrepreneurship

It has been acknowledged that corporate entrepreneurship has several positive effects on an organization. Despite of the recognized importance of corporate entrepreneurship for organizational success, there still seems to a limited amount of studies that extensively examine the outcomes of the concept. The existing research does however suggest that corporate entrepreneurship positively influences the performance, profitability and growth of an organization. The concept is also an important aspect of organizational and economic development and wealth creation. Thus, organizations with high levels of entrepreneurial activity tend to achieve better results. (Antoncic & Hisrich 2004.) The problem with measuring the outcomes of entrepreneurial activity is that it often takes several years for such activities to contribute to overall corporate profit. That is to say, corporate

entrepreneurship may have negative consequences on the short-term performance of organizations. (Guth & Ginsberg 1990, 8.) Even though the effects of corporate entrepreneurship on performance can be modest in the first years, research does suggest that the concept is generally an effective way to improve the long-term financial performance of a company (Zahra & Covin 1995, 44). Some researchers have even reported that the implementation of a corporate entrepreneurship strategy yields impressive financial results (Kuratko, Ireland & Hornsby 2001, 69).

While most research that does exist about the outcomes of corporate entrepreneurship emphasize its effects on the financial measures of performance, the concept may also be associated with the non-financial measures, such as job satisfaction, affective commitment to the organization and turnover intentions. All of these represent attitudes toward one's job and organization. Job satisfaction refers to the favorable emotional state that comes from evaluating one's job experiences, while affective commitment represents the employee's emotional attachment to the organization. (Holt et al. 2007; Rutherford & Holt 2007.) Turnover intentions reflect the employee's conscious willingness to leave the organization and it is strongly related to affective commitment (Tett & Meyer 1993, 262). Rutherford and Holt (2007) found in their study that corporate entrepreneurship mediates the relationship between process, context and individual variables and the above mentioned outcomes. This indicates that corporate entrepreneurship does have an effect on these non-financial measures, although the effect may not be as direct and obvious.

Lumpkin and Dess (1996, 154–155.) suggest that job satisfaction is one important non-financial measure when considering the effect of an entrepreneurial orientation on organizational performance. Previous research on the relationship between corporate entrepreneurship and job satisfaction shows that the relationship is reciprocal. While some researchers suggest that job satisfaction could have a mediating effect on corporate entrepreneurship (Kuratko, Hornsby & Bishop 2005, 281), others, in contrast, argue that it is corporate entrepreneurship that has the mediating effect on job satisfaction (Rutherford & Holt 2007). Most studies on the relationship between entrepreneurship and job satisfaction suggest that the relationship is actually mediated by the increased amount of freedom and autonomy (Lange 2012). Hytti, Kautonen and Akola (2013) analyzed the effect of employment status and work characteristics on job satisfaction among Finnish professionals and discovered that high autonomy, as well as variety and significance in assignments improved job satisfaction. Although this study does not refer to corporate entrepreneurship directly, it does provide evidence of the link between autonomy, a characteristic strongly related to entrepreneurial behavior (e.g. de Jong et al. 2015), and job satisfaction. A reciprocal relationship can also be found in previous research about job satisfaction and job performance. While these two concepts are allegedly linked and influence each other, the existing research provides a very wide range of results, suggesting that there is a lack of consensus about the relationship. (Judge, Thoresen, Bono & Patton 2001.) Ultimately

there is clear evidence that job satisfaction and corporate entrepreneurship are positively related, but the various results imply that there is still a lot to be known about the link between these two concepts and how they contribute to organizational performance.

Another important non-financial measure of organizational performance is affective commitment (Lumpkin & Dess 1996, 155), which refers to the employee's attachment to the organization (Silverthorne 2005, 176). Meyer and Allen (1991) define organizational commitment as a psychological state that characterizes the relationship between the employee and the organizations, and that impacts whether or not the employee decides to continue employment in the organization. Thus, affective commitment is strongly associated with turnover intentions. Although there are different themes related to the concept, organizational commitment here refers to affective commitment, which signifies the employee's emotional attachment to the organization. (Meyer & Allen 1991; Meyer & Allen 1997.) Researchers have acknowledged several advantages to having committed employees. There are reasons to believe that organizational commitment leads to higher productivity and better work performance (Silverthorne 2005, 192). Changes in turnover, attendance at work, and job performance are often mentioned as the direct outcomes of organizational commitment. Employees, who experience a strong emotional attachment to the organization, are more likely to stay, while those who experience a weaker emotional attachment are more likely to leave the organization. Research on affective commitment also suggests that employees with strong affective commitment to the organization have higher attendance, work harder and perform better than their counterparts who experience a weaker affective commitment. (Meyer & Allen 1997.) Despite the recognized benefits of affective commitment, very few studies empirically examine the relationship between the concept and corporate entrepreneurship (Rutherford & Holt 2007). Those that do exist, however, suggest that highly entrepreneurial firms are more likely to have committed employees than less entrepreneurial one's (Giannikis & Nikandrou 2013).

Both job satisfaction and affective commitment are good predictors of employee turnover (Griffeth, Hom & Gaertner 2000, 483). As affective commitment, for example, leads to higher attendance at work, it is also associated with turnover intention, which refers to the employee's willingness to voluntarily leave the organization (Tett & Meyer 1993; Meyer & Allen 1997). Out of the non-financial measures of organizational performance mentioned here, the link between corporate entrepreneurship and turnover intention has been studied least. Hereby, there exists very little research about the topic. Only a few studies show that these two concepts may be related to each other by suggesting that highly entrepreneurial organizations have lower turnover rates than their counterparts (Brand 1998; Rutherford & Holt 2007). Additionally, as some studies suggest that corporate entrepreneurship may lead to increased affective commitment, it could be argued that it also has an indirect effect on turnover intention. Most studies about employee turnover

suggest that it has a negative correlation with organizational effectiveness as well as individual performance. This means that lower turnover rates lead to increased effectiveness and employee performance, mostly because lower turnover rates result in lower hiring and training costs, as well as more experienced employees. (Koys 2001; Shaw, Gupta & Delery 2005.) Some studies about turnover, however, have received conflicting results regarding its effect. While both high and low turnover rates could have negative effects on an organization, the effects vary according to the type of organization as well as circumstances. Thus, there is no one optimal turnover level that organizations should pursue because the ideal level will always depend on the context and circumstances. (Glebbeck & Bax 2004, 284–285.)

Corporate entrepreneurship activities, whether formal or informal, enhance the firm's performance also by creating new knowledge. With the help of this new knowledge organizations are able to build new competencies and revitalize already existing ones. Competencies in this case refer to the unique skills that add value to the firm's offering. The new knowledge created by the corporate entrepreneurship activities can also improve the firm's ability to respond to changes in the market. (Zahra et al. 1999.) This is especially important in the Finnish healthcare industry, in which organizations continuously face new challenges and changes. Researchers have recently also become increasingly more interested in how corporate entrepreneurship contributes to organizational learning (Sambrook & Roberts, 2005). Based on the framework for organizational learning created by Crossan et al. (1999), the creation of new knowledge is especially based on the individuals intuiting and interpreting this knowledge. So while corporate entrepreneurial activities creates new knowledge that may enhance the organization's performance, above all it increases the knowledge and competencies of individual employees who intuit and interpret this knowledge.

Despite corporate entrepreneurship occurs differently in public sector organizations as opposed to private, it is recognized as an important part of organizational performance, regardless of the sector. (Kearney et al. 2008; Hinz & Ingerfurth 2013.) Traditionally the healthcare industry has been witnessed as static and highly risk-averse, in which change and innovation have been driven by external forces (Philips & Garman 2006). As the industry is facing significant challenges, due to changing conditions and increasing competitiveness, organizations in this field need to actively seek for ways, through which they can improve their performance. Corporate entrepreneurship has been recognized as a fundamental means of achieving this. (e.g. Hinz & Ingerfurth 2013.) Åmo (2006) suggests that through corporate entrepreneurship healthcare organizations can become more creative, innovative, and entrepreneurial, which can help the organizations to better overcome the changes and challenges that they face. Most research about corporate entrepreneurship and its outcomes in the context of the healthcare industry propose that there is a positive relationship between the concept and overall organizational performance. Results suggest

that corporate entrepreneurial behavior in healthcare organizations is positively related to both financial and non-financial measures of organizational performance. (Åmo 2006; Hinz & Ingerfurth 2013.)

The paradox in corporate entrepreneurship, as in any entrepreneurial projects and initiatives, is that there is a high chance of failure. This is likely to not only impact the organization, but also its individual employees who are involved in these initiatives. (Shepherd, Haynie & Patzelt 2013) While the research in this field is fairly recent and scarce, there are some studies that have examined the negative reactions of employees that result from failed corporate entrepreneurial initiatives. These negative reactions have been associated with job satisfaction, affective commitment, employee turnover and learning. (Shepherd, Covin & Kuratko 2009; Shepherd et al. 2013.) Failure has been especially linked to affective commitment since research shows that those who are less committed to their organizations tend to experience more negative emotional reactions from failure (Shepherd, Patzelt & Wolfe 2011). In some organizations failure is normalized to minimize its potential negative consequences. This means that failure is treated as a normal and necessary part of entrepreneurial initiatives to lower the negative emotional reactions related to it. (Shepherd et al. 2009; Shepherd et al. 2011.) However, researchers suggest that to get the most out of failed initiatives, organizations should regulate the negative emotions by providing social support to build higher self-efficacy among its employees. This is because these negative emotions benefit learning from the failure and, thus, contribute to the success of future initiatives. (Shepherd et al. 2009.)

2.6 Summary of the theoretical framework

An increased amount of studies have recognized that entrepreneurship can also occur within organizations. This phenomenon is called corporate entrepreneurship, which refers to entrepreneurial behavior and activity within already established organizations, in which new ideas are developed and implemented into the organization. (Holt et al. 2007.) The vast majority of corporate entrepreneurship literature suggests that companies should promote it to achieve better results. Thus, most research in this field emphasizes the organizational factors that facilitate it, studying the concept from the organization's point of view. However, corporate entrepreneurship is above all manifested in individuals' actions, which is why it is necessary to understand how corporate entrepreneurial behavior occurs at an individual level, and what the outcomes of such behavior are.

Although most research in corporate entrepreneurship has emphasized the factors that facilitate it, based on the existing literature this study recognizes six distinct behavioral characteristics that make up the components of corporate entrepreneurial behavior. These themes were chosen specifically, as they represent entrepreneurial behaviors, rather than

individual traits and characteristics, although some of these behaviors may be related to those. First of all, research suggests that enterprising individuals are self-imposed and take responsibility for shaping and creating their own future (Lumpkin & Dess 1996; Shane 2003). Thus, looking for new opportunities, pursuing greater roles in one's work environment, and frequently seizing new challenges can be considered as entrepreneurial behavior. Previous research has proposed that social skills are necessary for any enterprising individuals, and especially the ability to persuade and influence others have been recognized as important for the success of new ideas (Baron & Markman 2000; Baron 2008). Therefore changing other people's behaviors and attitudes using influence and persuasion are behaviors that entrepreneurial employees engage in. The creation of new knowledge is a source of new ideas and opportunities, which is why actively seeking for new knowledge and skills is an entrepreneurial activity (Crossan et al. 1999; Zahra 2015). Job autonomy, on the other hand has been linked to employees' urge to behave entrepreneurially, making the pursuit of independence and freedom part of entrepreneurial behavior (de Jong et al. 2015). While entrepreneurial behavior and entrepreneurship in general is considered as a positive phenomenon, it always involves some degree of uncertainty, as the outcomes of such behavior are usually unknown at the time the behavior is conducted. Thus, entrepreneurial behavior requires the individual to be able to behave in such manner, even when the outcomes and opinions of others are uncertain. (Shane 2003; Shane & Eckhardt 2003b)

Two of the common non-financial outcomes of corporate entrepreneurship mentioned in previous literature are job satisfaction and turnover intentions. These concepts represent attitudes towards one's job and organization. Out of these job satisfaction, which refers to a favorable emotional state that comes from evaluating one's job experiences, has received the most attention in previous research about the non-financial outcomes of corporate entrepreneurship (Rutherford & Holt 2007). The relationship between corporate entrepreneurship and job satisfaction has been described as positively reciprocal, suggesting that it may be job satisfaction that impacts corporate entrepreneurship positively (Kuratko et al. 2005) or, on the contrary, corporate entrepreneurship may have a positive impact on job satisfaction (Rutherford & Holt 2007). Either way, previous research clearly indicates that there is a positive link between these two concepts. Turnover intentions, on the other hand, have been studied less as a non-financial outcome of corporate entrepreneurship. The studies that do exist suggest that entrepreneurial organizations have lower turnover rates (Brand 1998; Rutherford & Holt 2007). Previous research implies that job satisfaction is a good predictor of employee turnover (Griffeth, Hom & Gaertner 2000). While there is no clear evidence, whether corporate entrepreneurship is directly associated with turnover intentions, the concept may indirectly decrease turnover intentions through increased job satisfaction. Figure 1 represents the framework for this study,

demonstrating the themes behind corporate entrepreneurial behavior and the chosen outcomes, the effects of which will be analyzed in the empirical part.

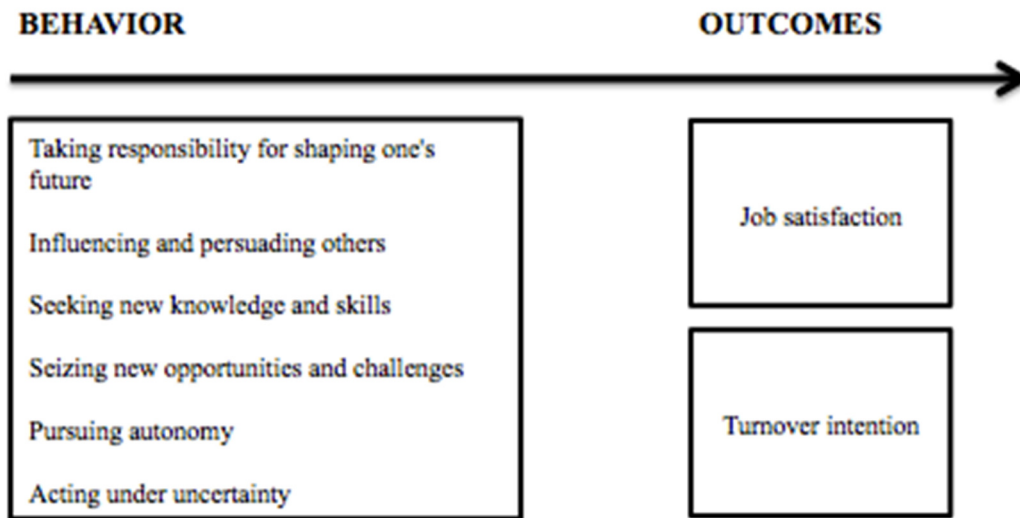


Figure 1 Framework for corporate entrepreneurial behavior and non-financial outcomes

This study focuses particularly on job satisfaction and turnover intention, since these two have received notable attention in the context of healthcare organizations recently. As the Finnish healthcare industry has witnessed significant changes in the past few years due to structural reforms, economic crises and a growing number of patients, healthcare professionals have especially reported increased dissatisfaction and intention to leave the organization or even the entire profession as a result. Although healthcare organizations have tried to intervene by introducing new ways to improve existing practices, the static and highly controlled nature of the industry has left little room for entrepreneurial and innovative approaches. Nevertheless, to respond to these issues, studies have proposed that facilitating corporate entrepreneurship may be an effective means to improve job satisfaction and decrease turnover levels (Heponiemi et al. 2008; Flinkman 2014), making the relationship between these concepts the focus of interest in this study.

3 RESEARCH METHODOLOGY

The goal of this thesis is to provide new insights about corporate entrepreneurial behavior and its relationship with job satisfaction and turnover intention in the context of the chosen Finnish healthcare organizations. As the theoretical part of this thesis provided a review about corporate entrepreneurship, how it is manifested in individual behavior, and what the outcomes of such behavior are, the empirical part of this thesis will examine these behaviors and their chosen outcomes in practice. To be precise the purpose of this study is to examine corporate entrepreneurial behavior among healthcare employees and discover, whether this kind of behavior is related to the employees' job satisfaction and intent to leave their organization. The study will also explore the nature and level of corporate entrepreneurial behavior separately in the examined organizations to see, whether there are significant differences in the occurrence of corporate entrepreneurial behavior when comparing these organization, out of which one represents a private organization and the remaining three are public. The objectives of this study be divided into the following sub-questions:

- How is corporate entrepreneurship manifested in individual behavior?
- Is the corporate entrepreneurial behavior of an individual associated with their job satisfaction and turnover intention?
- Does the nature and level of corporate entrepreneurial behavior differ when comparing the examined public and private sector organizations?

3.1 Research approach

The purpose of a quantitative research is to explain the area of study and test a theory. Hereby a quantitative research always originates from a theory. It is based on the notion that the studied phenomenon can be quantified, measured and conveyed numerically. In economics research it is assumed that there exists recurring events and structures in the society that are not only coincidences. The task of research is simply to consider why these regularities occur and to develop explanations of the society. Advanced scientific explanations can be defined as theories. All of this allows us to understand something limited as part of a complex reality. (Metsämuuronen 2005.) In this thesis the theoretical premises drawn from previous research are assessed with the help of a cross-sectional study, which is probably the most common research design in social studies. It consists of a single measurement, while the data is collected from a population. Although the demographic variables were already available at the time of the survey, this research does not allow for the review of changes in time. In addition, even though these concepts are all part of larger entities, the focus of this thesis is not to examine the whole entity, but

only to understand how entrepreneurial behavior is related to job satisfaction and turnover intention, putting aside other factors that may affect the results. As the aim of this research is to describe and interpret the relationship between the examined concepts, a quantitative research approach was chosen. In this chapter the examined population and the chosen research methods are described in more detail. First the data and its collection methods are explained, after which the chosen research methods are introduced. After this the thesis will demonstrate how the collected data was analyzed, and provide an evaluation of the accuracy and reliability of the study. The results of the analysis are presented in chapter 4.

3.2 Sample and data collection

The data used in this study was collected in 2012 as part of a research project called Innovation Management in Health Care – Practices and Development (In Finnish: Innovaatiojohtaminen terveystalveissa – käytänteet ja kehitys). The project was carried out by the Turku School of Economics Department of Management and Entrepreneurship. The aim of the project was to produce new information on management practices and corporate entrepreneurship in health services, and it was implemented during 2010-2012 in Southwest Finland. The specific chosen organizations for the study were Pulssi, the City of Salo, Turku University Hospital, and the Social and Healthcare Services of Härkätie (Pulssi, Salo, TYKS and HTK). The survey used in this study was sent to 262 participants of the research project in 2012. Out of these, 120 responded to the survey, which gives this study a response rate of 45,8%. This causes some loss among the respondents. However, the deficiency is moderate and relatively even between the different organizations and demographic groups, so the results can be assumed to remain roughly the same regardless of the number of respondents, and the response rate can be considered as sufficient.

The survey used in this research specifically produces data of entrepreneurial behavior, job satisfaction and turnover intentions in the examined organizations. The above mentioned aspects were measured with the Likert scale, developed by Rensis Likert (1932), which is commonly used to measure subjective opinions, attitudes and perspectives (Metsämuuronen 2005). The questions addressed in this thesis were answered with a 4 point Likert scale as follows: 1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree. This order scale allows the values of the variables to have an unambiguous order. As the survey was part of a larger entity, it was not necessary to ask the respondents the demographic variables used in this study, host organization, occupation or year of birth, because these were already available at the time the survey was

conducted. The data was collected from the employees of the four mentioned organizations, out of which three were public sector organizations (Salo, TYKS and HTK) and one was a private sector organization (Pulssi). As the Finnish healthcare industry has traditionally been mostly government owned, most people in the industry work for government owned organizations. Thus the limited amount of respondents representing private sector organizations should be considered as normal in this context. The following table demonstrates the demographics of the respondents:

Table 1 Demographic variables

Variable	Frequency (n)	Percent (%)
Gender		
Female	110	91,7
Male	10	8,3
In total	120	100
Sector		
Pulssi	32	26,7
HTK	20	16,7
Salo	23	19,2
TYKS	45	37,5
In total	120	100
Occupation		
Nurse	73	60,8
Doctor	10	8,3
Other	37	30,8
In total	120	100
Age groups		
Under 40	34	28,3
40-49	29	24,3
50-59	43	35,8
Over 60	12	10
In total	118	98,3

The 120 responses were distributed fairly evenly between the four different organizations, 26,7% representing the private sector organization, and the remaining 73,3% representing a government owned healthcare organization. A significant amount of the respondents (91.7%) were females, while only 10 (8.3%) were male respondents. Additionally, a large proportion of the respondents were nurses (60.8%), while only 10 (8.3%) were doctors. The remaining 30.8% of the respondents in this study represented these

other professionals in healthcare, such as secretaries and managers. The distribution between the amount of nurses and doctors may naturally be related to the gender distribution, as the nurse profession is generally dominated by women. The respondents were quite evenly distributed between the different age groups, although the age group from 50 to 59 had clearly the largest number of respondents (35.8%). The lowest number of responses came from the age group over 60, which is not surprising as professionals in Finland tend to retire between the ages of 60 and 70 (Finnish Centre for Pensions 2015). The average age of the respondents was 47,6.

3.3 Operationalization

A quantitative study requires that the examined concepts are operationalized into issues that can be measured. Matters of interest in a survey research are often abstract, such as attitudes, which means that these attitudes have to be operationalized into concrete and measurable forms. (Vehkalahti 2012, 18.) In this study especially corporate entrepreneurial behavior is a complex and abstract concept, which may be difficult to operationalize into measurable issues. The purpose of the operationalization of the measures is also to demonstrate the theory behind the survey questions, revealing on what knowledge the measurements are based upon. By examining themes related to the concept of corporate entrepreneurial behavior based on previous literature, this study recognized six specific, more measurable themes, which make up the measure of corporate entrepreneurial behavior. The concepts, themes and the theories behind them are presented in table 2. As table 2 demonstrates, corporate entrepreneurial behavior consists of numerous themes that define the concept, while job satisfaction and turnover intention are more straightforward and easier to measure as the risk for interpretation differences is smaller in these than in the complex issue of corporate entrepreneurial behavior. However, despite measuring corporate entrepreneurial behavior can be tricky, the created measure can be considered reliable, as it is based on themes and theories recognized in previous research about the concept.

Table 2 Operationalization

Concept	Themes	Theories	Questions
Corporate entrepreneurial behavior	Taking responsibility for shaping the future	Lumpkin & Dess 1996; Shane 2003	Question 8: Statements 1-6
	Influencing and persuading others	Baron & Markman 2000; Baron 2008	
	Seeking for new knowledge and skills	Crossan. et al. 1999; Zahra et al. 1999	
	Seizing new opportunities and challenges	Lumpkin & Dess 1996; Shane 2003	
	Pursuing autonomy	de Jong et al. 2015	
	Acting under uncertainty	Shane 2003; Shane & Eckhardt 2003b	
Turnover intention	Intention to leave the organization or the entire industry	Tett & Meyer 1993; Meyer & Allen 1997	Question 9 Statements 1-8
Job satisfaction	Favorable emotional states related to job experiences	Holt et al. 2007; Ruth-erford & Holt 2007	Question 12: Statements 1-5

3.4 Research method

The research methods presented in this chapter were chosen to provide answers to the previously explained research questions. As corporate entrepreneurial behavior is a socially constructed phenomenon, a literature review was conducted to understand how the concept has occurred in previous research. After analyzing how corporate entrepreneurial behavior appears in previous research, the thesis moves on to analyze the relationship of this behavior with job satisfaction and turnover intention, as well as the differences in its occurrence across the examined sectors. The specific methods of analysis chosen for the empirical studies are principal component analysis, regression analysis, analysis of variance, and cross tabulation analysis. The detailed research design, including research objectives, data collection methods, and methods of analysis are provided in table 3, after which each method is explained in more detail.

Table 3 Research design

Objective	Data collection	Method of analysis
Corporate entrepreneurial behavior	Previous literature & Survey responses	Literature review, Analysis of variance & Cross tabulation analysis
Association of corporate entrepreneurial behavior and the chosen demographic variables with job satisfaction and turnover intention	Previous literature & Survey responses	Principal component analysis & Regression analysis

3.4.1 *Principal component analysis*

The purpose of principal component analysis is to simplify a complex phenomenon by summarizing information and striving to describe it with a smaller number of variables. Principal component analysis is very similar to factor analysis in practice, but theoretically these two are quite different. In both methods the goal is to compress information by describing the sample with a smaller number of variables. In principal component analysis this is achieved by creating principle components, which represent variable groups in which the variables are highly correlated. These variable groups are called principal components. In principal component analysis the intention is to form independent linear combinations from the observed variables. Thus, this method allows the variation of one variable to be explained with the help of the variation of other variables. So while factor analysis aims to uncover latent variables from a sample, principal component analysis strives to create variable groups from the observed variables. The data used in this thesis was analyzed with the help of principal component analysis, as this method allows for the information to be compressed into a simpler form and enables a more precise analysis of the data. (Metsämuuronen 2005, 601–602; Nummenmaa 2004, 332–344.) Hereby, principal components were formed from the different areas of the survey (corporate entrepreneurial behavior, job satisfaction and turnover intentions) with the principal component analysis.

Corporate entrepreneurial behavior was examined in the survey with seven Likert scale statements, which measured the behavioral themes recognized in previous research about corporate entrepreneurial behavior. These statements formed only one principle component that contained variables from one to six. The 7th variable, which was associated with non-compliant behavior, was left out of the principle component, as it was not explained well in the chosen solution. The work-related attitudes were also examined in the survey

with Likert scale statements. Statements concerning turnover intentions formed two principal components, with the other representing a respondent's intention to leave the organization, and the other representing the willingness to leave the entire industry. Statements related to job satisfaction formed only one principle, which included all of the five statements measuring the respondents' job satisfaction. The created principal components were then utilized in examining the relationship between the concepts. These principal components and the results of the analysis are presented in more depth in chapter 4.

3.4.2 Regression analysis

Simple linear regression analysis examines the linear correlation between variables. The correlation describes the connection between two or more variables, but does not describe the quality of these connections. That is to say, regression analysis can only provide information about the level of dependence between two variables. In this thesis the aim is to uncover, whether there are correlations between corporate entrepreneurial behavior, and job satisfaction and turnover intention. Regression analysis will help discover the relationship between these concepts. Job satisfaction and turnover intention represent the dependent variables, while corporate entrepreneurial behavior and the chosen background variables (organization, occupation and age group) represent the independent variables. Gender was not chosen as a background variable for further analysis because the number of male respondents was too low for valid results. A general assumption in simple linear regression analysis is that there are linear correlations between the independent variables and the dependent variable, but that the independent variables do not correlate too strongly with each other. By drawing conclusions from previous research in the field, it can be assumed in this research that there are linear correlations between corporate entrepreneurial behavior and job satisfaction and turnover intention. Without enough correlation, no sufficient regression models can be created. However, if the correlation between explanatory variables is strong, it results in problematic multi-collinearity. In practice there is always some correlation between independent variables, but this only becomes a problem when the multi-collinearity is too strong. This can be reviewed with the help of VIF-values, Tolerance (TOL), and Quality Index (CI), which will be provided in more depth as the results are analyzed in chapter 4. (Metsämuuronen 2005, 658–672; Nummenmaa 2004, 297–317.)

3.4.3 *Analysis of variance*

Analysis of variance (ANOVA) examines, whether two or more group averages differ statistically significantly from one another. In this study the central idea in analysis of variance is to compare the means in corporate entrepreneurial behavior between different groups, using Oneway ANOVA. Each variable that was related to corporate entrepreneurial behavior was examined separately to get more explicit results. Thus, each of the six variables that construct the principal component of corporate entrepreneurial behavior was used as dependent variable separately. Because one of the main objectives of this study was to examine whether the nature of entrepreneurial behavior differs across the examined organizations, it was necessary to compare the different groups using ANOVA. In order to make the analysis even more comprehensive, all the demographic variables used in this study (organization, occupation and age group) were chosen as factors, over which the averages are compared with each other. As mentioned, each factor was examined separately, providing answers to whether corporate entrepreneurial behavior occurs differently in the examined organizations, occupations or age groups. The results of the analysis of variance are provided in chapter 4.

3.4.4 *Cross tabulation analysis*

Cross tabulation analysis was also used to compare the relationship between corporate entrepreneurial behavior and the different organizations to see, whether the level of corporate entrepreneurial behavior differs when comparing private and public sector organizations. To make the analysis more explicit, corporate entrepreneurial behavior was recoded into a binary variable by dividing the respondent to two groups based on their answers. Average responses from 1 to 2,5 (fully disagree to somewhat disagree) were defined as non-entrepreneurial, while average responses from 2,5 to 4 (somewhat agree, fully agree) were defined as entrepreneurial. Furthermore, the respondents' host organizations were divided into private and public, making this variable binary as well. A cross tabulation table was then created out of these two binary variables to examine and interpret the distribution of corporate entrepreneurial behavior across sectors. In addition, Chi-Square test was used to consider the statistical significance of the cross tabulation analysis. This test is used to resolve whether the variables are independent or associated with each other. The basic assumption is that the variables are independent. (Metsämuuronen 2005, 330–338.) The results of the cross tabulation analysis and Chi-Square test will be presented in chapter 4.

3.5 Data evaluation

Because survey studies often measure abstract issues, the credibility of the research is influenced by multiple factors, such as the content, statistics, culture, language and technical issues. When evaluating the measurements, it is important to consider the validity and reliability of the research. Validity shows whether or not the measurements correspond to the matters of interest, while reliability shows the accuracy of the measurements. Sometimes a measure may actually gauge something completely other than what it was designed to. This is why the validity of the research is the primary criterion when evaluating its credibility. A research is valid when the theoretical and operational concepts match, and the issues are measured comprehensively and accurately. When a research is valid it means that the results can be generalized. Additionally, it is important to pursue reliability of the research, to make sure that no significant measurement errors occur and that the results are repeatable. That is to say, if the research would be conducted again, it would produce similar results. (Metsämuuronen 2005, 58–70; Vehkalahti 2012, 40–41.)

The survey used in this thesis examines the entrepreneurial behavior of the respondents and their job satisfaction and turnover intention, which are subjective and socially constructed matters. This predisposes the data to differences in perspectives and interpretation. The validity issue has been decreased by using questions in the survey, which are based on previous research in the field. (Metsämuuronen 2005, 64–66.) Thus, the measures used have been developed based on previous literature to reduce variations in interpretation. As the number of responses to the follow-up survey was 120 units, the response rate landed in 45,8%, which can be considered moderate in this type of study. In addition, as noted earlier in this chapter, the loss in respondents is relatively evenly distributed among the different respondent groups. This means that the results can be assumed to remain roughly the same regardless of the response percentage, and therefore the sample can be considered as fairly representative. The representativeness of the responses can be evaluated by comparing the socio-demographic characteristics of the sample and the entire population with non-response analysis. By doing so, the sample of this research proves to be comparable with the entire population, which means that there is no significant structural bias in the sample. In other words, the sample corresponds to the population of all employees in the four examined organizations.

The reliability of this study is reviewed by examining the internal structure and the compatibility of the variables in the principal components, which were formed with the principal component analysis. The underlying assumption is that the variables have measured somewhat same objects and the associations between these objects come across in the correlation coefficients. A correlation matrix is suitable for principal component analysis when the significance of the KMO is over 0,5 and the Barlett's Test under 0,05, which both measure whether or not the chosen solution has enough correlation. Both of

these measures were achieved in the analysis. The reliability was tested with the help of Cronbach's Alpha, which is based on the correlation of the variables. Cronbach's Alpha is calculated on the basis of the number of average correlations between variables and statements. The higher the value of alpha (closer to number 1), the more accurate the measure is considered to be. The value of alpha should be at least 0,6 for the structure of the principal component to be considered reliable. This was true for all the principal components created based on the data of this research. (Nummenmaa 2004, 297–317.)

Moreover, the reliability of the regression analysis can be considered with the help of some key ratios. The suitability of the model can be viewed with the help of analysis of variance, in this case, the F-test. The model can be considered suitable, if the result of the analysis of variance is statistically significant ($p < 0,05$), which is true in this research. Additionally, if the suitability of a regression model can be considered with the help of the coefficient of determination, i.e. the ratio that communicates how much of the variation of the explained variable can be described with the model. In this research the coefficient of determination in the first regression model 46,1%, and the second model 35,2%, meaning that the models explain 46,1% and 35,2% of the variations in job satisfaction (model 1) and turnover intention (model 2). These percentages are moderate and typical in this type of research. To consider the reliability of the regression models, it should also be examined whether or not the explanatory variables are suitable, and are they co-linear or not. (Nummenmaa 2004, 297–317.) This will be considered in more depth as the results are presented in chapter 4.

4 RESULTS

In this chapter the results of the study are presented, using the methods explained in the previous chapter. First the results of the principal component analysis will be provided. Later, the relationship between these principal components, as well as some background variables will be analyzed with regression analysis. Previous research in the field supports the argument that corporate entrepreneurship and job satisfaction are positively related to each other (e.g. Lumpkin & Dess 1996; Rutherford & Holt 2007). The results of this study are in line with this argument. The analysis conducted in this chapter will provide proof that the corporate entrepreneurial behavior does, in fact, positively influence job satisfaction. Even though previous research has suggested that corporate entrepreneurship decreases turnover intention, the results of this study provides evidence of a direct positive link between corporate entrepreneurial behavior and turnover intention. That is to say, on the contrary to earlier findings, the corporate entrepreneurial behavior of healthcare employees may actually increase their intent to leave their organization. After the results of the principal component analysis and regression analysis have been presented, the results of the analysis of variance and cross tabulation analysis will be provided to see whether corporate entrepreneurial behavior differs above all in the examined organizations, but also in the examined occupations and age groups.

4.1 Principal components of corporate entrepreneurial behavior, turnover intention and job satisfaction

In the survey used in this study, respondents were asked to provide an answer to statements related to the chosen themes. All of these statements were measured with a 4-point Likert scale, in which 1 stands for “fully disagree” and 4 “fully agree”. The data provided by the responses to the survey was analyzed by examining the variables in more depth with the help of principal component analysis. The statements related to corporate entrepreneurial behavior examined the respondents’ views of the occurrence of entrepreneurial behavior in their work. These statements were related to matters such as looking for greater roles and opportunities, seizing new challenges, as well as seeking more knowledge and skills. In addition, the statements measured the urge to pursue independence and freedom, the ability to plead cases that may provoke resistance, i.e. acting under uncertainty, and the capacity to sell one’s own thoughts and ideas to others. The section that measured entrepreneurial behavior was phrased as follows: “next we will examine your views on the occurrence of corporate entrepreneurial behavior in your work”. These statements from one to six created one principal component, which was named corporate

entrepreneurship. As the statements were highly related to previous research about corporate entrepreneurship, it should come as no surprise that all of them correlated highly with each other, producing a single principal component. Table 4 demonstrates each created principal component and the variables they comprise of:

Table 4 Principal components and variables

Principal Component	Variable
Corporate Entrepreneurship	Looking for opportunities and a greater role
	Selling thoughts and ideas to others
	Actively seeks to increase knowledge and skills
	Try to seize new challenges more than average
	Try to achieve greater independence and freedom
Intention to leave the organization	Able to plead cases which may provoke resistance
	I often consider leaving my job
	I will probably consider seeking a new job within the next year
	I will probably apply for a new job in another organization
Intention to leave the entire industry	Most likely I will leave this organization during next year
	I often consider leaving the entire healthcare industry
	Most likely I will look for jobs outside of the industry
Job satisfaction	Most likely I will leave the industry within a year
	I am so far satisfied with my job
	I am enthusiastic about my job on most days
	I like my job more than the average
	I get satisfaction from my work
	I am not often bored with my work

The statements measuring the respondents' views about possibly changing their job created two principal components. The question measuring turnover intentions was phrased: "the next statements are related to your views about possibly changing your job". The matters discussed were related to considering about resigning from one's current job or leaving the entire industry and planning to seek for a new job. In addition these statements measured the respondents' actual intention to look and apply for a job outside of current host organization, the willingness to leave the organization, and even the intent to leave and look for a job outside the entire health care industry. The first principal component was named intention to leave the organization, as it consisted of variables measuring just this. The second created principal component was named intention to leave the entire industry, as it measured the respondents' willingness to leave the entire healthcare indus-

try. Job satisfaction was measured simply with statements regarding satisfaction, enthusiasm and affection to one's job, as well as whether or not the respondent is often bored at work. The last statements, related to boredom, was recoded into I am not often bored at work to get more reliable results. All of the statements related to job satisfaction created one principal component. The means, standard deviation for each variable and the Pearson correlation matrix can be found in attachment 2. In addition, each of the created principal components, the related variables, the charge and extraction of each variable in the chosen component, as well as Cronbach's alpha are presented in attachment 3.

A correlation matrix (attachment 2) is suitable for principal component analysis when the KMO is over 0,5 and the Barlett's Test significance under 0,05. This was achieved for all principal components in this study. The cumulative coefficient of determination for corporate entrepreneurship was 48,75, which means that the chosen principal component solution explains 48,75% of the variance of variables. This is moderate and typical in behavioral sciences. (Metsämuuronen 2005, 601–614.) The variables in corporate entrepreneurship were strongly in line with previous research about the issue. The most loaded variables (attachment 3) were related to opportunity seeking and proactive behavior and the ability to sell thoughts and ideas to others. Also pursuing more knowledge and skills as well as greater independence and freedom turned out to be important in this component, which is consistent with the findings in previous research. The least loaded variable was related to the ability to plead cases that may provoke resistance. Extraction is a value that describes the percentage by which the variance of an individual variable is explained in the chosen solution (Metsämuuronen 2005, 609). In this principal component variables are explained well, as the extraction is more than 0,5 for each variable. The structure of a principal component can be considered reliable, when the value of Cronbach's Alpha is more than 0,6 (Nummenmaa 2004). For corporate entrepreneurship it was 0,845, which indicates that the structure of this principal component is coherent and reliable.

For the principal component solution related to intention to leave the organization or the entire industry, the overall coefficient of determination was 75,4%, which is rather high. The KMO's significance was 0,793 and Barlett's Test significance under 0,05, which means that the correlation matrix is suitable for principal component analysis. This principle component analysis resulted in two components, one that represents the respondents' willingness to leave the organization, and another that represents their willingness to leave the entire industry. The variable that represented the respondents' probability to actually apply for a job outside of current organization was most significantly loaded in the first principal component, while the consideration of leaving one's current job was the least. Variables that fell in between these two measured the probability of seeking a new job, and the intention to actually leave the organization. The same applied for the extractions. The Cronbach's Alpha for the principal component of leaving the

organization was 0,92, which suggests that the structure of the component can be considered reliable. The variables that measured the respondents' intention to leave the entire industry created another principal component, in which the consideration of leaving the entire industry proved to be most highly loaded, with the likelihood to look for jobs outside the industry falling just slightly behind. The intention to actually leave the industry within a year was less significant for this component. The extraction of each variable in this component was also over 0,5. One variable in this section of the survey, which measured the respondents' willingness to stay in current organization, was left out of the component as it did not load well in either of the created components, and its extraction was less than 0,5, even after the variable was recoded to measure the willingness not to stay in current organization.

Job satisfaction created one principal component, in which the KMO's significance was 0,885 and Barlett's Test under 0,05. The created principal component consisted of all the five variables related to job satisfaction provided in the survey. The most loaded variables measured the respondents' satisfaction with and enthusiasm about their job. The variable that was phrased to measure, whether the respondent gets satisfaction of their work, was least loaded, with the remaining two that measured, whether the respondents' liked their job and were not bored with it, fell in between these two. All of these variables were explained well in the solution, with extractions over the required limits. The created principal component can be considered reliable structurally as the Cronbach's Alpha was 0,894.

The average responses (see attachment 2) related to corporate entrepreneurship were close to the median (2,5), which means that the respondents corporate entrepreneurial behavior can be regarded as somewhat entrepreneurial (somewhat agree) or somewhat non-entrepreneurial (somewhat disagree). Only statement 3 was measurably above the median, suggesting that the respondents are more active in seeking to increase knowledge and skills, than in searching for opportunities and greater roles, and selling their thoughts to others or pleading cases that may possibly provoke resistance. The mean for the urge to seize new challenges and pursuing greater independence and freedom fell in between the variables mentioned above. Despite there is some variation in variables regarding corporate entrepreneurial behavior, all of them are fairly close to the average. What stands out from these figures, is that the means related to turnover intention are significantly lower than those related to corporate entrepreneurship and job satisfaction. This is not surprising, since the variables related to turnover intention measured the respondents' intention and willingness to leave their job, while for corporate entrepreneurship and job satisfaction the statements were about being entrepreneurial, or being satisfied. This can be attributed to the fact that turnover intention is often perceived as a negative phenomenon, while entrepreneurial behavior and job satisfaction are perceived as positive. These figures also indicate that considering leaving one's job is more common than actually

planning for leaving the job, or the industry. For job satisfaction, the figures indicate that the respondents are generally somewhat satisfied with their current jobs.

4.2 Relationship between corporate entrepreneurial behavior, job satisfaction and turnover intention

After creating the necessary principle components for further investigations, the relationships between these components were analyzed with the help of regression analysis. As the aim of this study is to provide answers to whether or not there are causal relationships between the respondents' entrepreneurial behavior, their job satisfaction and turnover intention, regression analysis was chosen as the method to proceed in the study. The specific method used is linear regression, which examines the linear correlation between variables, and describes the strength of these correlations, but does not provide more in depth information about the quality of them (Nummenmaa 2004, 297). Because the study aims to provide evidence of the effect of corporate entrepreneurial behavior on turnover intention and job satisfaction, these outcomes were chosen as the dependent variables, and corporate entrepreneurial behavior as independent variable. Because regression analysis requires only one dependent variable, turnover intention and job satisfaction were examined individually as dependent variables in the chosen solutions. In addition, the demographic variables used in this study were chosen as independent variables for the analyses to make the models more appropriate and to get more in depth information on whether these demographics influence job satisfaction and turnover intention.

Job satisfaction was chosen as the first dependent variable, as previous research has shown more support and evidence about the relationship between corporate entrepreneurial behavior and job satisfaction, than turnover intention. To make the model even more suitable, intent to leave the organization and intent to leave the entire industry were added as predictors of job satisfaction. The demographic variables chosen as predictors for the analyses were age groups, organization and occupation. The results of the regression analysis are demonstrated in table 5.

Table 5 Regression analysis results

Variable	Coefficient	Std. error	t-value	p-value
Model 1 – linear regression, dependent: job satisfaction				
<i>(R Square 0,46; p < 0,01)</i>				
(Constant)	3,414	,261	13,078	,000
Age groups	,038	,047	,805	,423
Organization	-,094	,038	-2,479	,015*
Occupation	,036	,052	,694	,489
Corporate entrepr.	,267	,074	3,632	,000***
Intent to leave org.	-,302	,083	-3,658	,000***
Intent to leave ind.	-,252	,083	-3,030	,003**
Model 2 – linear regression, dependent: intention to leave organization				
<i>(R Square 0,352; p < 0,01)</i>				
(Constant)	3,392	,377	8,996	,000
Age groups	-,059	,059	-,996	,322
Organization	-,006	,049	-,115	,908
Occupation	,082	,065	1,269	,207
Corporate entrepr.	,205	,095	2,145	,034*
Job satisfaction	-,680	,094	-7,211	,000***

***Significance level $p < 0,001$

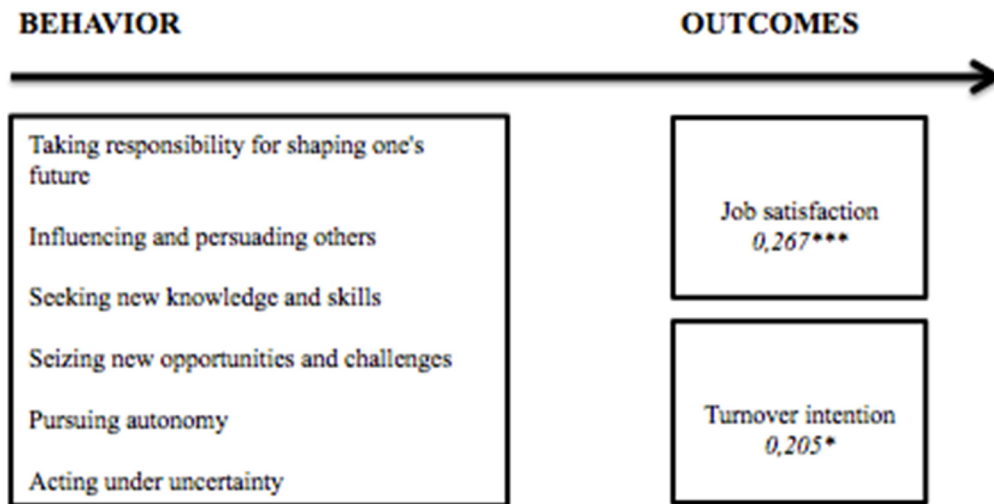
**Significance level $p < 0,01$

*Significance level $p < 0,05$

As can be seen from the results shown in model 1, for job satisfaction, corporate entrepreneurship, turnover intentions and organization can be regarded as statistically significant predictors, with a significance level of $p < 0,05$. These results suggest that when job satisfaction increases by one, corporate entrepreneurship increases by 0,267. Neither the correlation matrix, the VIF values, nor the collinearity diagnostics indicated any problematic multicollinearity. The model can be regarded as suitable for the data, considering that the coefficient of determination was 46% (adjusted 43,1%). The residual plots reveal that the observed values and the predicted values are similar, which indicates that the model fits the data. The coefficient of determination (R Square) indicates that the model explains 46% of the variability of the data. In addition, the significance in F-test of overall significance in the analysis was less than 0,01 ($p < 0,01$), which means that at least one of the coefficients is significantly different from null, i.e. the null hypotheses can be rejected, and the model can be considered as suitable. (Metsämuuronen 2005, 679–686.)

For the second regression model, intent to leave the organization was chosen as the dependent variable to get more specific results on whether entrepreneurial behavior impacts turnover intention. Only a few studies have argued that these two concepts may be related to each other, by suggesting that highly entrepreneurial organizations have lower turnover rates than their counterparts, yet the evidence of this is rather scarce (Brand 1998; Rutherford & Holt 2007). Again, age groups, organization and occupation were also chosen as independent variables. Furthermore, job satisfaction was added to the group of independent variables to make the model more suitable. The results suggest that only corporate entrepreneurship and job satisfaction can be considered as statistically significant predictors of an employee's intention to leave the organization ($p < 0,05$). In this second model none of the demographic variables showed any statistically significant impact on the concept. Interestingly, these results imply that when the intent to leave increases by one, corporate entrepreneurial behavior increases by 0,205, suggesting that employees who behave entrepreneurially are more likely to leave the organization. This is contrary to earlier findings that suggested that corporate entrepreneurship decreases turnover intentions. None of the values that measure multicollinearity indicated any problems. The model can be considered suitable as the residual plots demonstrate that there is no significant difference between the observed and predicted values. The coefficient of determination was 35,2%, which means that as much as 64,8% of turnover intention is not explained in this model. The F-test of overall significance, however, was less than 0,01 ($p < 0,05$), which means that at least one of the coefficients is significantly different from null and this model can be considered appropriate. (Metsämuuronen 2005, 679–686.)

These regression models imply that corporate entrepreneurial behavior does, in fact, influence job satisfaction, and turnover intention in the studied healthcare organizations. The results of the first model is strongly in line with previous research, providing evidence of a direct positive between corporate entrepreneurial behavior and job satisfaction, with only a 0,1% chance of error. As the second model demonstrates, with a significance level of $p < 0,05$, corporate entrepreneurial behavior is also directly positively related to turnover intentions, implying that increased corporate entrepreneurial behavior would result in an increased intention to leave the organization. This is an intriguing finding, as it challenges the current understanding of the relationship between corporate entrepreneurial behavior and turnover intention. The figure 3 represents the framework of this study with the correlations provided by the regression analysis. These results are analyzed and discussed in more depth in chapter 5.



***Significance level $p < 0,001$

*Significance level $p < 0,05$

Figure 2 Framework with correlations

4.3 Corporate entrepreneurial behavior in relation to organization, occupation and age groups

As previous research suggests that corporate entrepreneurial behavior differs across sectors, it makes sense to explore the differences in the studied concepts between the examined organizations. What must be kept in mind though, only 26,7% of the respondents represent a private organization, while the rest work in the public sector. Thus, the sample may not be adequate enough to draw reliable conclusions. Yet, to get more in depth information about whether or not corporate entrepreneurial behavior occurs differently across sectors in the studied organizations, further studies were conducted with the help of analysis of variance and cross tabulation analysis. To make the analysis even more comprehensive the other demographic variables used in this study, occupation and age groups were also used in the analysis of variance in addition to organization. The analysis of variance (ANOVA) showed no statistically significant differences in corporate entrepreneurial behavior between the different respondent groups. This indicates that corporate entrepreneurial behavior occurred roughly the same, regardless of the organization, occupation, and age group of the respondents.

For the cross tabulation analysis, the respondents were divided to private and public sector employees. A cross tabulation analysis was then created with the two different sectors and the corporate entrepreneurship principal component to see how corporate entrepreneurial behavior varies across these sectors. To make the analysis more appropriate, the respondents were divided to non-entrepreneurial and entrepreneurial based on their

answers. As the behavior was measured with Likert-scale statements from 1 to 4, 2,5 was defined as the median. Thus, average responses from 1 to 2,5 (fully disagree, somewhat disagree) were defined as non-entrepreneurial responses, and average responses from 2,5 to 4 (somewhat agree, fully agree) were defined as entrepreneurial responses. The results of the cross tabulation analysis indicated that there occurred no significant differences in the level of entrepreneurial behavior between the private and public sector organizations. These results support the findings of ANOVA, which also suggested that corporate entrepreneurial behavior occurs roughly the same, regardless of the organization of the respondent. These results should be analyzed with caution though, as the amount of private sector employees in the sample was rather limited. The Chi-Square test examines the independency of the variables, with the null hypotheses assuming that the variables are independent. If the p is over 0,05 ($p > 0,05$), as is the case in this study, the results suggest that sectors do not differ statistically significantly in corporate entrepreneurial behavior. In addition, the differences in observed and expected frequencies were not significant. For these reasons, it is not meaningful to draw conclusions about the differences across sectors based on these results. This however, represents an excellent opportunity for further studies, which will be discussed later on.

5 DISCUSSION

Corporate entrepreneurship is defined as entrepreneurial behavior and activities within already established organizations (Holt et al. 2007). Entrepreneurial behavior here refers to individual employees' engagement in the creation, introduction, and implementation of changes in the organization (Okholina 2010). Although the phenomenon is a highly context-dependent phenomenon, it is above all associated with individuals' actions (Holt et al. 2007). Despite the important role that individual employees play in corporate entrepreneurship has been recognized by numerous researchers, most studies in the field focus on examining how organizations can direct employees' actions to encourage entrepreneurial behavior. Thus, most research in the field examines and suggests what organizational characteristics facilitate corporate entrepreneurial behavior and how firms can create an environment that encourages this type of behavior. (Holt et al. 2007; Ireland, Kuratko & Morris 2006b.) This implies that there is a clear lack of research about the concept from the perspective of individual employees. This may be due to the fact that most existing research on corporate entrepreneurship at individual level has tried to explain it with the help of individual characteristics alone, while fewer have looked at the behaviors of entrepreneurial individuals. One of the goals of this thesis, however, was to examine how corporate entrepreneurship is manifested in individual behavior. Therefore both corporate entrepreneurship literature, as well as general entrepreneurship literature was reviewed to discover how entrepreneurial behavior appears at the level of individual employees.

Previous research on corporate entrepreneurship has especially studied the individual characteristics associated with the phenomenon. The most commonly mentioned characteristics are risk-taking propensity, need for autonomy, need for achievement, goal orientation, and internal locus of control. In addition, characteristics such as opportunity recognition, self-efficacy, social competence, and intuition have been mentioned as important entrepreneurial traits. (Hornsby et al. 1993; Chell 2008.) However several researchers suggest that individual characteristics and personality traits alone are not adequate enough in explaining the variance in entrepreneurial activity (Shane & Venkataraman 2000; Shane 2003). So instead of categorizing people to entrepreneurial and non-entrepreneurial based on their personality traits and characteristics, it should be considered that the decision to behave entrepreneurially is always influenced by various environmental, organizational and individual factors. In these circumstances of scarce research about corporate entrepreneurial behavior on an individual level, the measure used in this study to examine corporate entrepreneurial behavior was created based on the various behavioral characteristics found in previous literature about corporate entrepreneurship.

Based on previous literature this thesis recognized six themes that were strongly associated with entrepreneurial behavior. Entrepreneurial individuals take responsibility for

shaping and creating their own future by looking for new opportunities and greater roles and seizing new challenges more often than the average (Lumpkin & Dess 1996; Shane 2003). Previous research has proposed that entrepreneurially behaving individuals pursue greater independence and freedom (de Jong et al. 2015), and persuade and influence others about their ideas (Baron & Markman 2000; Baron 2008). One of the desired outcomes of corporate entrepreneurship is the creation of new knowledge, as it helps organizations to build new competencies and revitalize already existing one's. The creation of new knowledge is largely dependent on individuals who intuit and interpret this knowledge, and then diffuse it to their colleagues. (Crossan et al. 1999; Zahra et al. 1999) Thus, actively seeking for new knowledge and skills is part of corporate entrepreneurial behavior. Moreover, entrepreneurial opportunities always involve some degree of uncertainty, which is why entrepreneurial behavior requires the individual to be able to behave in such manner, even when the outcomes and opinions of others are uncertain (Shane 2003; Shane & Eckhardt 2003b.)

When these recognized behavioral characteristics were studied in the survey, actively searching for new knowledge and skills, seizing new challenges more often than the average, and the pursuit of increased independence and freedom surfaced from the data more frequently than the search for new opportunities and greater roles. Selling thoughts and ideas to others, and being able to plead cases that may even provoke resistance in others got roughly the same, albeit slight support among the respondents. That is to say, corporate entrepreneurial behavior occurs in the examined healthcare organizations especially in the active search to increase knowledge and skills, seizing new challenges more often than the average, and in striving for more autonomy. Interestingly the average respondents somewhat disagreed to looking for new opportunities and greater roles. This may indicate that the healthcare environment has a pretty established set of opportunities and roles, which may restrain the employees from even trying to look for greater roles in the organization. Additionally, while the average responses to most of the questions related to corporate entrepreneurial behavior landed in somewhat disagree, the data implies that the respondents are not very inclined to behave entrepreneurially, supporting previous findings that propose that healthcare organizations are not exactly forerunners in corporate entrepreneurship.

Because the average responses to questions about corporate entrepreneurial behavior landed mostly around somewhat disagree, suggesting that most of the respondents somewhat disagreed to behaving entrepreneurially, one may question what would be the desired level of corporate entrepreneurial behavior in healthcare organizations. Although research suggests that corporate entrepreneurship is a necessary response to today's dynamic and competitive business environments (Hinz & Ingerfurth 2013), and that organizations with high levels of such behavior tend to achieve better results (Antoncic &

Hisrich 2004), this may not be directly true for healthcare organizations. One of the reasons that healthcare organizations have traditionally been witnessed as static and less entrepreneurial is mainly because the industry is highly regulated (Borkowski & Gordon 2006). Although high regulations are known to prevent entrepreneurial behavior, most would agree that they are necessary in the healthcare industry to preserve the safety and quality of healthcare services. After all, it is the lives and health of people that is at stake. Thus, in a healthcare environment entrepreneurial activities may naturally focus more on working conditions, such as minimizing paperwork and reducing bureaucracy, as well as service improvement, letting the mechanical treatment of patients remain controlled by standards and regulations to ensure the safety and quality of the treatments.

Phillips and Garman (2006) recognized an interesting conflict with entrepreneurship as they looked at the career motivations and job satisfaction of healthcare employees. As the healthcare industry is known to be rather stable, industry professional often consider job security and employment stability as important factors for choosing to work in the field. This may explain why the healthcare profession remains to be considered as less entrepreneurial. Considering that healthcare professionals appreciate job security and stability, it may indicate that not only is the industry environment less fertile for entrepreneurial behavior in general, but it may also invite individuals who are less entrepreneurially oriented to work in the field. Despite of this, the results of this study clearly indicated that entrepreneurial behavior in healthcare organizations results in more satisfied employees. So, although the industry may attract less entrepreneurial employees, it is still obvious that corporate entrepreneurial behavior results in the positive outcome of improved job satisfaction. This is good news for healthcare organizations that have been struggling with increased dissatisfaction in the past few years, making corporate entrepreneurship a valid means to tackle this issue.

In addition to finding a positive link between corporate entrepreneurial behavior and job satisfaction, the results of this study also provide evidence of a link between entrepreneurial behavior and turnover intention. Interestingly, these results suggest that corporate entrepreneurial behavior in the examined organizations may in fact result in increased intention to leave the organization. This finding is quite the opposite of what previous research has indicated, raising questions about the prevailing beliefs about the relationship between corporate entrepreneurial behavior and turnover intentions. Most studies that exist about corporate entrepreneurship and turnover suggested that increased entrepreneurial activity results in decreased turnover rates (Brand 1998). However, what the results of this study may suggest is that healthcare organizations being less fertile for entrepreneurial behavior will drive entrepreneurially behaving employees elsewhere, looking for employers that are more supportive of this type of behavior. With growing levels of dissatisfaction as well as little chances to behave entrepreneurially, the studied healthcare organizations may actually be in the process of losing those employees who

have the ability and desire to behave in such manner. What makes this all the more problematic is that these same employees could very well be those who will eventually come up with solutions for the challenges that these healthcare organizations are currently facing.

While entrepreneurially behaving individuals may have the tendency to consider and plan for leaving their jobs, what this study did not measure is the actual turnover levels. What is more, the respondents were more likely to consider leaving their job, but less likely to state that they are actually going to fulfill their intentions within a certain period of time. As this research demonstrates, individuals who behave entrepreneurially tend to look for opportunities for greater roles, seize new challenges, and actively seek to increase their knowledge and skills. This may also contribute to why entrepreneurially behaving individuals consider opportunities outside the organizations more often than their counterparts, as they are more actively looking for opportunities and greater roles in general. What this does not prove though is that these individuals would actually leave the organization. Hence, it is clear that there is still a lot to be known about the link between corporate entrepreneurial behavior and turnover intentions, and how these contribute to actual turnover levels, and also how job satisfaction positions itself in this effect.

While the results of this study provided evidence of a direct positive link between corporate entrepreneurial behavior and the intent to leave the organization, what remains uncertain though, is the desired level of turnover that organizations should pursue. Previous research about the concept has provided conflicting results, as some suggest that low turnover rates contribute to organizational effectiveness and individual work performance, as well as lower hiring and training costs (Koys 2001; Shaw et al. 2005), while others argue that too low levels of turnover could also be harmful for an organization. The results naturally vary according to circumstances, and so the optimal level of turnover always depends on the context in question (Glebbeck & Bax 2004). In a healthcare environment, it should be considered, whether the organizations want new and enthusiastic employees who may bring new perspectives to the otherwise static atmosphere, or whether keeping the more experienced employees in the organization for lower hiring and training costs would be more preferable. However, as these organizations are in significant need to find new creative ways to improve their performance, both financially and non-financially, it is reasonable to assume that keeping these entrepreneurially behaving employees in the organization would be worth striving for.

Previous research has suggested that corporate entrepreneurship occurs differently in public sector organizations as opposed to private (Kearney et al. 2008; Hinz & Ingerfurth 2013). This is because it is a complex and multidimensional phenomenon, which is influenced by various environmental, organizational and individual level factors. When looking at the differences in corporate entrepreneurial behavior in relation to organization, occupation and age groups, the results imply that there are no significant differences in

how much this type of behavior occurs in the different groups. That is to say, that the level and nature of corporate entrepreneurial behavior is roughly the same, regardless of the organization, occupation or age of the respondent. This suggests that in this context it may be insignificant for the organizations, whether they are privately or publically owned. Considering that researchers claim that there exist certain role expectations within organizations, which impact the entrepreneurial cognitions (Corbett & Hmieleski 2007, 104–105), it is reasonable to question whether entrepreneurial behavior occurs in different ways depending on the position and role of the individual in the organization. Surprisingly the results of this study indicated that entrepreneurial behavior occurs roughly the same regardless of the respondent's occupation. This is an interesting finding, as it suggests that corporate entrepreneurial behavior is possible for all employees, regardless of their role in the organization, making everyone in the organization responsible for their own decision to behave in such manner.

While corporate entrepreneurship is above all manifested in individual behavior, and while it is the individual who is responsible for their own behavior, the restrictions of the healthcare environment should not be forgotten. However, perhaps corporate entrepreneurial behavior is virtually the necessary means to introduce changes in the environment, which will then reduce the restrictive nature of healthcare organizations and cultivate even more entrepreneurial behavior. Because this type of behavior has been proved to be desirable for achieving better performance, both financially and non-financially, healthcare organizations as well as individual employees working in the field should definitely take responsibility for making the environment more favorable for this type of behavior. Small acts of corporate entrepreneurship could not only help build a culture that is fertile for entrepreneurial behavior, but also, as the results of this study show, improve job satisfaction, making the practice valuable for both organizations and individual employees. What is more, by cultivating a culture and working environment that is more favorable for entrepreneurial behavior, healthcare organizations may even alleviate the increase in turnover intention of these entrepreneurial individuals who would rather work for employers that are more supportive of this type of behavior. After all, the future success of these organizations may very well be dependent on these innovative and proactive individuals who yearn for working conditions, in which they are empowered to renew not only themselves as individuals, but also the operating environment in unique ways.

6 CONCLUSION AND LIMITATIONS

The Finnish healthcare industry is currently facing significant challenges, due to changing conditions, aging population, and increasing competitiveness among other things. Furthermore, the industry is at the face of major structural reforms, which the government is undertaking. The radical changes have not only had an effect on the productivity of healthcare organizations, but also resulted in mutable working conditions and job satisfaction, and increased levels of turnover. This proposes that healthcare organizations need to come up with new proactive means to sustain and improve performance, as well as attract the right professionals. In previous research corporate entrepreneurship has been recognized as a means of not only improving the financial performance of organizations, but also of improving job satisfaction and decreasing turnover intentions (e.g. Holt et al. 2007; Rutherford & Holt 2007). While the concept of corporate entrepreneurship has been of interest in academic research for several years now, most studies related to the concept have focused on how firms can create an organizational setting that encourages corporate entrepreneurial behavior among its employees, while fewer have examined the phenomenon from the perspective of the individual employees. Because the individual employees play such a vital role in corporate entrepreneurship, this thesis saw the need to examine how the phenomenon is manifested in individual behavior, and how this type of behavior impacts the individuals' job satisfaction and turnover intention.

At first this study examined how corporate entrepreneurship is manifested in individual behavior based on previous literature about the concept. Although little research was found, in which the focus was on the behavioral characteristics of corporate entrepreneurial individuals, drawing from existing entrepreneurship, as well as corporate entrepreneurship research, six behavioral characteristics were recognized that define corporate entrepreneurial behavior in this thesis. These behavioral characteristics indicated that corporate entrepreneurship occurs in taking responsibility for shaping one's future by looking for new opportunities and greater roles, seizing new challenges, actively seeking for new knowledge and skills and pursuing greater autonomy, and the ability to influence and persuade others and act under uncertainty. The influence of this sort of behavior on job satisfaction, i.e. favorable emotional states related to job experiences (Holt et al. 2007; Rutherford & Holt 2007), and turnover intentions, more specifically the employees' intention to leave the organization or the entire industry (Tett & Meyer 1993; Meyer & Allen 1997), was then examined with the help of linear regression analysis, to see whether this type of behavior is directly linked to these attitudes.

The results suggested that corporate entrepreneurial behavior of individuals positively influences their job satisfaction. That is to say, employees who behave more entrepreneurially tend to be more satisfied with their jobs. This supports the findings in previous research, which also implied that these two concepts are positively linked to each other.

The association of corporate entrepreneurship on turnover intention has provided mixed results in the past. The results of this study also raise questions about the relationship between these two concepts, as the results suggest quite the opposite than what most previous research implies. However, this study provides evidence that corporate entrepreneurial behavior of the studied healthcare employees may actually result in the employees' increased urge to consider leaving their current organization. This suggests that the examined healthcare organizations are not fruitful for entrepreneurial behavior and will possibly cause employees with the willingness and ability to behave in such manner to look for employers that will support such behavior. Whether the increased turnover intentions impact actual turnover rates remains unclear. Lastly this thesis examined the differences in the level of corporate entrepreneurial behavior between different demographic variables, such as organization, occupation and age group, as previous research has proposed that the nature of corporate entrepreneurship may vary according to these, and one of the objectives was to examine, whether it occurs differently in the studied organizations. This study, however, showed no significant difference between the different groups, suggesting that corporate entrepreneurial behavior occurs roughly the same regardless of the organization, occupation and age group of the respondent.

There are some limitations to this study, caused mainly by the amount of data, chosen methods and the subjectivity of the studied phenomena. As the data used in this thesis was collected from the follow-up survey of an existing project, the survey resulted in 120 responses, causing some loss in the responses, which may reduce the representativeness of the sample. In addition the themes discussed and measured in the survey are subjective, and based on the respondents' own opinions, predisposing the data to differences in perceptions. Although the measures were based on previous literature, there is always a risk of discrepancy when measuring subjective phenomena, such as entrepreneurial behavior, job satisfaction and turnover intention. In addition, the chosen research methods only provided results about a linear causal relationship between the concepts, leaving no room for the interpretation of the quality of these relations. The causal relations were examined with a cross-sectional study, eliminating the possibility to review changes in time. What is more, the corporate entrepreneurial behavior affected intention to leave the organization with a significance level of 5%, suggesting that the matter should be studied further to reduce the risk of error. Giving that the results provide evidence of the links between the studied concepts, they also create excellent premises for further research, in which the focus should be more on how corporate entrepreneurial behavior occurs in practice, as well as the nature of the relationships between the concept and job satisfaction and turnover intention.

As the first step of this research was to examine how corporate entrepreneurship is manifested in individual behavior based on previous literature, quite soon into the research it was noticed how little literature there actually exists about the concept from this

point of view. Thus, this thesis suggests that it would be necessary for future research to examine how corporate entrepreneurship is manifested in individual behavior in more detail to get more specific results of how the concept actually occurs in a behavioral sense. While it is clear that corporate entrepreneurial behavior is linked to job satisfaction and turnover intention, future research should review the nature of this link in more depth, also considering additional factors that may affect the relationship between these concepts. Although these results provide proof of a direct link between corporate entrepreneurial behavior and job satisfaction on an individual level, it provides no further information on how the increased job satisfaction contributes to the overall performance of these healthcare organizations, which represents an excellent theme for future studies. The results of this study also clearly indicate that corporate entrepreneurial behavior may increase turnover intentions, suggesting that entrepreneurially behaving employees are more inclined to consider leaving their current employer in these healthcare organizations. Future studies may therefore consider whether organizations can prevent these turnover intentions by making the organizational environment more fertile for entrepreneurial behavior. Giving that the results of this study only measure turnover intention, not actual turnover rates, further studies could also tackle the link between corporate entrepreneurial behavior and actual turnover levels to get more comprehensive results on whether this type of behavior actually results in increased turnover levels. While this study suggested that corporate entrepreneurial behavior occurs roughly the same way regardless of organization, age, and occupation, it would be beneficial to examine this in more detail to get more extensive results. Considering that there seems to be quite limited research about corporate entrepreneurial behavior that takes into account the different sectors as well as the different positions and roles in the organization, future studies should definitely address these more thoroughly.

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ATTACHMENT 1 SURVEYS

Innovaatiojohtaminen terveyspalveluissa - käytänteet ja niiden kehittäminen

Tässä kyselyssä innovaatiolla tarkoitetaan esimerkiksi toimintatapojen ja rutiinien muuttamista ja parantamista, uusien käytäntöjen kehittämistä sekä uusien palvelujen ja toimintojen edistämistä työpaikalla.

Aluksi kysymme teihin liittyviä taustatietoja. Kysely jatkuu väittämillä, johon merkitsette teille parhaiten sopivan vaihtoehdon. Kyselyn lopussa voitte antaa palautetta kyselystä tai koko hankkeesta.

1. Sukupuolenne?

Nainen Mies

2. Syntymävuotenne?

Valitse ▼

3. Missä tehtävässä työskentelette?

Hoitajana

Lääkärinä

Muuna, minä?



Innovaatiojohtaminen terveyspalveluissa - käytänteet ja niiden kehittäminen

Tämä kysely on osa "Innovaatiojohtaminen terveyspalveluissa" -projektia. Osallistuite projektin ensimmäiseen kyselyyn viime vuonna. Nyt kyseessä on seurantakysely, jossa tarkastellaan työn tekemisen piirteitä. Kysely sisältää väittämiä, johon toivomme Teidän merkitsevän aina teille parhaiten sopivan vaihtoehdon. Kyselyn lopussa voitte antaa palautetta kyselystä tai koko hankkeesta.

Antamanne vastaukset käsitellään luottamuksellisesti, eikä yksittäisiä vastauksia esitetä missään. Tuloksia tarkastellaan keskiarvoina ja prosenttiosuuksina.

8. Seuraavaksi tarkastellaan näkemyksiänne yrittäjämäisen toiminnan ilmenemistä työssänne.

Valitkaa jokaisen väittämän kohdalta teille parhaiten sopiva vaihtoehto asteikolla 1=täysin eri mieltä,...,4=täysin samaa

mieltä.

	Täysin eri mieltä	Melko eri mieltä	Melko samaa mieltä	Täysin samaa mieltä
1. Olen viimeisen vuoden aikana etsinyt mahdollisuuksia suurempaa suurempaa rooliin työyhteisössäni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Olen viimeisen vuoden aikana myynyt omia ajatuksiani ja ideoitani ideoitani muille.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Olen viimeisen vuoden aikana pyrkinyt aktiivisesti kasvattamaan asiantuntemustani ja osaamistani.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Pysin keskimääräistä ja muita työtovereitani useammin tarttumaan tarttumaan uusiin haasteisiin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Olen viimeisen vuoden aikana pyrkinyt saavuttamaan työssäni suuremman itsenäisyyden ja vapauden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Olen viimeisen vuoden aikana ajanut työyhteisössä sellaisiakin asioita, joiden olen arvellut herättävän vastustusta.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Olen viimeisen vuoden aikana tarkoituksella jättänyt noudattamatta esimiehen antamaa tai jotain muuta tiedossani olevaa minuakin koskevaa ohjeistusta, koska sen noudattaminen ei minusta olisi ollut järkevää.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Seuraavat väittämät liittyvät näkemyksiinne mahdollista työpaikan vaihtoa koskien.

Valitkaa jokaisen väittämän kohdalta teille parhaiten sopiva vaihtoehto asteikolla 1=täysin eri mieltä,...,4=täysin samaa mieltä.

	Täysin eri mieltä	Melko eri mieltä	Melko samaa mieltä	Täysin samaa mieltä
1. Harkitsen usein eroa nykyisestä työstäni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Harkitsen usein siirtymistä kokonaan pois terveydenhuollon tehtävistä.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Jos se on minusta kiinni, työskentelen tässä organisaatiossa vuoden kuluttua.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Todennäköisesti suunnittelen uuden työn etsimistä seuraavan vuoden aikana.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Todennäköisesti etsin ja haen uutta työpaikkaa toisessa organisaatiossa.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Todennäköisesti lähdän tästä organisaatiosta vuoden kuluessa.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Todennäköisesti etsin muuta työpaikkaa terveydenhuollon ulkopuolelta.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Todennäköisesti lähdän terveydenhuollosta vuoden kuluessa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Jos harkitset eroamista ja/tai työpaikan vaihtoa, mikä seuraavista vaihtoehtoista on todennäköisin?

- Hakeutuminen uuteen työtehtävään terveydenhuollossa nykyisen työnantajan palveluksessa
- Hakeutuminen uuteen työtehtävään terveydenhuollossa julkisen sektorilla
- Hakeutuminen uuteen työtehtävään terveydenhuollossa yksityisellä tai kolmannella sektorilla
- Hakeutuminen uuteen työtehtävään terveydenhuollon ulkopuolella (julkinen, yksityinen tai kolmas sektori)
- Hakeutuminen opiskelijaksi, eläkkeelle tai muu jättäytyminen työelämän ulkopuolelle
- En aio hakeutua uuteen työtehtävään
- Muu, mikä?

12. Kuinka hyvin seuraavat väittämät kuvaavat työtänne?

Valitkaa jokaisen väittämän kohdalta teille parhaiten sopiva vaihtoehto asteikolla 1=täysin eri mieltä,...,4=täysin samaa mieltä.

	Täysin eri mieltä	Melko eri mieltä	Melko samaa mieltä	Täysin samaa mieltä
1. Olen toistaiseksi tyytyväinen työhöni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Useimpina päivinä olen innostunut työstäni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Pidän työstäni enemmän kuin ihmiset keskimäärin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Saan työstäni todellista tyydytystä.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Olen usein kyllästynyt työhöni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ATTACHMENT 2

CORRELATION MATRIX

Means, standard deviation and Pearson correlation matrix (n = 120)

Variable	Mean	S.D.	Org.	Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
Organization	2.67	1.231																							
Occupation	1.70	.913	.189*																						
Age groups	2.28	.995	.104	.192*																					
1. Looking for opportunities and a greater role	2.17	.876	.066	.094	.108																				
2. Selling thoughts and ideas to others	2.43	.932	.085	.181	-.018	.524**																			
3. Actively seeks to increase knowledge and skills	3.14	.692	.123	.027	-.074	.470**	.417**																		
4. Try to seize new challenges more than average	2.72	.747	-.028	.108	-.047	.534**	.501**	.487**																	
5. Try to achieve greater independence and freedom	2.6	.834	.044	.117	-.019	.590**	.480**	.420**	.558**																
6. Able to plead cases which may provoke resistance	2.44	.848	.002	.063	.012	.481**	.547**	.222	.451**	.537**															
7. I often consider leaving my job	1.98	.930	.198*	.110	-.019	.066	.061	-.007	.026	.074	.153														
8. I will probably consider seeking a new job within the next year	1.94	.938	.136	.087	-.131	.041	-.010	.091	.048	-.052	-.031	.702**													
9. I will probably apply for a new job in another organization	1.83	.914	.098	.128	-.182*	.057	.088	.173	.038	.018	.036	.657**	.851**												
10. Most likely I will leave this organization during next year	1.71	.804	.056	.104	-.200*	-.061	-.063	.055	-.066	-.115	-.030	.634**	.790**	.845**											
11. I often consider leaving the entire healthcare industry	1.78	.900	.148	.033	.057	.004	-.040	-.139	-.105	-.027	.049	.696**	.473**	.383**	.415**										
12. Most likely I will look for jobs outside of the industry	1.56	.765	.078	.073	-.106	.060	.018	-.007	-.044	-.029	-.008	.528**	.608**	.658**	.644**	.678**									
13. Most likely I will leave the industry within a year	1.56	.765	.141	.146	-.084	-.092	-.088	-.135	-.103	-.069	-.047	.575**	.468**	.466**	.593**	.715**	.756**								
14. I am so far satisfied with my job	3.11	.731	-.287**	-.102	-.004	.146	-.056	.169	.118	.085	-.105	-.503**	-.371**	-.412**	-.392**	-.449**	-.320**	-.365**							
15. I am enthusiastic about my job on most days	3.16	.756	-.269**	.009	.053	.201*	.130	.279**	.289**	.261**	.047	-.449**	-.402**	-.385**	-.411**	-.505**	-.372**	-.430**	.683**						
16. I like my job more than the average	2.96	.741	-.163	.043	.086	.106	.173	.309**	.205	.043	-.393**	-.332**	-.360**	-.334**	-.444**	-.391**	-.346**	.616**	.660**						
17. I get satisfaction from my work	2.91	.770	-.120	.057	.114	.199*	.138	.413**	.176	.232	.063	-.439**	-.335**	-.287**	-.276**	-.468**	-.313**	-.313**	.590**	.680**	.696**				
18. I am not often bored with my work	3.07	.847	.205*	-.004	-.008	-.135	-.198**	-.242**	-.243**	-.216	-.064	.595**	.482**	.397**	.398**	.576**	.447**	.408**	-.504**	-.666**	-.623**	-.604**			

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

ATTACHMENT 3 PRINCIPAL COMPONENTS

Principal component	Variables	Loading	Extraction	Cronbach's Alfa
Corporate Entrepreneurship	Looking for opportunities and a greater role	0,806	0,642	0,845
	Selling thoughts and ideas to others	0,790	0,586	
	Actively seeks to increase knowledge and skills	0,768	0,625	
	Try to seize new challenges more than average	0,762	0,616	
	Try to achieve greater independence and freedom	0,761	0,649	
	Able to plead cases which may provoke resistance	0,585	0,744	
Intention to leave the organization	I often consider leaving my job	0,600	0,693	0,920
	I will probably consider seeking a new job within the next year	0,887	0,865	
	I will probably apply for a new job in another organization	0,928	0,908	
	Most likely I will leave this organization during next year	0,864	0,833	
Intention to leave the entire industry	I often consider leaving the entire healthcare industry	0,911	0,857	0,789
	Most likely I will look for jobs outside of the industry	0,863	0,699	
	Most likely I will leave the industry within a year	0,699	0,812	
Job satisfaction	I am so far satisfied with my job	0,834	0,716	0,894
	I am enthusiastic about my job on most days	0,840	0,790	
	I like my job more than the average	0,758	0,755	
	I get satisfaction from my work	0,696	0,726	
	I am not often bored with my work	0,721	0,668	