



SCHOOL OF
ECONOMICS AND
MANAGEMENT

Womens' Perception of their Role as CEOs and Managers of Business Incubators: leadership, environment and challenges

By

Esthefany Moscoso

Natalia Przybylska

May 25, 2022

Master's Programme in Entrepreneurship and Innovation - New Venture Creation

ENTN19 Degree Project - New Venture Creation

Supervisor: Diamanto Politis

Abstract

Business incubators are a fundamental part of the entrepreneurial ecosystem in Sweden. One of the key actors in these institutions are CEOs and managers. However, research on how they lead and manage is still in the early stages, and it mainly addressed the topic from a male perspective. For this reason, the authors of the present thesis focus on getting a deeper understanding of how women leaders of Swedish business incubators perceive their role and the challenges they experience in what is considered a male dominant environment: the entrepreneurial ecosystem. To achieve the objectives, a qualitative and inductive approach was selected. Empirical data was gathered through semi-structured online interviews with nine CEOs and managers in different business incubators around Sweden. The participants of this research were either leaders of incubators that support the tech and life science industry or incubators that support any field. Afterward, a thematic analysis was conducted, which led to four key findings. The principal contributions were that women leaders perceive their role as the ones in charge of caring about the community within the incubator and that leading is an essential characteristic. In addition, it was found that women leaders deal with internal and external challenges while gender ones do not affect the perception of their role. The findings of the thesis suggest replicating the research addressing only one type of incubator and in other countries to see how the findings compare. Another approach can be to address the perception of different stakeholders of the role of the incubator leader.

Keywords: management, perception, challenges, gender, incubators

Acknowledgements

Throughout the process of writing this thesis, the researchers received a lot of support and would like to acknowledge the people involved. The ongoing feedback from Diamanto Politis has been helpful in shaping our thesis to be relevant for the research field. The researchers also want to express their gratitude to the nine incubator leaders who made time in their busy schedules to share their personal stories, experiences, and perceptions with the researchers. This has not only provided invaluable data for the thesis but also offered a lot of inspiration and confidence to succeed in reaching for the stars for the researchers. Additionally, the discussants have given a lot of constructive criticism on this thesis throughout the process, which supported the researchers in looking at it with a more critical eye, especially Nea Tuovinen, who went above and beyond with the comments and suggestions. Finally, the researchers would also like to thank Edgar Obregón for the feedback on the writing and research approach and the moral support provided from the beginning of the project.

Table of Contents

List of Tables & Figures	5
1 Introduction	6
1.1 Underrepresentation of women in managerial positions	6
1.2 Background studies in Business Incubators	8
1.3 The role of Business Incubators	8
1.4 Aim of study	9
1.4.1 Academic and societal contribution	10
1.5 Outline of the Thesis	11
2 Literature review	12
2.1 Incubators	12
2.1.2 Types of incubators	12
2.1.3 Incubator services	13
2.1.4 Incubator management	14
2.2 Self-perception of the managers' role at incubators	15
2.3 Women in leadership	16
2.4 Self-perception of women in leadership	17
2.5 Challenges for women managers	17
2.5.1 Stereotypes	18
2.5.2 Environmental effects	19
2.5.3 The need for adaptation	20
3 Methodology	22
3.1 Research design	22
3.2 Case selection	23
3.3 Data collection	25
3.4 Data analysis	26
3.5 Limitations	27
3.6 Ethical considerations	29
4 Findings	30
4.1 Perception of their role as incubator leaders	31
4.1.1 Caring about community	31
4.1.2 Solving problems	32
4.1.3 Networking	33
4.1.4 Leading	34
4.1.5 Meeting the expectations from financiers	35
4.1.6 Self-perception as leaders	35
4.2 How women incubator leaders deal with perceived challenges	37
4.2.1 Recruitment of staff	37

4.2.1.1 Recruitment of staff in all industry incubators	37
4.2.1.2 Recruitment of staff in tech and life science incubators	38
4.2.2 Gender-related competition *	38
4.2.3 Managing diversity in the team	39
4.2.4 Team frustration caused by processes and rules associated with getting funding	39
4.2.5 Unexpected day-to-day tasks	39
4.2.6 Recruitment of incubatees	40
4.2.7 Getting finance for incubator	41
4.2.7.1 Vinnova	41
4.3 Gender-related challenges	42
4.4 How the leaders got their position	42
5 Discussion and analysis	44
5.1 Perception of their role as incubator leaders	44
5.1.1 Caring about the community	44
5.1.2 Meeting the expectations of financiers	44
5.1.3 Leading	45
5.1.4 Solving problems	46
5.1.5 Networking	46
5.1.6 Self-perception as leaders	46
5.2 How women incubator leaders deal with perceived challenges	48
5.2.1 Internal challenges	48
5.2.2 External challenges	49
5.2.3 Gender challenges	49
6 Conclusion	52
6.1 Aim of the study and research findings	52
6.2 Implications for academia	53
6.3 Implications for practice	54
6.4 Recommendations for future research	55
References	56
Appendix A- Interview Guide	65
Appendix B- List of Incubators	67

List of Tables & Figures

Table 3.2.1. Overview of the selected cases	25
Table 4.2.1 Overview of perceived internal and external challenges	37
Figure 1: Women's ways of leading: the environmental effect	19
Figure 2: Perception of their role as incubator leaders	30

1 Introduction

The following section will provide an overview of the core phenomenon that this study addresses, followed by the purpose of the thesis.

1.1 Underrepresentation of women in managerial positions

Women are underrepresented in corporate managerial positions (Guirado, Navas, Molero & Ferrer, 2012; Kusterer, Lindholm & Montgomery, 2013; Jayasingam & Cheng, 2009). Among the S&P 500 companies, only 5.8% of CEO positions are taken up by women (Catalyst, 2020). Even in Sweden, which is ranked as one of the most egalitarian countries globally (Hausmann, Tyson & Zahidi, 2010), women managers are underrepresented in middle-management and top corporate positions (Kusterer, Lindholm & Montgomery, 2013).

Therefore, it is well known that men run the business world. But also, there is a trend that says men focus more on occupying different fields than women. Men tend to be enrolled in engineering, manufacturing, science, and construction, and women in areas like education, humanities, social sciences, business, law, health, and welfare fields (World Bank, 2012). Also, Verheul and Thurik (2001) mentioned that women are seen in areas other than management, science, and technology. So, it is evident that segmentation exists between which fields women and men should work or even where each gender is welcome.

In addition, when considering the entrepreneurial ecosystem, women's underrepresentation is also evident. It is well known that women enrolled less in the entrepreneurial field, because there are fewer CEOs leading startups, and they have access to less funding (Mattis, 2004; Bavey, Messel, Jessen, Schuyler, Di Fonzo, Lundqvist & Renoldi, 2021). These discrepancies have led different actors from the entrepreneurial ecosystem to start acting toward a more gender-equal environment by implementing women-focused programs (Sahoo & Lenka, 2016). Some examples are events, networks, and even incubators for women (Jaffe, 2015) but usually without much impact.

The underrepresentation is also evident, especially in critical actors that facilitate more people enrolling in entrepreneurship, such as business incubators. Nowadays, more studies state that business incubators are male-dominated environments (Treanor & Henry, 2010; Gabarret & D'Andria, 2021; Marlow & McAdam, 2011; Jaffe, 2015) and the differences are seen in terms of which gender of tenants is more representative (Marlow, Henry & Carter, 2009; Jaffe, 2015), what type of business field the incubator supports (Marlow & McAdam, 2011; Jaffe, 2015) and what gender is the CEO that runs the incubators (Treanor & Henry, 2010).

For example, several studies help understand the male-dominant environment in incubators. Treanor and Henry (2010) indicates that campus incubators in Ireland tend to be male-dominated in culture, with eleven managers being men and six being women. Also, Ulvenblad, Blomkvist and Winborg (2011) found that only 16% of women working in incubators in Sweden were managers. In addition, it is known that business incubators that support STEM and advanced technologies have fewer women entrepreneurs (Marlow & McAdam, 2011), and all-women tech startups gain less funding (Bavey et al. 2021).

In the same order of ideas, there are three main reasons for studying how women navigate their role as incubator leaders in a heavily male-dominated environment. First, in the entrepreneurship literature, it is common to find only males as the commonly used model to examine important issues (Baker, Aldrich & Liou, 1997). There is a tendency to analyze women in relation to and in comparison to men (Ahl, 2006), but this is not the only way of doing it.

Secondly, the idea of not addressing the capabilities that women can bring to the entrepreneurial field. Women tend to adopt a more participative style than men (Eagly & Johnson, 1990; Trinidad & Normore, 2005), enhancing team engagement and creating an environment where people can actively express their ideas (Trinidad & Normore, 2005). Additionally, Dezs and Ross (2012) found that having a female manager at the top of management improves firm performance when a firm's strategy is focused on innovation.

Thirdly, the underrepresentation of women in guiding roles of key entrepreneurial actors like incubators, can lead to fewer women feeling invited to the entrepreneurial ecosystem, because women lack role models. As Ragins (1997) says, given the low proportion of women in leadership positions, women may benefit more than males from gender-specific examples of achievement. Usually, women tend to judge themselves as less qualified for leadership roles than

men, but this idea changes when they see a female portrayed successfully in a leadership position (Bosak & Sczesny, 2008). That is why it is essential to learn more about leaders in incubators working in the entrepreneurial field because they serve as examples for other women in the ecosystem.

In conclusion, the underrepresentation of women in leadership positions is evident in diverse contexts. Yet, some studies address how important it is to have women in leadership positions.

1.2 Background studies in Business Incubators

In recent years, the studies have shifted into analyzing more in-depth aspects of the incubators, considering business characteristics in management (Oliveira & Vieira, 2016) and addressing the role of the manager incubators (Xu, 2010). For example, Xu (2010) states that the manager of an incubator performs two functions: a counselor or mentor and a connector between resources and entrepreneurs. Additionally, a study by Redondo and Camarero (2017) found that the manager's previous experience in entrepreneurship determines how much access to business networks and efficient business training they can give to incubatees. Yet, the entrepreneurial ecosystem is still under-researched and dominated by conceptual rather than empirical studies (Mukiza, Kansheba & Wald, 2020).

According to the Founder Institute (2021), over 410 incubators, accelerators, and investors in Sweden are in place to support business growth. There is little research addressing management in incubators (Ulvenblad, Blomkvist & Winborg, 2011; Hannon, 2003). There is even less specifically addressing the perception of the role of managers in incubators (Kakabadse, Karatas-Ozkan, Theodorakopoulos, McGowan & Nicolopoulou, 2020). Therefore, there are still gaps in the literature about the entrepreneurial ecosystem in Sweden. For this reason, this study aims to assess them by focusing on describing and analyzing the women manager's role in Swedish Business incubators.

1.3 The role of Business Incubators

Incubators play a significant role in the economy, and that is why it is important to analyze how they operate. For example, ease of doing business is linked to increasing the country's Gross

Domestic Product (GDP), job creation, and long-term productivity increase (Isenberg, 2010). Private initiatives, such as private incubators, make it easier for the government to speed up the process of developing their entrepreneurial ecosystem and stimulate self-sustaining venture creation. That is why governments have encouraged the development of incubators and science parks to support entrepreneurship. Within Sweden, in particular, the focus on innovation is based on the fact that around 40% of employees work at SMEs, and in order to support the employment growth, systematic innovation in the country is necessary (The Swedish Innovation Strategy, 2012).

1.4 Aim of study

This exploratory research studies the phenomenon of being a woman leader in a heavily male-dominant environment within business incubators, institutions that are an essential source for starting new small firms and fostering high-tech startups (Phan, Siegel & Wright, 2005). Business incubators are male-dominated environments (Treanor & Henry, 2010; Gabarret & D'Andria, 2021; Marlow & McAdam, 2011; Jaffe, 2015) that contribute to the underrepresentation of women in leadership positions. There are also fewer women entrepreneurs in STEM and advanced technology fields (Marlow & McAdam, 2011). Nevertheless, research shows many positive aspects of having a woman as a leader in the corporate environment (Peni, 2012; Dezs & Ross, 2012), having a gender-balanced board of directors team (Campbell & Minguez-Vera, 2008; Carter, Simkins & Simpson, 2003) and having role models to look at.

That is why this research wants to address the 16% of women managers in Swedish business incubators found by Ulvenblad, Blomkvist, and Winborg (2011), as a way to get a deeper understanding of how they are navigating their role in what is considered a male dominant environment. This study takes inspiration from Kakabadse et al. (2020) to address the perception of business incubator managers of their role in terms of demands, constraints, and choices. In addition, other studies of self-perception related to leadership and challenges for women are considered, such as dealing with stereotypes (Guirado et al. 2012; Schein, 2001), environmental effects (Dzubinski, Diehl & Taylor, 2019; Ely, 1995), or their need to adapt (Andersen & Hansson, 2011; Snyder & Gangestad, 1986).

The present study aims to deepen the understanding of how women leaders perceive their role in business incubators, including the challenges they face. This information can serve as a model to other women that want to enroll in the entrepreneurial field as incubator managers. Additionally, it will serve as a reference to understand the role of a leader in a business incubator from a woman's perspective that, at the same time, can serve as a benchmark to others in the entrepreneurial ecosystem. According to Orser, Elliott and Leck (2011) researchers had paid little or no attention to the individual incubator manager's self-perception of their role and how they dealt with the job's demands and constraints. In addition, Kusterer, Lindholm and Montgomery (2013) mentioned that future studies should analyze female perceptions higher in the hierarchy. Therefore, to provide current and future women leaders in incubators with a description and common language framework, this thesis aims to answer the following research questions:

How do women leaders of Swedish business incubators perceive their role and what challenges do they experience?

Overall, there is a gap in the literature about the role of the incubator manager, especially focusing on women. There is little research into the role of business incubator managers, which is why there is a call for research in this area (Bergek & Norman, 2008; Patton, Warren & Bream, 2009; Scillitoe & Chakrabarti, 2010). Currently, managers rely on imagination and learning on the job instead of academic research (SUMMIT-II., 2010).

1.4.1 Academic and societal contribution

This thesis further expands the research that has been done so far in business incubator management and specifically in terms of gender. These institutions are an essential part of the entrepreneurial ecosystem. Therefore, the study contributes to three main aspects. First, in recent years several studies about management in incubators have emerged (Hannon, 2003; Bergek & Norman, 2008; Xu, 2010; Ulvenblad, Blomkvist & Winborg, 2011; Oliveira & Vieira, 2016), but they still have not fully explored women management attributes. That is why the current research is essential to introduce this new perspective. Secondly, the research is focused on understanding how women in top management navigate in the executive space considering their challenges. As Dzubinski, Diehl and Taylor (2019) mention, understanding how women deal with norms and

pressures offers theoretical value for a study of women's leadership but also practical value for working towards change. Thirdly, the study will make women aware of existing mechanisms of performance that govern individuals' self-perceptions and biases while working in the role of managers (Saint-Michel, 2018). Understanding how other women perceive their role can empower current and future women managers at incubators to make strategic choices about their role and their efforts to adjust (Saint-Michel, 2018). In conclusion, this thesis will contribute to research in better understanding of the role of women CEO and managers and the challenges they may face in a key entrepreneurial environment that are business incubators.

1.5 Outline of the Thesis

As follows, Chapter 2 involves a review of the literature in the context of business incubators and on the manager's self-perception. Subsequently, Chapter 3 mentions the methodology. Chapter 4 shows the interview findings. After that, Chapter 5 discusses and analyzes the data considering relevant literature. Finally, Chapter 6 mentions the conclusions, research implications, and suggestions for future research.

2 Literature review

As follows, Chapter 2 provides an overview of the existing literature related to the topic. Chapter 2 states the definition of incubators, the types, services, and management. Chapter 2.2 talks about the role of women in leadership, and Chapter 2.3 how women perceive themselves as leaders. Finally, Chapter 2.4 exposes the challenges that the authors considered relevant to the present research focus on addressing women.

2.1 Incubators

The NBIA (2016) defines a business incubator as an agent that creates programs to help businesses grow faster by providing a collection of internal and external resources that are planned, structured and led by a manager. In the same way, Hannon (2003, p.451) refers to incubators as “the business development processes employed to support pre-start, launch and early start and growth phases of a new venture.” These institutions are an essential source for starting new small firms and fostering high-tech startups in particular (Phan, Siegel & Wright, 2005).

In Sweden, incubators arose during the 1970s due to the construction of science parks, and it was one of the first 13 countries to establish one before 1980 (Dahlstrand & Klofsten, 2002). In the country, the entrepreneurial ecosystem is well developed, but studies focusing on understanding business incubators' management are scarce. Nevertheless, the study of Ulvenblad, Blomkvist, and Winborg (2011) clearly shows how business incubators are structured internally. They mention that in terms of gender, only 30% of the board were women.

2.1.2 Types of incubators

Many types of incubators exist. University business incubators, business and innovation centers, science/technology parks, specialized incubators, and virtual incubators are identified by the Center for Strategy and Evaluation Services (2002). But a more general approach was proposed by Grimaldi and Grandi (2003) in their study about the classification of business incubators. They mapped four categories: Business Innovation Centers (BICs), University Business Incubators (UBIs), Independent Private Incubators (IPIs), and Corporate Private Incubators

(CPIs). In addition, Grimaldi and Grandi (2003) indicated that the evolution of a company's requirements drives the diversity of incubating organizations and encourages incubators to distinguish the range of services they provide.

The public incubators segment involves the Business Innovation Centers (BICs) and the University Business Incubators (UBIs). BICs offer essential services such as a physical space, infrastructure, communication connections, information about external financing prospects, and visibility (Grimaldi & Grandi, 2003). On the other hand, the UBIs aim to develop science and technology to revive national and regional economies. They usually tend to lend university resources, faculty time, and talent. These incubators tend to transfer the gained knowledge from universities to companies.

On the other hand, private incubators can be divided into Corporate Business Incubators and Independent Business Incubators (Grimaldi & Grandi, 2003). These institutions look to earn money by charging service fees from incubated companies or liquidity events. In addition, they also offer business advice, access to their network, and the ability to take over office management, hiring, and payroll chores. In general, private incubators and universities incubators focus on providing support during the early stages of the venture (Grimaldi & Grandi, 2003).

2.1.3 Incubator services

The incubator services have evolved and differ between incubators. Ulvenblad, Blomkvist and Winborg (2011) outline three primary services: Selection, business support, and mediation. One of the core activities of business incubators is providing support to tenants. As Blok, Thijssen and Pascucci (2016) clearly define, there are four forms of support: 1. infrastructural support, such as providing a space for rent or for free 2. shared resources like availability of meeting rooms, parking 3. knowledge-based business support like coaching or training, and 4. Provide networking opportunities with other entrepreneurs or people from the external environment. (Bergek & Norman, 2008; Ahmad & Thornberry, 2018). In addition, another aspect to manage is "exit" which is related to making the decision of when ventures need to leave the incubator (Bergek & Norman, 2008).

2.1.4 Incubator management

The management structure of incubators usually consists of the board representation that includes the board members, managing director, the personnel working in the incubator, business advisors, and business coaches (Ulvenblad, Blomkvist & Winborg, 2011). All the members of an incubator are vital for tenants to get better outcomes from the experience of being part of the community.

The incubator's manager is one of the most influential people in the whole structure. The manager's two core functions are: managing the incubator as a company and the incubation process (i.e., assisting clients) (Ahmad & Thornberry, 2018). The incubator process involves supporting the tenant's business development from the ideation phase, recognition of its commercial potential, planning, setting the business strategy, entry into the market, and growth to the point of self-sufficiency (Hannon, 2003). As Patton and Marlow (2011) mention, business incubators give entrepreneurs the proper knowledge and guidance towards business development.

In addition, there is a need to have particular qualities as a manager in an incubator. Ahmad and Thornberry (2018) identified three principal qualities that every Incubator manager needs to have. Firstly, they must be a "people manager" because they need to manage the Incubator Board of Directors, stakeholders, employees, and clients. Secondly, they should have an entrepreneurial background, and thirdly, they must have good communication skills because they need to promote the incubator program in different settings and markets such as with potential clients and diverse stakeholders. The manager needs to be a mediator between private companies, public authorities, research centers, and even universities (Da Silva, Rampasso, Anholon, Ordoñez, Quelhas & Da Silva, 2018). In summary, the incubator manager's role is a combination of a knowledge supplier and an articulator of vast networks of relationships and needs to be competent and skilled for the incubator tenants to get better outcomes (Monsson & Jørgensen, 2016; Xu, 2010).

2.2 Self-perception of the managers' role at incubators

The American Psychological Association (2022) defines the term self-perception as a “ person's view of his or her self or of any of the mental or physical attributes that constitute the self.” Considering this definition, one of the main objectives of this study is to apply this term to the role of incubator CEOs and managers. As the founder of the most commonly used Self-perception Theory, Bem (1972) indicates individuals partially get to know their attitudes, emotions, and other internal states by relating them to their behaviors and circumstances. But also, because these interpretations can be weak, ambiguous, or interpretable, the external environment needs to be considered (Bem, 1972). These statements show that individual self-perception can be described by considering how people behave. Still, it is necessary to consider external factors like the environment to get the whole picture.

The study by Kakabadse et al. (2020) provides a straightforward approach to the topic of how incubator managers perceive their role by using Stewart's (1976a, 1976b) role framework. Kakabadse et al. (2020) found that managers in incubators perceive their primary role as acting as a “supporting mechanism” for incubatee entrepreneurs and their enterprises. Furthermore, Kakabadse et al. (2020) found that managers perceive that their role demands require them to perform multiple roles daily. On the one hand, they need to meet internal incubator targets, recruit suitable tenants, and interview them. In contrast, on the other hand, they need to fulfill their key role, which is supporting the current incubatees. In the same way, managers perceive they have role constraints, which get in the way of fulfilling their role demands. These are related to a constant search for funding, resources, and managing their working time because their role requires longer working hours and multitasking. Lastly, the managers discuss their role choices, which are things they can do to minimize their role constraints. For example, prioritizing, delegating to experienced staff, managing founders' expectations, and building and balancing relationships. (Kakabadse et al., 2020)

The manager at an incubator plays a key role in creating the right environment for the incubatees to develop (Kakabadse et al., 2020). The analysis by Kakabadse et al. (2020) found that incubator managers are under ongoing pressure from both sides, the internal targets, and trying to perform what they deem their most important role, which is supporting the incubatee. Therefore,

further research into the role demands, constraints and choices can demonstrate where the biggest pain points lay for these managers. This way, current and future managers can learn based on how the managers deal with the constraints and the tasks in the incubator.

2.3 Women in leadership

There is limited understanding of the different ways that females lead (Dzubinski, Diehl & Taylor, 2019). Although research has been done into the differences in leadership styles between male and female managers, there is still some debate in the field.

Some studies show no gender differences in leadership styles (Miranda, 2019; Eagly & Johnson, 1990). Specifically, there are no gender differences in choosing an interpersonally oriented versus task-oriented style (Eagly & Johnson, 1990; Guirado et al. 2012). Male and female leaders self-evaluated that they perform leadership in similar ways (Guirado et al. 2012) and adopt a typical behavior of the transformational and transactional leadership styles with similar frequency.

However, there are gender differences when looking into specific aspects of leadership styles. For example, Eagly and Johnson (1990) found that females are more likely than males to lead democratically than autocratically. This leadership style has been associated more closely with female leaders than male leaders. Furthermore, Eagly and Johnson (1990) and Trinidad and Normore (2005) found a tendency for women to adopt a more participative style and for men to adopt a more directive style. A participative leader employs a democratic approach to team engagement and allows the employees to actively express their ideas (Trinidad & Normore, 2005).

A leadership style that has been specifically connected to feminine characteristics is the transformational leadership style (Silva & Mendis, 2017). This style fulfills the social expectations for women (Saint-Michel, 2018) and is based on empowering employees to promote innovative behavior (Bak, Jin & McDonald, 2021). It is characterized by a combination of both task-orientation and people consideration-orientation, making it associated with both masculine and feminine traits (Zhang, Qiu, Dooley & Choudhury, 2021).

2.4 Self-perception of women in leadership

Gender role identity defines the self-belief of the extent to which an individual possesses traits and characteristics that are stereotypically associated with each gender (Zhang et al. 2021) based on the qualities which are seen as ideal for each gender in society (Wood & Eagly, 2009). Although these are based on stereotypes, it is the lens through which people understand themselves, and a few frameworks have been established within management roles. However, it is important to consider that sex is not the same as gender. The way individuals exhibit it is influenced by other external factors such as race, ethnicity, and socioeconomic class (Hoobler, Masterson, Nkomo & Michel, 2016).

Furthermore, in terms of self-perception in leadership, Orser, Elliott, and Leck (2011) found that female participants perceive their leadership as participative and democratic. They feel that they inspire, empower, and grow teammates and employees through others' leadership and by providing opportunities to express themselves and actively participate in decision-making (Baumgartner & Schneider, 2010). Additionally, women described fewer agentic characteristics required for decision-making positions than males and more communal traits (e.g., gentle, affectionate) (Bosak & Sczesny, 2008). These findings suggest that females perceive themselves to lead differently from males.

In addition, females believe to a greater extent that they encounter more challenges in the workplace than male managers (Kusterer, Lindholm, & Montgomery, 2013). Although gender alone does not affect managerial aspirations, female managers who perceive themselves to exhibit more feminine traits are more likely to have lower managerial aspirations (Zhang et al. 2021). Therefore, self-perception amongst women leaders can have an impact on their decisions.

2.5 Challenges for women managers

Women face many, often not clearly visible, challenges when trying to move their way up the hierarchy in an organization (Guirado et al. 2012). This is often defined as the glass ceiling, which can be partly explained by challenges linked to stereotypes and the Role Congruity Theory (Dzubinski, Diehl & Taylor, 2019).

2.5.1 Stereotypes

One of the most prevailing stereotypes within this field is think manager-think male (Guirado et al. 2012; Schein, 2001). It describes the way that females and males perceive that males are more likely to possess the characteristics associated with managerial success (Schein, 2001). For example, this can be seen through the terms used to define leadership, which are usually associated with masculinity (Saint-Michel, 2018). These stereotypes and biases lead to a lowered self-perception of competence and self-efficacy in female managers (Rudman & Phelan, 2010).

The Role Congruity Theory states that prejudice towards women managers stems from the misalignment between the characteristics stereotypically associated with women and those stereotypically assigned to a leader (Eagly & Karau, 2002). Women are expected to exhibit communal characteristics (Saint-Michel, 2018), yet a leader is expected to exhibit agentic characteristics (Eagly & Karau, 2002). Agentic characteristics are, for example, being assertive, controlling, confident, and self-sufficient (Kusterer, Lindholm, & Montgomery, 2013 and communal characteristics include concern for the welfare of other people, for example, being sympathetic, interpersonally sensitive, and helpful (Kusterer, Lindholm & Montgomery, 2013). Additionally, Fagenson and Marcus (1991) found that women believe that a successful entrepreneur has more masculine attributes, therefore, seeing themselves as less of an entrepreneur.

Moreover, women are more penalized than men when acting in a non-androgynous manner (Kark, Waismel-Manor & Shamir, 2012). When a woman manager acts in a forceful or assertive manner may be perceived as unacceptably pushy, whereas a male would be perceived as acting within his role (Kark, Waismel-Manor & Shamir, 2012).

Masculine traits related to leading are favored for managerial roles. However, the findings of (Kark, Waismel-Manor & Shamir, 2012) suggest that displaying behaviors that are stereotypically seen as 'feminine' could lead to higher levels of perceived effectiveness in leadership.

2.5.2 Environmental effects

To understand women’s self-perception of their role as managers of incubators, we need to consider the environment in which they execute their daily activities. The literature differentiates between male-dominant and gender-diverse environments. In this thesis, the authors consider these aspects a critical factor in selecting the study participants.

Dzubinski, Diehl, and Taylor (2019) describe how “context” is related to the organizational leadership culture and is conceptualized in a male-normed to a gender-diverse normed environment, which is illustrated in figure 1. In this way of thinking, the authors created a model describing how women enact executive leadership in four quadrants: glass ceiling, internal barriers, glass cliff, and authentic self. The description of these contexts will help analyze how women behave in incubators depending on whether they are in a male-normed or gender-diverse environment.



Figure 1: Women’s ways of leading: the environmental effect (Dzubinski, Diehl & Taylor, 2019, p. 234)

Ely (1995) found that gender-role stereotypes were more rigidly constructed in male-dominated firms. These environments have fewer than 15 percent of female employees in the male-dominated environment. Also, it is an environment where competitiveness and the expectation of disponibility to work are expected (Longman & Bray, 2017). This environment is

challenging for women to lead successfully (Heilman, Wallen, Fuchs & Tamkins, 2004). In addition, a male-dominant environment tends to replicate aggressive and controlling male attitudes (O'Brien & Rickne, 2016).

On the other hand, the gender-diverse context encourages women to be their authentic selves. They have more space to enact their leadership in a place where gender stereotypes are less enforced (Ljungholm, 2016). It is a space where all views and needs are considered, and a variety of perspectives and collaboration are fundamental guiding principles. (Dzubinski, Diehl & Taylor, 2019). In this type of environment, people are accepted as individuals based on their skills and competencies in a gender-diverse-normed leadership space. In general, an executive-level woman leader can bring her entire authentic self to leadership in this type of setting: her ideas, interests, ways of communication, preferences, and more (Ely, 1995).

2.5.3 The need for adaptation

Due to the biases mentioned above, women developed their understanding that they need to adapt their behavior in some environments to move up in the ranks and often use the strategies that were effective to men (Andersen & Hansson, 2011). This way of thinking could be related to what Petrovic (2008) calls the "Role Making" approach. Individuals do not merely react to the expectations of others; they also play their roles in creating and changing role expectations and communicating those to the role senders.

Furthermore, Glass and Cook (2016) indicated that women experience two types of pressure: pressure to perform and pressure to adapt to the styles of the majority of peers in an environment. Ely (1995) also found that the most common and discussed pressure that women face is the idea of adjusting their behaviors to accommodate gender-role stereotypes that are prevalent in their workplace, especially if it is a male-dominated environment. This adaptation results in women constantly self-monitoring to respond accurately to social situations and provide situationally suitable responses (Snyder & Gangestad, 1986). All of these reflect how women, during their role, constantly change behaviors to adjust to the male-dominant environment. Moreover, experiences in adaptation go further to affect physical aspects. Elliott and Stead (2017) found that women tend to communicate in stereotypically masculine ways, such as by deepening their voices.

In summary, this chapter reviews the literature related to incubators, self-perception of women managers, and the challenges they may face. Incubators help startups grow faster by providing support to the entrepreneurs (Hannon, 2003, p.451). There are four types of incubators which offer different kinds of services (Grimaldi & Grandi, 2003). They give access to a place to work, resources, knowledge-based business support, and networking opportunities (Blok, Thijssen & Pascucci, 2016). One of the key players in the incubator is the manager or CEO (Ulvenblad, Blomkvist & Winborg, 2011) who must be a people manager, have an entrepreneurial background, and have good communication skills (Ahmad & Thornberry, 2018). Not many studies address their self-perception (Kakabadse et al. 2020), especially from the women's perspective. Research has found differences in the way men and women lead (Dzubinski, Diehl & Taylor, 2019; Eagly & Johnson, 1990; Trinidad & Normore, 2005) as well as gender-related challenges women face in typically male-dominated environments (Guirado et al. 2012; Schein, 2001; Eagly & Karau, 2002), like the entrepreneurial ecosystem.

However, as most studies within entrepreneurship use men as subjects (Baker, Aldrich & Liou, 1997), there is no proper representation of women in literature. Therefore, it is crucial to fill this gap in the literature by exploring how women perceive their role as business incubator leaders and the associated challenges.

3 Methodology

The following chapter describes the qualitative approach which was taken during the present thesis. First, a discussion of the research design was made. The following section provides a detailed explanation of the case selections. After that, the data collection, sampling, an in-depth description of the methodology was made, and finally, a description of how the authors analyzed the data was considered. In addition, the end of this chapter is related to exposing the limitations of the present study and some ethical considerations.

3.1 Research design

The primary purpose of the present thesis is to create a clear and in-depth understanding of womens' perception of their role and challenges as CEOs and managers of business incubators. For this reason, the authors selected qualitative research as the method suitable for the objectives of this paper. As Gentles, Charles, Ploeg and McKibbon (2015) stated qualitative research analyses people's perceptions of different events. It is like taking a snapshot of people's perceptions in their natural settings.

Furthermore, by analyzing and understanding how women navigate the role as managers in incubators, the thesis will contribute to the literature gap by considering the women's perspective in business research. In this field of research, many studies have used men as test subjects and therefore have developed theories and models based solely on this group (Baker, Aldrich & Liou, 1997). The authors will focus only on women because they want to delve into the women's perspectives and experiences as managers in business incubators. The insights from this research can help current, and future managers at incubators make decisions within their role and how to adjust (Saint-Michel, 2018) and inspire more women to enrol in entrepreneurship, especially in more senior roles. Overall, there is both theoretical and practical value in understanding how women deal with norms and pressures to work towards change (Dzubinski, Diehl & Taylor, 2019).

In addition, the present thesis adopts an inductive approach to not have strict structures limiting the findings. This is especially important as the perception of the leader's role at a business incubator has not been thoroughly studied; therefore, it is important to do an exploratory analysis

to see what themes emerge. That is why the subjects in this thesis were taken as “knowledgeable agents,” as Goia, Corley and Hamilton (2012) identify them. They are people who can explain their thoughts, intentions, and actions and allows informants to hear their voice in research while aiding to create new concepts instead of affirming existing concepts (Goia, Corley & Hamilton, 2012).

3.2 Case selection

In this chapter, the reasoning for the selection of the cases will be explained. As mentioned previously, interviews with women incubator leaders have been conducted to understand their perceptions and experiences.

This research takes on a purposive and, more precisely, a criterion sampling approach. This means that the research question determines the most appropriate sample (Bell, Bryman & Harley, 2015) and the criterion approach is when all individuals who meet the set criteria are included in the sample (Bell, Bryman & Harley, 2015). Therefore, as our study aims to understand the perception held by women incubator CEOs and managers, all the individuals fitting these criteria were approached directly. Additionally, the authors believed that by analyzing the experiences of managers who work in different incubator environments could potentially show a difference in their perceptions. Therefore, the interviewees for the research were four women managers working at incubators that support ventures from any industry and five women managers working at incubators that support startups in technology and life science. The reason for this categorization was to assess if there is a difference in perceptions and experiences of women managers who work in stereotypically heavily male-dominated environments or not. This is based on multiple studies showing that men tend to be enrolled in fields such as technology and science more frequently than women (World Bank, 2012).

Additionally, more specific to the entrepreneurial ecosystem, fewer women entrepreneurs are in the STEM and advanced technology fields (Marlow & McAdam, 2011). Therefore, having a group of leaders from incubators that support the tech and life science fields is to assess if the environment is male-dominated and if that affects their perceptions and challenges in their role.

To maintain a level of homogeneity, only business incubators located in Sweden were considered. This means that some factors that could influence the data were kept constant between the incubators, such as culture, regulations, and legislation. It is important to mention that incubators from across Sweden were approached in the sample, including private, public, university, and non-university incubators. The authors approached different types of incubators due to the difficulty of finding women as CEOs and managers. Additionally, to maintain a level of similarity between the roles of the participants, only positions with the names “CEO” or “Incubator Manager ” were taken into account.

Furthermore, the selected business incubators followed the criteria set out by the authors. As Hannon (2003) the present thesis addresses incubators with programs that support business ideas in their pre-start, launch, early start and growth phases. In addition, to be considered they needed to define themselves as incubators not as accelerators, meaning that they should not focus on helping entrepreneurs with funding and do not get equity from the business ideas they support. The incubators which were chosen for this study were sourced from online databases and then filtered through the requirements listed above. The databases used were: Swedish Incubators and Science Parks (SiSP) (Swedish Incubators and Science Parks, n.d.), NUTEK in Sweden (NUTEK in Sweden, n.d.) and Sweden Tech Ecosystem (Sweden Tech Ecosystem, n.d.).

Based on the databases, a mapping of 47 incubators was made, which can be found in Appendix B, and then the top-level managers or the CEO of the incubators were identified in terms of gender. Afterward, all women were contacted to be part of the current research. Out of all the incubator managers and CEOs who were identified that matched the criteria for the present study (n=21) nine agreed to participate in the interview. Due to the many tasks and the busy nature of the job role, the interviews were scheduled a couple of weeks in advance. Also, to get more participants, interviewees were asked for recommendations of colleagues in similar roles at the end of each interview. This added the snowball sampling approach and through this method, one additional incubator was found, marked with an asterix (*) in Table 3.2.1, which also gives an overview of the selected cases.

Table 3.2.1. Overview of the selected cases

Subject	Industry the Incubator supports	Percentage of employees (Women, Men)	Type (Public/Private/University)
Subject 1	Any industry*	F: 86% M: 14%	Public/University
Subject 2	Any industry**	F: 67% M: 33%	Public
Subject 3	Any industry	F: 70% M: 30%	Public/University
Subject 4	Any industry	F: 50% M: 50%	Public
Subject 5	Tech & Life Science	F: 50% M: 50%	Public/University
Subject 6	Tech & Life Science	F: 25% M: 75%	Public
Subject 8	Tech & Life Science	F: 60% M: 40%	Private/Non-Profit
Subject 7	Tech & Life Science	F: 50% M: 50%	Public/University
Subject 9	Tech & Life Science	F: 50% M: 50%	Public

* the incubator which was used for the pilot interview

** the incubator which was recruited through the snowball method

3.3 Data collection

In the previous two chapters, a description of the research design and case selection was given. This chapter explains how data was collected.

The data was collected through semi-structured interviews conducted online through Zoom. The interviews lasted, on average, one hour and a half and were all recorded with the participant's permission. As Haradhan (2018) mentions, the qualitative research data was descriptive and analyzed inductively. To collect the data for this qualitative research, the authors created an interview guide, which can be found in Appendix A, taking the topics detailed in the theoretical framework as a base. The interview guide consists of twenty-one open-ended questions that focus on exploring themes such as perception of the managerial role, demands, constraints, leadership, dealing with challenges, environmental factors, and gender. The interview guide was reviewed by the thesis supervisor, Diamanto Politis.

In addition, one pilot in-person interview was conducted with a manager of a university incubator as a test to see if the interview guide was well structured, how the interviewee perceived it, and to use it as a reference to continue online with more interviewees. After the

pilot interview, the authors adjusted three of the questions that prompted the interviewee to answer with opinions and hypothetical scenarios. Therefore, the questions were changed to ask the interviewees to give concrete examples of times when they faced an issue. Additionally, the gender-related questions were modified because they were too leading and instead were adapted to be more open-ended without focusing on gender, allowing the interviewees to take the lead on sharing what they perceived as most important.

3.4 Data analysis

The previous chapter explained the reasons behind the decision to create and run a semi-structured interview to gather data for the present study. The current section describes the methods and strategies behind analyzing the data collected.

The authors decided that a thematic analysis was the most appropriate approach to analyze the qualitative data obtained from the interviews based on similar exploratory researches previously made such as Kakabadse et al. (2020). For this reason, the six phases identified by Braun and Clarke (2006) were followed. Before the analysis started, all the interviews were transcribed automatically using the software called Descript. Phase one of the analysis consisted of familiarising with the data. The researchers listened to the recorded interviews while reading through the transcription and made any corrections necessary for the text. During this phase, the researchers also started taking notes of ideas observed in the interviews. Phase two consisted of generating initial nodes. To do this, the researchers imported all of the transcriptions to the selected software for coding called NVivo. Here, the researchers discussed the list of ideas which they generated based on phase one. Some ideas were combined into one node, and others were discarded because they were encountered very few times. After this, the authors created nodes or themes based on the ideas discussed previously during phase two. Finally, this step included coding the entire interviews by rereading the transcriptions and putting each part into a corresponding node.

Afterward, phase three consisted of creating themes and sub-themes. During this phase the researchers grouped nodes that were related to similar topics. From this, they created a thematic map to get a clearer understanding of how the ideas were connected. Based on this, a hierarchy of nodes was created, which helped establish themes and sub-themes. Following, phase four consisted of reviewing the themes and discussing which ones to discard and merge. Here, four themes were discarded by the researchers because, although they were interesting, they did not answer the research question. Then, phase five consisted of defining and naming themes to present in the research paper. Here, the researchers adapted the wording of some of the themes to make them clear for the reader. It also involved identifying the “story” that each theme tells and considering the data as a whole. Finally, phase six consisted of producing the report, which was the final analysis, and writing out the findings and conclusions.

Finally, the theory-related material stated in the theoretical framework was taken into consideration in the discussion and conclusions. The findings in this thesis are based solely on the data gathered through interviews, and the literature from the theoretical framework was used only for the discussion. The researchers made this decision to allow for themes to emerge rather than basing them on strict frameworks from previous studies.

3.5 Limitations

Limitations are important to consider because they can influence the data analysis, discussion, and conclusions. In the following section, the authors describe the limitations they faced during the development of the present thesis.

One of the critiques of qualitative research is the issue of subjectivity (Bell, Bryman & Harley, 2015). Due to the nature of qualitative research, subjectivity cannot be removed, especially when studying perception. Therefore, the aim was to collect rich data and embrace the different perceptions of the researchers. Conducting interviews together allowed for a wider variety of follow-up questions, and communication between the researchers to avoid leading questions. However, to minimize subjectivity in the approach to the interviewee, a pilot interview was used to test the interview guide, leading to the adaptation and removal of some questions.

The interviewees were asked sensitive and personal questions that may have influenced their willingness to share. A few of the leaders were very straightforward in their responses and did not bring in a lot of personal perceptions. This may have been because we were talking to them online while they were in their typical work setting, so they were in their more professional demeanor. We tried to make the interview feel more laid back and personal by having a short informal conversation at the beginning of the call. Another limitation was that usually, interviewees tend to give over-rationalized responses when asked about their reasoning (Bell, Bryman & Harley, 2015) therefore, the research was not introduced at any point during the interviews. Another issue could be due to the social desirability bias, where the interviewees give biased answers about what they believe the interviewer wants to hear (Grimm, 2010). To reduce the chances of this, the pilot interview was used to identify and remove all leading questions. Finally, it was difficult to identify the line between perceptions and actions because when asked about their perceptions the interviewees often gravitated towards talking about what they do. During the interviews, when the researchers noticed that the interviewees were focusing on actions, they reiterated the question making sure to make it clear that they were looking at their own perceptions. These limitations were all related to the nature of the data that was being collected.

Furthermore, some of the limitations stem from the case selection. For example, a difference in sources of funding for university and non-university incubators was reflected in challenges perceived by the incubator leaders. Therefore, by not having the same type of incubators a variation in data between them was observed. However, it was clear to observe by the researchers that all the other main themes remained the same in all types of incubators. The researchers address this limitation in the conclusion by suggesting directions for future research. Another limitation is that the majority of the incubator leaders who were interviewed were women who were in the position for many years. This is a limitation because they might have gotten used to the role so that they can no longer identify and express the challenges that they face.

On the other hand, there are also more technical limitations. For example, English is not the native language of the interviewees and in some cases, they doubted that their point was coming

across. In a few instances, they stumbled on words or used a Swedish expression directly translated into English to illustrate their argument. The interviewees were reassured that they had the time to think about their answers, and when something was unclear, the interviewers asked follow-up questions.

3.6 Ethical considerations

As the interviewees were asked for sensitive information and personal experience, each interviewee was informed that their name and the incubator's name are not used in the data analysis and that the data would be anonymous. This means that the raw data needs to be taken care of and used cautiously. Participants were verbally asked for consent to voluntarily participate in the research and for the interview to be recorded for transcription and data analysis.

4 Findings

In this chapter, the findings from the thematic analysis will be presented. The results are presented based on the research questions defined on Chapter 2 and supported with quotes obtained from nine semi-structured interviews conducted by the researchers. The words in the findings that are marked bold make it easy for the reader to identify what actions women leaders take that support the theme. In addition, to keep the subjects confidential, the names have been removed and replaced with subject numbers. Subjects 1-4 are leaders at incubators that support any industry and subjects 5-9 are leaders at tech and life science incubators.

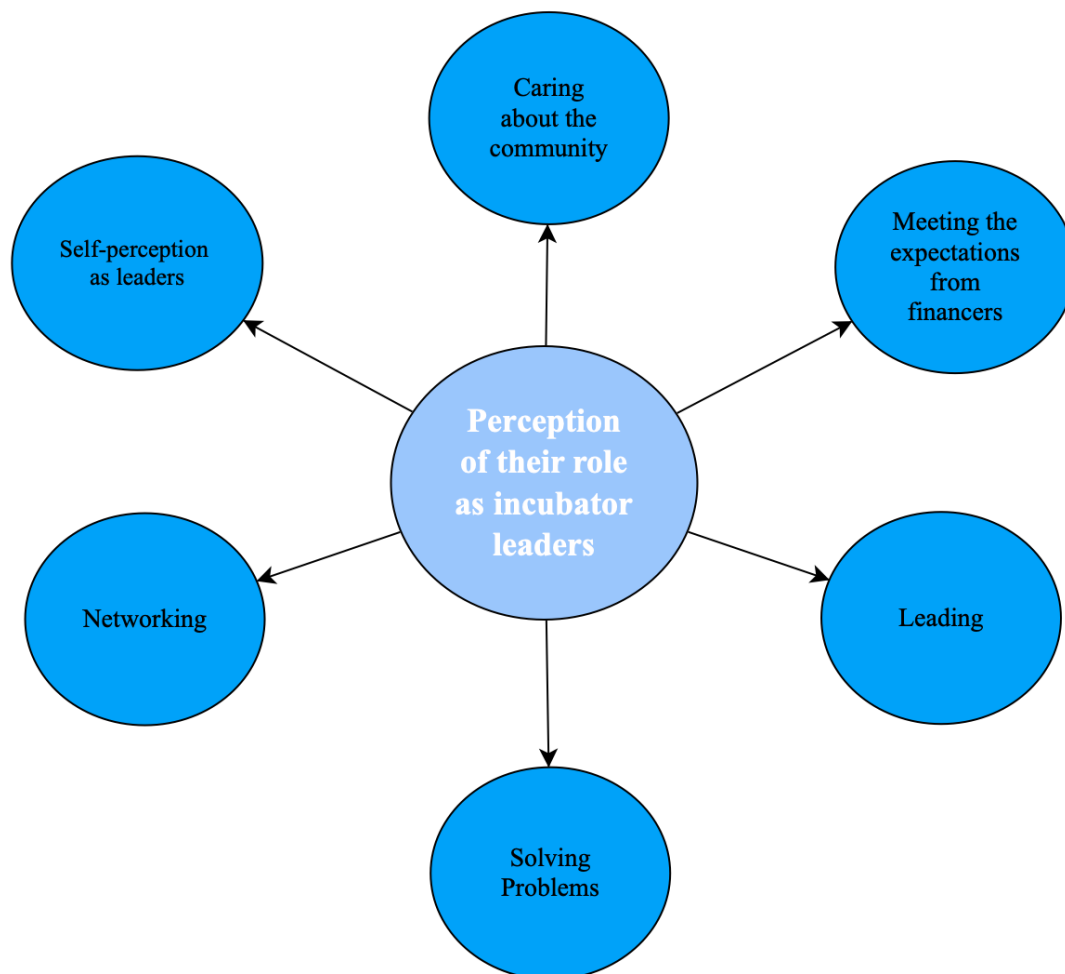


Figure 2: Perception of their role as incubator leaders

4.1 Perception of their role as incubator leaders

The data showed that the women who were interviewed perceived that their role requires them to be in charge of common aspects within the business incubator. For this reason, the authors of the present thesis decided to summarize the way women in Swedish business incubators perceive their role in six subthemes: caring about the community, meeting the expectations from financiers, leading, solving problems, networking and self-perception of their role as leaders. These can be seen in figure 2. The data will be presented in this order and supported by quotes from women leaders of incubators.

It is important to mention that the perception of the role as incubator leaders was the same for incubators that support tech, life science and engineering business ideas and for the ones that support any field. No differences were identified.

4.1.1 Caring about community

The data collected showed that women leaders of incubators really care about the environment and culture inside the business incubators and they see maintaining a good culture as a fundamental part of their role.

Women managers perceive that their role involves **taking care of the culture** in their business incubator. For example, Subject 1 said *“to be a community leader is even bigger part of my role.”* in addition, it also involves *“...making sure that the community is open and willing to help each other and that they feel like it's a fruitful place to be in and always making sure that I have something to offer to the people that are sitting in the incubator and make sure that they feel like they are a community, which is a task in itself.”* In addition, Subject 8 stated *“I do put a lot of time in developing the team and the culture throughout the year.”* As seen before, the women managers in incubators put a lot of time and effort in developing the culture and they perceived that they are in charge of that. They really care about making the incubator a good place to be for incubatees and also for the staff.

Some actions that women managers in incubators do to care for the community is by **being welcoming to incubatees**. For example, Subject 1 stated that sometimes she buys food for people in the incubator and gives them the surprise “... *We got you, something come on out here and grab something. It makes them happy and it makes them feel more welcome since they do spend a lot of hours in here.*” and from her point of view these actions make entrepreneurs in the incubator feel that she is taking care of them and inviting them to continue spending time at the place. Also, Subject 2 explained that for her being welcoming is to let small and big entrepreneurial ideas come to the incubator and find help “*we don't close the door for anyone like (some more places in Sweden) where there are a lot of entrepreneurs, but they don't feel that they get the help. They should have because they don't feel welcome. And I think here is a crucial part.(...) I think that's why people want to come here.* All these quotes reflect how women leaders perceive that their role requires them to help everybody and their incubator reflects a place incubatees can trust.

In addition, the interviewees continuously mentioned how important it is for their role to give **support-help** to their staff but also to the incubatees: “*I'm sitting at a position where people need me*” (Subject 1). They perceive this invested time in supporting people inside the incubator as part of their role, such as Subject 7 mentioned “...*I'm present and if they need support, I set aside time for them to support them because that's, that's part of my job also as a manager to make sure that the job gets them through others and they need to feel that they get the support they need from their, from their boss.*” They also perceive that they should personalize their support to the needs of each employee. For example, Subject 7 talked about how different employees have different thoughts about working from the office after the pandemic: “*it feels like they have become almost a little bit more shy of big meetings, meeting a lot of people, and stuff like that. So I think. You need to respect that too. And to be more kind of sensitive and understanding.*”

4.1.2 Solving problems

Another thing that the authors identified repetitively was that they perceived their role as a problem solver. This is related to the incubatees and the staff: “*I think that the people working*

here expect me to kind of keep the ship afloat” (Subject 5), also Subject 6 mentioned “I think, for my role, I have, you know, make sure that the processes work smoothly”. In addition, women managers are constantly asking people inside the business incubator “Is this running smoothly or are we having problems?” (Subject 4) because they see that they are also in charge of providing the resources within the incubator such as coffee, that the dishwasher is working well just to mention a few examples. They see that they are in charge of having everything in place when people need it: “basically just make sure that everything is running quite smoothly. Everything for making sure that we have coffee to dishwasher is working to everything you might need and then give better every detail and making sure that it's there” (Subject 1).

In addition, being a problem solver makes women leaders in incubators feel like they have to constantly **juggle different balls** at their role: *“You need to be able to juggle(...) you should be able to handle several things at the same time. So there's so much to do and there are so many different things” (Subject 1), also other participants stated the same “it's a lot of things happening” (Subject 2), “There are a lot of things that need to be done”(Subject 7). No day is the same for them: “Okay. (laughed) Typical day?”(Subject 3). They also stated that they are really busy during the day with a lot of different activities: “it's a lot of meetings. Well, we're connected to always finding new opportunities, new funding opportunities, reporting. Yeah, maybe building the business operations systems” (Subject 6) but besides these activities, they have others that do not contribute much to the goals that they need to achieve in their role. For example external visitors or external questions, for example, from students or people that are interested in what the incubator is doing: “We have a lot of people coming in who just want to know, what are you doing?” (Subject 2) and Subject 3 expressed that it is the “small questions (...)that don't lead to anything in the end of the day,” which get in her way of completing her tasks for the day.*

4.1.3 Networking

Another important component that women managers perceive important in their role is networking. They consider that they are in charge of **representing the incubator** like Subject 8 mentioned, *“there is a big chunk of my work also is to represent [name of the incubator] externally. So being in contact with other agency, investors or industry, or go to events and*

partnering conferences, congresses, and also manage the stakeholder.” Subject 9 also stated this: *“my role is also to be the face of incubator towards the town, and in the end, everything is about politics and having the best network.”* They usually use their role to get things for the incubator, like collaborations with people or institutions: *“I often have meetings. I try to go out to visit the funding partners that we have. So I usually meet with the communities or the region or the university”*(Subject 4).

4.1.4 Leading

Leadership was an aspect that was constantly reflected in the answers: *“... being a CEO is about leading people, so they execute”* (Subject 8). They take special care in planning and executing the strategy of the incubator with the staff and entrepreneurs.

Also, based on the interviews conducted during the research process, the findings suggest that the incubator leaders implement **ongoing general leadership strategies** to prevent challenges in the team. These proactive leadership activities ensure ongoing open communication and maintain a feedback loop, making it easy for employees to talk to the leader: *“I try to be approachable. My door is always open”* (Subject 3). *“I usually try to set aside some time to actually be more present for my colleagues”* (Subject 7). Through their approach to leadership, they aim to establish a culture in which the employees feel that their leader is there for them when they need it. They do this by focusing on listening, supporting, and helping the employees.

Listening was found to be a big theme across the leaders. There are formal activities, in the form of yearly appraisals, during which the leader discusses with each employee 1-on-1: *“This is something you do every year. You have a dialogue between each employer and their boss. It's truly a dialogue. I mean, the communication goes both ways, and I'm always eager to pick up some feedback.”* (Subject 5). These meetings are used to discuss the progress, performance, and how the leader can best support the employee. From the interviews, it is clear that leaders put emphasis on these meetings as they can provide them with a lot of insightful information: *“That's a possibility to discuss things which may be not working, you know, because you need to bring that out to the table as well.”* (Subject 8).

Another significant aspect of their leadership is **supporting the development of their staff**. For example, helping them grow in the job: “*Every time I ask them questions: how can I help them to be the best in their role, (...) like for example do they want to go some course?*” (Subject 8). It is also important to not cross the line with the level of help as Subject 7 said: “*I give them the resources they need and then (...) I leave them alone. (...) Sometimes you need to go in and steer (...) so you need to kind of supervise them, but not micromanage.*” On the other hand, Subject 9 discussed support for personal development: “*a business developer wasn't feeling good (...) so I gave her Fridays off, with payment. But the thing was that I wanted her to focus on herself. (...) she liked to swim, so she swam. And every Friday I wanted her to do something cultural*”.

4.1.5 Meeting the expectations from financiers

Another perception that women leaders have of their role is related to delivering all their work with **high standards and top quality**. “*We never want to deliver anything that is below good.*” (Subject 1), she also stated that if something is not going well “*someone's going to notice it.*”

Also, the managers expressed that people expect them to work well and to have everything in the incubator as stable as possible. These kinds of expectations were more related to be given by financiers or from the board of the incubator: “*They probably expect me to (...) work well. (...) That it's a very good delivery, that we make tons of money, that we invest a lot of new ideas, and most of them also are female led ideas so that we have those types of conditions that people would like to create. That is very important to [the financiers]*” (Subject 3) and because financiers are giving the money Subject 9 said “*So absolutely we have to be a stable incubator*” the financiers don't expect less from them.

4.1.6 Self-perception as leaders

From the interviews the authors found that there are several images that women managers hold about themselves and traits that influence the way they perceive their role.

In general terms, there is a common view of specific **personality traits and experience** which the leaders perceive are required for the role, and that they possess. For example, Subject 2 mentioned that some skills cannot be taught: “*So I would say in my job, education is maybe*

40%, and 60% is a mixture of experience and personality (...) the knowledge you can read about(...) but how can I make someone understand what I'm saying? That is more difficult to learn.” Regarding personality traits, Subject 2 mentioned, “you need to like people, otherwise this was not the right job to have.” Subject 1 expanded on this idea “Like you need to “know how to approach people and talk to people. Incubator managers always tends to be a little bit more charismatic. You have to turn it on.” In addition, another important characteristic mentioned several times was the ability to be open-minded “when it comes to nationality and age, background, so you need to be open and embrace that.” (Subject 8). The leaders are aware of the strengths they possess in this area. “I know how to talk to different types of people, people with different backgrounds(...)I'm quite a good listener to what the pupils and the incubatees are telling me” (Subject 1). Subject 4 also expressed, “I have an ability to see people's needs.”

Overall, women leaders of incubators perceive that this role requires them to have the personality trait of being **curious about people**: “I also think curiosity about people, I am really curious about people. I want to know what drives them, and I want to know what their dreams are, what they would like to achieve” (Subject 4). “I am very interested in people. And I want to, you know, actually, um, co-work and develop entrepreneurs” (Subject 9).

In terms of experience, managers mentioned that it is essential to have knowledge and experience in the entrepreneurial field: “I would say, can I say this? But how old you are, how much experience you have an experience usually comes with age because that's just the way it works. (...) I think obviously the right knowledge about businesses, how you know, different, um, technical aspects about the Swedish system VAT, the rules ...” (Subject 2).

In addition, the self-perception of the managers is that they are **doing a good job**. When asked about reaching their goals, they were confident: “So I can't say that we have not reached the targets that we set. We have reached them” (Subject 4). Additionally, they are confident in their ability to lead, as Subject 8 exemplifies: “I have a strong ability to think strategically. Uniting a team around a specific path or goal or directions is one of my strong qualities, I will say.” They also know they possess the traits they perceive as essential to their role, such as Subject 7 said “I think I'm very solution-oriented (...) If there is a problem, I'm focused on finding a solution.”

4.2 How women incubator leaders deal with perceived challenges

The researchers have identified challenges that can be seen in common between the incubator leaders:

Table 4.2.1 Overview of perceived internal and external challenges

Internal Challenges	External Challenges
Recruitment of Staff in incubators that support any industry: need more money	Recruitment of incubatees
Recruitment of Staff in incubators that support Tech & Life Science incubators: need more women*	Gender-related competition *
Managing diversity in the team	Getting finance for incubator
Team frustration caused by processes and rules associated with getting funding	Getting finance for incubator: Vinnova
Unexpected day-to-day tasks	

Challenge marked with an asterisk (*) applies only to tech and life science incubators

4.2.1 Recruitment of staff

Challenges related to recruiting staff were seen amongst both incubator types. However, the specifics differed between them.

4.2.1.1 Recruitment of staff in all industry incubators

In all industry incubators, the main problem was the lack of money to hire more of the right people. Due to the high number of ideas and entrepreneurs needing support, there is often a shortage of staff. *“My only need is that I need to have more staff that could help out because there are so many great entrepreneurs out there”* (Subject 3). One of the main causes of this problem is the limited funding. *“The mission is (...) to arrange the long-term financing to recruit*

a team, to be able to do the work that is needed for the startups” (Subject 4). The financing was only mentioned when talking to leaders from incubators that support all industries.

4.2.1.2 Recruitment of staff in tech and life science incubators

On the other hand, incubators that support ventures in the tech and life science industries face this problem differently. Here the challenge is linked to gender, where women who have long experience in the field are harder to find: *“That has maybe been a bit of a challenge to get enough of senior female experts. (...) I think it's usually a challenge to get more senior business development coaches, for instance, that are women”* (Subject 3). However, the focus on implementing gender balance amongst staff in tech and life science incubators staff is especially prominent. To do this, the women leaders expressed that they use gender as one of the decision criteria when hiring, as mentioned by Subject 3: *“I've been using a recruitment firm to help in finding the right person (...) we're looking for a person who has this and that knowledge, expertise, seniority, experience, and preferably a woman or preferably a man.”*

4.2.2 Gender-related competition *

A theme of competition related to gender was found in the subgroup of leaders from incubators that support tech and life science fields. One of the leaders stated from personal experience that *“when there are too many men in a startup team or in a board or in a room, it gets a bit more, everything gets a bit more competitive”* (Subject 6). This incubator leader operated in a managing team primarily of men and found that she also had to put a lot of energy during meetings to be heard: *“it just takes more effort to break through.”* Although this leader experienced higher levels of competition in meetings where men outweighed women, she found that *“when there are a lot of women, it tends to be a bit of a more nurturing environment”* (Subject 6). This was not the experience of another leader who found competition between women more harmful. This competition was coming from the board, so a higher level of leadership which was supposed to support, guide, and have the same goals and ambitions for the incubator development. She expressed her experience, which impacted her for a long time after: *“I had a female chairman, and I thought she was fantastic actually. (...) the board actually took the decision that she had to quit. So it developed into a competition between her and me. And it*

took some years for me, actually, perhaps two years for me to understand that we were not in the same team” (Subject 9). She also experienced that “there’s always a competition between women. Always, always, always I’m so tired” (Subject 9). The way that Subject 6 tackles the challenge of getting through the competition in the meetings with primarily men and of not being heard is by adapting her communication style to be “even more forward and clear with [her] message, because with these like black and white men. They don’t get it.”

4.2.3 Managing diversity in the team

The leaders aim to have diversity in the workplace in many different ways. The reason for this is to be welcoming to anybody with a great idea, no matter their background, gender, or ethnicity. Subject 2 mentioned: *“we have Swedes, from the middle east we have from the US. So it should, you know, mirror the people we are trying to help and that we’ve tried to focus on all the time.”* Many good ideas and wide support stem from this diversity, as stated by Subject 2 *“this is so important that we are different. That’s fun. That’s exciting. So you bring in different ideas to the table”*. However, it is also a challenge to ensure that the whole team gets along. For example, Subject 3 discussed how in the past, she had experienced someone being harassed in the workplace, and *“it affects everyone in the working environment. So it’s really important that, you know, you have good collaborations and respect for everyone.”*

4.2.4 Team frustration caused by processes and rules associated with getting funding

There are also some challenges that are caused by the extensive administrative work related to applying for funding for the incubator. This is not only frustrating for the leader herself and the team who needs to take part in the ongoing bureaucratic processes. This is frustrating to the leader since nothing can be done about it. Subject 4 shared these complaints in her interview: *“Why do we need to follow these rules? These rules are so stupid. They don’t build any value for the companies.” And then I can get frustrated because. This is nothing that we can change. We just have to live by it. And sometimes I can experience that. We have talked about this so many times and when this question pops up again, I get really frustrated.”*

4.2.5 Unexpected day-to-day tasks

There are also small day-to-day challenges that slow down the leader in doing the tasks they set out to do that day. This is often associated with the willingness of the leader to be always

available to the team. Although, sometimes the leaders have time that they set aside for the questions from the team, as Subject 7 put it *“to be more present, for my colleagues. So they can ask questions because there are a lot of things that needs to just kind of get a quick answer.”* However, with their door always open, it can distract them from getting their most important tasks of the day done. As Subject 3 mentioned *“each day I can say that, okay, these are the five stuff I wanted you to do this morning when I started. But I couldn't because I didn't have time because 10 other people interrupted me.”* Therefore, they prioritise by being in line with the incubator strategy as explained by Subject 8: *“You need to take two steps back and think: what are we here for? What are we doing? What is our strategy? (...) Is it relevant? Is it urgent? And prioritize from that.”* Overall, most of the daily distractions are related to the leaders being always available to their team to answer questions and support them. In itself, it is not a problem but requires the leader to have strong skills in prioritizing and dealing with many different tasks at once.

4.2.6 Recruitment of incubatees

One of the external challenges is recruiting incubatees. The incubator leaders want the incubator to be welcoming for all people and include minorities. According to Subject 2, *“the challenge is also to be that incubator that talks about, you know, lowering the threshold, making it possible for everyone, regardless, men, women, ethnicity, and so on.”* In one instance, there was a gender imbalance in the gender of incubatees with *“70% female”* mentioned by Subject 3, leader of an incubator that supports any industry. She stated that they *“have been recruiting a little bit too many women, so we need to get back on the more gender balance.”* Subject 6, a leader from an incubator that supports tech and life science, also discussed having more women than men founders in the incubator. *“I think now we are up to 80% female founders. (...) they can talk to me and be like, you are the first woman we have met in our whole startup journey, which means that (...) it's the only oasis where women meet other women. So we're still like in a minority, if you see what I mean (...) it might be the only place where the female entrepreneurs talk to another woman in the whole startup ecosystem.”* Therefore, this challenge related to having a gender balance may be more nuanced than expected.

4.2.7 Getting finance for incubator

The final external challenge is getting finance for the incubator. Based on the interviews, the challenge can be separated between university incubators and non-university incubators. Amongst leaders of non-university incubators, there was a general need to apply for funding because it is necessary to keep the incubator operating. One of the biggest challenges for the incubator, according to Subject 9, is *“the finance. I don't have finance enough.”* However, university incubators are funded by the university and do not worry about finance and just have some administrative work associated with it that needs to be done. Subject 7 summed this up by saying: *“the plus side is that you are a part of the university, you have access to budgets and so on. But you are also kind of drawn into some of these more administrative tasks as well.”*

However, there was an exception, Subject 5, where the university business incubator is operating *“on the border of the private sector and public sector and always having to apply for money for very specific things. There is not enough of a basic funding so we always were applying from Vinnova and from, you know, here and there and everywhere and all of this money comes with very specific rules (...) And so it's very time-consuming to run this show.”* The incubator leaders need to be *“one step ahead (...) In this kind of leading role that's key. If I miss [the funding opportunity], we don't have any operation”* (Subject 6).

4.2.7.1 Vinnova

One of the main organizations which provides funding and other support for incubators in Sweden is Vinnova. Some more specific challenges come with this organization that was found to be similar between incubator leaders. It requires a lot of administration to be approved, and as Subject 5 said, *“they look at all the work processes that need to be documented (...) In the first phase, we sent them written material about all the processes and the work that we do. And the next step was that they followed up by interviewing us in the team and the company.”* Therefore, according to Subject 3 they *“talk about it all the time and [with] all of the other incubators [leaders] as well. And then you learn that [is] something you live with as you know, Vinnova doesn't want to change it. There's nothing more to do. It's just, you know, move on.”* That is why they create structures that allow for ongoing updates of the documents that need to be sent to Vinnova, as well as take a “just do it” approach when dealing with this problem.

4.3 Gender-related challenges

The challenges described in chapter 4.2.2 Gender-related competition was the only identified subtheme that was found amongst leaders of incubators that support tech and the life science industries. Other gender-related challenges were very different between the individuals to be generalized. For example, Subject 2 had experienced 20 years ago when working her way up to the leadership position: *“I’m not that old, but you know you could get a slap on the back or on the bum. And, you know, like, “is this too difficult for you, honey?”* Additionally, Subject 9 talked about the difference in treatment she identified between herself and a man leading an incubator with a similar board: *“they are expecting more answers from me. We could present the exact same case and I can see that they are approaching me with questions in another way. Then they are doing with him. So, I don't know really why but that's interesting.”* However, Subject 9 has *“never been discriminated by a man, but I have been by women.”*

4.4 How the leaders got their position

The results showed that the interviewed managers in incubators found it easy to get the position, and they have been working in it for several years. The majority of the women leaders got headhunted or got the position as an offer of their previous job performance Subject 5 explains it well *“I was headhunted. Quite an easy way in”*. Others got the position because of their previous performance, such as Subject 4, who was a critic of the previous business incubator management and she got the offer to change things in the administration *“Well, uh, I was working at the science park, which was one of the partners in beforehand at (name of the incubator) and I was not satisfied by the work that they did. So I was one of the critics that said that this could be done in a better way”*. Similarly, for Subject 7, she was a student but really interested in entrepreneurial topics, and she helped develop the incubator since this time: *“I didn't really apply for it. It kind of more serendipitously happened”*.

Another important aspect of the findings was that the interviewees exposed that they had **previous experience** in entrepreneurship in terms of networking within the ecosystem, leading teams, and founding their own venture. For example, Subject 2 *“had a company of my own,*

because I know what you go through when you set up the company, what, you know what, problems that can occur on the way.” Subject 9 also mentioned “I also have worked in a private company before, so I have my own big network.” Subject 8 shared that her background helped her be good at her job right now: “Looking at my background. I mean, I’ve been leading teams and being in big corporations earlier. So for me, leading a team was something I was quite confident with.”

Finally, another important finding was that the women leaders interviewed really loved their job. To show some examples, these three subjects express it perfectly: Subject 4 mentioned, *“It’s the best job you could have. I meet companies and persons every day with just one goal to make this ideal dream work. So that is so inspiring being part of that.”* also for Subject 2 it is rewarding *“That’s like payment for many hours. That’s the best. It’s better than any money actually, because when you see people happy and, and you feel, wow, they have, you know, I’ve reached the goal that I wanted...”* Finally, Subject 7 expressed, *“I think I have spent my entire career in this area and I have sort of that kind of true passion for it.”*

5 Discussion and analysis

The following chapter will discuss and analyze the findings described in the previous chapter while relating them to the existing literature on the topic. The analysis in this section is organized based on the themes identified previously and the research question stated in chapter 1.4 aim of the study.

5.1 Perception of their role as incubator leaders

The findings from the interviews suggest that women incubator leaders in Sweden perceive their role in six themes: caring about the community, meeting the expectations from financiers, leading, solving problems, networking, and self-perception of their role as leaders.

5.1.1 Caring about the community

Firstly, caring about the community is expressed by taking care of the culture at the incubator, being welcoming to incubatees as well as supporting and helping staff and incubatees. A lot of this is based on them being curious about people's experiences at the incubator, giving them space to speak up, and actively listening to their needs to offer support. This perception of their role is in line with Baumgartner and Schneider (2010), who found that women leaders perceive that they empower their team and employees by giving them the opportunities to express themselves and be part of decision-making. One similarity between the leaders at the incubators is that they are sensitive and reactive to the individual issues and needs of staff which supports the finding of Bosak and Sczesny (2008), who found that women have many communal traits. Overall, the authors can analyze that women leaders perceive that they are in charge of taking care and nurturing the incubator culture to make it welcoming for everybody. This is an essential part of their job, from their point of view.

5.1.2 Meeting the expectations of financiers

Another theme that was repeatedly found in the interviews and seen as a perception of their role is the need of the incubator leader to meet the expectations of financiers. These were usually very high and expected the incubator leader to have everything under control and make sure that the incubator remains stable. Glass and Cook (2016) found that women experience two types of

pressures, one of them being the pressure to perform. Although the role of an incubator leader in itself has a lot of expectations, this strong pressure that the incubator leaders perceive may be harsher due to their gender. One of the leaders explained how her colleague, who is a man, runs a similar incubator with a similar board, and she is often asked more questions and expected to have more answers than he is.

5.1.3 Leading

Another role that the women leaders constantly mentioned which they perceived as essential for their role, is leading. With this role, they ensure that the team is on the same page, executing the strategy and working towards meeting the incubator goals. In addition, based on the interviews and data collected, the authors found that the women leaders in incubators take deep care of having open communication, listening, supporting, and helping the staff but also the incubatees. They invest a big part of their time on maintaining a good environment similar to what was mentioned by Kakabadse et al. (2020).

Therefore, all the leadership characteristics found in the interviews support what Kusterer, Lindholm and Montgomery (2013) found about women having more communal characteristics that include concern for the welfare of other people, for example being sympathetic, interpersonally sensitive, and helpful. Considering these, the authors can analyze that women leaders in business incubators in Sweden are part of the tendency stated by Trinidad and Normore (2005) that women adopt a more participative style instead of the directive style that men have. Also, women perceive themselves as participative and democratic (Orser, Elliott & Leck, 2011). In general, women in the present study showed to have a social expected participative leadership within the characteristics involved.

In addition, the finding showed that women leaders are really good at applying the participative leadership style, and from their perception, they try to make it the best way they can. By making a relation between these findings and the model that Dzubinski, Diehl and Taylor (2019) the authors can determine that leaders in incubators lead by quadrant 4 “authentic self”. Women expressed that they have all the qualities of leading with their authentic self because they can

bring their ideas, passions, ways of expression, preferences, and more to their role. One analysis the authors can make is that they especially lead in this way internally. Maybe the reason can be that they can control what happens inside the incubator. But externally, they perceive several challenges that make them lead in what Dzubinski, Diehl, and Taylor (2019) describe as Quadrant 2: internal barriers. In this quadrant, women tend to internalize gender-role stereotypes, especially in male-dominated environments. All of these are supported by the findings that in business incubators that help any field, the authors found a competition challenge that was not shown in the incubators that support all types of fields.

5.1.4 Solving problems

The findings help to analyze that the leaders who were interviewed shared the perception that it is their role to solve all the different problems at the incubator. This includes making sure everything is running smoothly and keeping all the stakeholders updated, meaning that they need to be able to manage many different tasks at once. This supports Kakabadse et al. (2020), who identified role demands linked to being the leader of an incubator, which require them to perform multiple roles every day.

5.1.5 Networking

Leaders perceive that representing the incubator to external stakeholders is a big part of the role of the incubator leader. Through this, they believe they can expand the network they have access to which can be useful for the incubatees but also to secure additional funding for the incubator. This supports the statement that one of the key services that incubators must offer to the incubatees, based on Bergek and Norman (2008), is networking opportunities. Overall, the purpose of networking is to support the incubator.

5.1.6 Self-perception as leaders

The authors can analyze that leaders of the incubators perceived themselves to have strengths relating to their personality and previous experience. Firstly, they recognise that some skills they have cannot be taught such as being curious about people and being approachable. Their

strengths surrounding managing people support what Trinidad and Normore (2005) observed, which is that women tend to adopt a participative leadership style, where team engagement and listening are at the core of leadership. Additionally, collaboration and a variety of perspectives are often more prominent in environments where gender stereotypes are less enforced (Dzubinski, Diehl & Taylor, 2019). This is an interesting finding as Sweden has been analyzed as an egalitarian country with high gender equality (World Economic Forum, 2019). Therefore, this may be why women leaders can create a collaborative and supportive work environment.

Other expertise, such as knowledge of the Swedish startup ecosystem and business administration, has been gained through their experience, for example, developing their own startup. This practical experience aids them in offering more efficient business training and access to bigger business network opportunities to the incubatees (Redondo & Camarero, 2017). Additionally, having an entrepreneurial background is one of the most important qualities, according to Ahmad and Thornberry (2018). The incubator leaders also perceive that they do a good job at their role, which gives them the confidence to succeed and continue working despite the many challenges.

To conclude, it can be seen that the incubator leaders make decisions based on the incubator's goal, which is to support as many good ideas and entrepreneurs as possible. However, they do not perceive their most important role to be supporting the incubatee, not supporting Kakabadse et al. (2020), who found that their primary role is acting as a “supporting mechanism” for incubatee entrepreneurs and their enterprises. From the interviews in this thesis, it can be analyzed that the leaders indirectly perform this role by enabling the team in the incubator to focus on supporting the entrepreneurs while the incubator leader needs to “*keep the ship afloat*” (Subject 3) and “*juggle different balls*” (Subject 1) to “*make sure that everything is running quite smoothly*” (Subject 1). Therefore, in line with the findings of Kakabadse et al. (2020), the main role of the incubator is to support the incubatees; however, the leader does this indirectly through leading, meeting the expectations of the financiers, networking, solving problems, and above all caring about the community.

5.2 How women incubator leaders deal with perceived challenges

The authors identified nine challenges that women leaders in business incubators perceive they face while working in their role. These challenges are either related to the internal or external context of the business incubator with which they need to deal simultaneously. Internally, the leaders have team management challenges and have too much to do each day. Externally, challenges are more related to recruiting incubatees and dealing with financing matters.

The majority of the findings in terms of challenges are a contribution to the research on the role of women incubator leaders in Sweden, as few authors had explored this topic.

5.2.1 Internal challenges

In terms of internal challenges, the authors found correlations between the research article by Kakabadse et al. (2020), which discusses the perceptions of incubator leaders about what tasks hinder them from performing their role. Kakabadse et al. (2020) found that managers perceive that their role constraints are related to a constant search for funding and resources and managing their working time because their role requires longer working hours and multitasking. In the current thesis, it was found that staff recruitment was one of the role constraints, mainly because it involves a lot of work, and they need to constantly look for funding to be able to afford them. Furthermore, they talked about prioritization as a way of dealing with another challenge which was dealing with unexpected day-to-day tasks that slow down their work. This was also found by Kakabadse et al (2020), who stated that managers perceive that they need to perform multiple roles every day and to minimize these constraints, they use strategies such as prioritization.

In addition to contributing to the findings of Kakabadse et al. (2020) on self-perception, the authors identified two more internal challenges that women leaders experience: managing diversity and team frustrations. Both are related to managing the team within the incubator. It is important to mention that after an in-depth analysis of the results, the authors believe that managing diversity could be related to the setting of the present study, namely Sweden, which is considered a multicultural society (Ålund, 1998). This is also reflected in the interviews, where

incubator leaders discussed their intent to have diversity in the incubator both in terms of staff and incubatees, setting it as an internal goal. This is also related to Kakabadse et al. (2020), who stated that one of the roles of the incubator manager is the need to meet internal targets.

5.2.2 External challenges

Based on the interviews, it can be concluded that the main external challenges that incubator leaders need to deal with are: recruitment of incubatees and getting finance for the incubator.

The challenges associated with recruiting incubatees lay in the difficulty of getting a gender balance and diversity within the incubator. In terms of financing, university incubators differ from non-university incubators because they usually make use of university resources, faculty time, and talent, and as Birley (2002) mentions, the purpose is to extract the learned knowledge from the university and use it in the incubated venture (Birley, 2002). One of these resources is access to budgets, meaning that although the university incubators are involved in a lot of finance-related administration, they do not have to scout for finance as non-university incubators do. Nevertheless, the tasks related to gaining funding need to be done. This was described as one of the role constraints by Kakabadse et al. (2020).

Additionally, Vinnova is one of the main funding sources for many incubators in Sweden. However, it requires a lot of documentation to get through the approval process and, therefore, takes away time for the business developers from the incubatees themselves. For this reason, Vinnova was mentioned to be one of the principal external frustrations to the women leaders in their role as all they can do is share their frustrations with other colleagues

5.2.3 Gender challenges

The authors decided to interview women leaders of incubators that support tech and life science industries and leaders from the ones that support entrepreneurial ideas in any industry. The reason behind this was the assumption that they would respectively illustrate a stronger gender imbalanced environment. Based on this difference in work environment, the researchers expected to find more rigidly constructed gender-role stereotypes in the tech and life science incubators as

found by Ely (1995). The findings were supported, but the evidence was not very strong, and these gender-related challenges did not impact how the leaders performed their roles. The data showed that one of the challenges for leaders of tech and life science incubators leaders is gender-related competition. This correlates with the findings of Longman and Bray (2017) that competitiveness is expected in male-dominated environments. Interestingly, these challenges were only discussed in one group rather than both.

In addition, women leaders mentioned that they adapt their communication style to be more straightforward and clear in these situations. This is in line with the findings of Ely (1995) that the most common pressure that women face in these male-dominant environments is needing to adjust their behaviors to accommodate gender-role stereotypes. Another challenge in that group of incubators was recruiting staff, especially women with relevant experience for senior positions. This could be due to the fact that women are not very present in areas of management, science, and technology (Verheul & Thurik, 2001). On the other hand, leaders that support entrepreneurial ideas in any industry do not face gender-related challenges.

Another key and unexpected finding is that the women leaders who were interviewed did not have any challenges getting their position at the incubator. They worked very hard to get to the leading role; however, unlike what the literature suggests (Dzubinski, Diehl & Taylor, 2019), they did not encounter the glass ceiling or glass cliff. Therefore, our findings contradict the prior literature that discusses the many gender-related challenges that women perceive when working up their way to more senior positions (Kusterer, Lindholm & Montgomery, 2013). This may be explained by the local culture, as Sweden is ranked as one the most egalitarian countries in the world (Hausmann, Tyson & Zahidi, 2010). Therefore, individuals may be less likely to succumb to gender stereotyping.

Lastly, Rudman and Phelan (2010) linked stereotypically feminine traits to lower managerial aspirations, self-perception, and self-efficacy of female managers. However, contrary to this finding, the leaders who were interviewed were leading using communal traits, yet they were confident in their capabilities to perform their role. This finding also contradicts the idea of think manager-think male (Guirado et al. 2012; Schein, 2001), which was also observed in the

interviews. The leaders did not show to try to imitate the masculine characteristics which are stereotypically associated with managerial success. Overall, they did not show low self-perception and self-efficacy because they think that they are good at what they do.

6 Conclusion

6.1 Aim of the study and research findings

This thesis aimed to investigate the perception that women have of their role as business incubator leaders and the challenges that they face. The contribution of the present study can be summarized in four conclusions. First, Kakabadse et al. (2020) gave a broad vision of the perception that managers in business incubators have, but by doing a similar study in Sweden, the authors identified more in-depth themes related to how they perceive their role. These are caring about the community, solving problems, networking, leading, meeting the expectations of financiers, and self-perception as leaders. Additionally, it was found that women leaders of business incubators take on the socially expected “participative leadership,” as explained by Trinidad and Normore (2005). In conclusion, these findings can contribute to understanding how women in incubators perceive their role and lead, especially in Sweden.

Regarding the second contribution, the present study addressed the perceived challenges for incubator leaders. This is a new perspective in the study area of management within incubators. The authors identified challenges that are not yet fully explored in research (Hannon, 2003; Bergek & Norman, 2008; Xu, 2010; Ulvenblad, Blomkvist & Winborg, 2011; Oliveira & Vieira, 2016). Identifying challenges can be very context-specific, and the present study concludes that women leaders in business incubators within Sweden deal with internal and external challenges that, in general, are related to team management, having too much to do, recruitment and dealing with financiers.

The third contribution is, contrary to the assumption of the authors, that gender does not have a big influence on women who are already in leadership positions in Swedish business incubators. Business Incubators are usually labelled as male dominant environments in literature (Treanor & Henry, 2010; Gabarret & D'Andria, 2021; Marlow & McAdam, 2011; Jaffe, 2015) but through the present thesis the authors only identified gender-related competition as a challenge. The authors could not find a strong gender-related issue which women perceive as deeply affecting their role as incubator leaders. The reason behind this could be that women in this position

expressed being confident and wanting to be in control of the situations, especially internally of the incubator.

Regarding the fourth contribution, the authors identified that in Sweden the perception of leaders in incubators that support tech and life science industries and the ones that support any industry are not significantly different. Similar findings were made relating to the perception of the role and challenges, except the gender-related challenge of competition. Therefore to conclude, the perception of the role of women leaders in incubators that support tech and life science is similar to the ones that support any field and both leaders perceive they are efficient in their role.

Synthesizing the contributions expressed before, an answer can be formulated to the posed research question:

How do women leaders of Swedish business incubators perceive their role and what challenges do they experience?

Women leaders of business incubators in Sweden perceive their role as the ones who nurture and take care of the community, utilize their leadership qualities, help incubatees and staff, and constantly meet expectations and goals from financiers. In addition, women perceive they need to juggle different tasks and manage different stakeholders. In terms of challenges, since they constantly deal with different actors inside and outside the business incubator, challenges appear in both contexts. Most of the challenges they perceive are related to team management and coping with financiers. Additionally, they do not perceive that gender challenges affect their performance in their job. Overall, women leaders from incubators that support startups in the tech and life science industries have a similar perception of their role to those that support any field and perceive they confident in the way they lead.

6.2 Implications for academia

The findings made in this thesis support some prior literature and contradict others. Most of the findings by Kakabadse et al. (2020) were supported. Firstly, the role demands being related to juggling many different balls. Secondly, the role constraints being mainly the bureaucratic tasks

associated with getting funding for the incubator. Finally, the managers also discussed their role choices to deal with said constraints mainly as prioritization. However, the current thesis partially confirmed the core finding of Kakabadse et al. (2020) that incubator leaders perceive their main role as being the “supporting mechanism” for incubatees. The women incubator leaders who were interviewed perceived their main role to be taking care of the community, which enables the employees to focus on supporting the incubatees. Therefore, although all the decisions made by the incubator leaders are to ultimately give the best support to as many entrepreneurs as possible, they do this indirectly by creating enabling conditions for the team via taking care of the community and making sure the incubator is operating smoothly.

In addition, literature that found that women use feminine leadership traits was also partially supported; however, most literature pertaining to gender-related challenges was contradicted. They lead using communal characteristics, like taking care of the community's welfare (Kusterer, Lindholm & Montgomery, 2013). Yet, as opposed to the findings of Rudman and Phelan (2010), they had high managerial aspirations and strong self-efficacy. The interviewed women leaders did not experience the glass ceiling or glass cliff (Dzubinski, Diehl & Taylor, 2019). Other ideas which were not supported by the current findings are think manager-think male (Schein, 2001), gender stereotypes (Ely, 1995), and adapting their physical aspects to be taken seriously (Elliott and Stead, 2017). Overall, the evidence found in this thesis is too weak to support the prior findings about gender-related challenges for women in the workplace (Guirado et al. 2012). There was no pattern of such challenges that impacted the leader's ability to perform their role or move up the organizational ladder. Therefore, the researchers made suggestions for future research.

6.3 Implications for practice

The findings drawn from the present thesis can be important for practice, especially for two actors. Firstly, for women leaders in business incubators around Sweden. The results and findings in the present study can give them references of what other colleagues are perceiving and doing in the same role and can serve as a benchmarking tool. Therefore, women can see a representation of themselves in the present thesis because most research on success criteria in business is based on men or masculine traits. However, this paper allows them to see their role

based on women and feminine characteristics. Secondly, the present study can help other women or recent graduates from the entrepreneurship field that want to become incubator managers one day, such as one of the authors of the present thesis. The findings can prepare these future leaders by informing them what the role involves, the challenges they will face, and what will be expected from them. In addition, the study can serve as an example of successful role models to look at. Overall, this paper can help understand the role of the incubator leaders and students to evaluate if they are ready for the challenge.

6.4 Recommendations for future research

First of all, the authors recommend repeating the research but only in one type of incubator, for example, addressing only university incubators or public. By doing this, more profound insights can emerge, and perceptions can be differentiated between the different incubator types. Additionally, the authors suggest replicating the present research in other countries to address cultural differences and discuss how these differences impact the results.

In addition, the current thesis did not find support for a lot of literature relating to gender challenges in the workplace. Therefore, the researchers suggest that future research should consider the cultural context when conducting gender studies and assess the impact of the culture on the perception of gender-related challenges in the workplace for women. Additionally, just because this thesis did not find that women leaders of incubators in Sweden do not encounter gender-related challenges, these findings do not deny the existence of such issues. Therefore, the researchers suggest that future research should study the actors around the leader. For example, research the expectations from financiers to incubator leaders to see if they expect more from women leaders, as suggested from our findings. Another approach could be a case study of a women leader to see if there is a match between the perception of the manager and the different stakeholders that they interact with regularly, such as the team, financiers, the board of directors, and clients. Finally, another research approach could be to assess the perceptions of challenges of women who are still in the process of trying to get into the position of manager or CEO of incubators. Although no strong evidence of gender-related challenges were found in this thesis, the researchers urge for more in-depth gender studies to develop a fuller picture of challenges related to gender in the workplace.

References

- Ålund, A. (1998). Swedish Multicultural Society, *Soundings*, vol. 9, pp.176-181
- Ahl, H. (2006). Why Research on Women Entrepreneurs Needs New Directions, *Entrepreneurship Theory and Practice*, vol. 30, no. 5, pp.595-622
- Ahmad, A. J., & Thornberry, C. (2018). On the structure of business incubators: de-coupling issues and the mis-alignment of managerial incentives, *The Journal of Technology Transfer*, vol. 43, pp.1190-1212
- American Psychological Association. (2022). APA Dictionary of Psychology, Available online: <https://dictionary.apa.org/self-perception> [Accessed 20 Feb. 2022]
- Andersen, J. A., & Hansson, P. H. (2011). At the end of the road? On differences between women and men in leadership behaviour, *Leadership & Organization Development Journal*, vol. 32, no. 5
- Bak, H., Jin, M. H., & McDonald, B. D. (2021). Unpacking the Transformational Leadership-Innovative Work Behavior Relationship: The Mediating Role of Psychological Capital, *Public Performance & Management Review*, vol. 45, no. 1, pp.80-105
- Baker, T., Aldrich, H. E., & Liou, N. (1997). Invisible entrepreneurs: The neglect of women business owners by mass media and scholarly journals in the USA, *Entrepreneurship & Regional Development*, vol. 9, pp.221–238
- Baumgartner, M. S., & Schneider, D. E. (2010). Perceptions of Women in Management: A Thematic Analysis of Razing the Glass Ceiling, *Journal of Career Development*, vol. 37, no. 2, pp.559-576
- Bavey, N., Messel, T., Jessen, H., Schuyler, S., Di Fonzo, M. A., Lundqvist, M., & Renoldi, M. (2021). *The Startup Funding Report: the untapped potential of the Nordic Ecosystem and beyond*, Sweden: Unconventional Ventures
- Bell, E., Bryman, A., & Harley, B. (2015). *Business Research Methods*, New York: Oxford University Press

- Bem, D. J. (1972). Self-perception theory, *Advances in Experimental Social Psychology*, vol. 6, pp.1–62
- Bergek, A., & Norman, C. (2008). Incubator best practice: A framework, *Technovation*, vol. 28, pp.20-28
- Birley, S. (2002). Universities, academics, and spinout companies: Lessons from imperial, *International Journal of Entrepreneurship Education*, vol. 1, no. 1, pp.1–21
- Blok, V., Thijssen, S., & Pascucci, S. (2016). Understanding Management Practices in Business Incubators: Empirical Evidence of the Factors Impacting the Incubation Process, *International Journal of Innovation and Technology Management*, vol. 14, no. 4
- Bosak, J., & Sczesny, S. (2008). Am I the Right Candidate? Self-Ascribed Fit of Women and Men to a Leadership Position, *Sex Roles*, vol. 58, no. 9, pp.682-688
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology, *Qualitative Research in psychology*, Available online: https://www.researchgate.net/publication/269930410_Thematic_analysis [Accessed 2 May 2022]
- Campbell, K., & Minguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance, *Journal of Business Ethics*, vol. 83, no. 3, pp.435–451.
- Carter, D., Simkins, B., & Simpson, W. (2003). Corporate governance, board diversity, and firm value, *Financial Review*, vol. 38, no. 1, pp.33–53.
- Catalyst. (2020). Women CEOs of the S&P 500, Available online: www.catalyst.org/research/women-ceos-of-the-sp-500/ [Accessed 17 April 2022]
- Center for Strategy and Evaluation Services. (2002). Benchmarking of business incubators, Available online: <http://ict-industry-reports.com.au/wp-content/uploads/sites/4/2013/10/2002-Benchmarking-of-Business-Incubators-CSES-European-Union.pdf> [Accessed 18 April 2022]
- Da Silva, M. C., Rampasso, I. S., Anholon, R., Ordoñez, R. E. C., Quelhas, O. L. G., & Da Silva, D. (2018). Critical Success Factors of Brazilian Business Incubators, *Latin American Business Review*, vol. 19, no. 3-4, pp.197-217

- Dahlstrand, Å, L. & Klofsten, M. (2002). Growth and innovation support in Swedish science parks and incubators, in Oakey, R., Daring, W. and Kauser, S. (eds.), *New Technology Based Firms at the New Millennium II*, Oxford: Elsevier Science, pp.31–46
- Dezs, C & Ross, D. (2012) Does Female Representation in Top Management Improve Firm Performance? A Panel Data Investigation, *Strategic Management Journal*, Available online: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/smj.1955> [Accessed 4 March 2022]
- Dzubinski, L., Diehl, A., & Taylor, M. (2019). Women’s ways of leading: the environmental effect, *Gender in Management: An International Journal*, vol. 34, no. 3, pp.233-250
- Eagly, A., H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis, *Psychological Bulletin*, vol. 108, no. 2, pp.233-256
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders, *Psychological Review*, vol. 109, no. 3, pp.573-598
- Elliott, C. & Stead, V. (2017). The effect of media on gender and leadership, in Madsen, S. R. (eds.), *Handbook of Research on Gender and Leadership*, Northampton, MA: Edward Elgar Publishing, pp.344-360.
- Ely, R. J. (1995). The power in demography: women’s social constructions of gender identity at work, *Academy of Management Journal*, vol. 38, no. 3, pp.589-634.
- Fagenson, E. A., & Marcus, E. C. (1991). Perceptions of the sex-role stereotypic characteristics of entrepreneurs: women’s evaluations, *Entrepreneurship Theory and Practice*, vol. 15, no. 4, pp.33 – 47
- Founder Institute. (2021). Sweden Startup Resource List: 410+ Accelerators, Incubators, Investors, and more, Available Online: <https://fi.co/insight/stockholm-startup-guide-250-resources-for-entrepreneurs> [Accessed 1 February 2022]
- Gabarret, I., & D’Andria, A. (2021). Improving gender equality through entrepreneurship: The role of women-dedicated business incubators, *Journal of the International Council for Small Business*, Available online: <https://doi.org/10.1080/26437015.2021.1882916> [Accessed 4 March 2022]

- Gentles, J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in Qualitative Research: Insights from an Overview of the Methods Literature, *The Qualitative Report*, vol. 20, no. 11, pp.1772– 1789
- Glass, C., & Cook, A. (2016). Leading at the top: understanding women’s challenges above the glass ceiling, *The Leadership Quarterly*, vol. 27, no. 1, pp.51-63
- World Economic Forum. (2019). Global Gender Gap Report [PDF], Available at: <https://www.weforum.org/reports/gender-gap-2020-report-100-years-pay-equality> [Accessed 18 April 2022]
- Goia, D., Corley, K., & Hamilton, A. (2012). Seeking Qualitative Rigor in Inductive Research: Notes on the Goiaia Methodology, *Organizational Research Methods*, vol. 16, no. 1, pp.15-31
- Grimaldi, R., & Grandi, A. (2005). Business incubators and new venture creation: An assessment of incubating models, *Technovation*, vol. 25, no. 2, pp.111–121
- Grimm, P. (2010). Social Desirability Bias, *Marketing Research*, Available online: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781444316568.wiem02057> [Accessed 17 April 2022]
- Guirado, I. C., Navas, M., Molero, F., & Ferrer, E. (2012). Gender Differences in Leadership Styles as a Function of Leader and Subordinates' Sex and Type of Organization, *Journal of Applied Social Psychology*, vol. 42, no. 12, pp.3083-3113
- Hannon, P. D. (2003). A Conceptual Development Framework for Management and Leadership Learning in the UK Incubator Sector, *Education & Training*, vol. 45, no. 8/9, pp.449-460
- Haradhan, M. (2018). Qualitative Research Methodology in Social Sciences and Related Subjects, *Journal of Economic Development, Environment and People*, Available online: <https://mpra.ub.uni-muenchen.de/85654/> MPRA Paper No. 85654 [Accessed 1 May 2022]
- Hausmann, R., Tyson, L. D., & Zahidi, S. (2010). The Global Gender Gap Report 2010, Available online: https://www3.weforum.org/docs/WEF_GenderGap_Report_2010.pdf [Accessed 23 February 2022]

- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: reactions to women who succeed at male gender-typed tasks, *Journal of Applied Psychology*, vol. 89, no. 3, pp.416-427
- Hoobler, J. M., Masterson, C. R., Nkomo, S. M., & Michel, E. J. (2016). The Business Case for Women Leaders: Meta-Analysis, Research Critique, and Path Forward, *Journal of Management*, vol. 44, no. 6, pp.2473-2499
- Isenberg, D. (2010). The Big Idea: How to Start an Entrepreneurial Revolution, *Entrepreneurship*, Available online: <https://hbr.org/2010/06/the-big-idea-how-to-start-an-entrepreneurial-revolution> [Accessed 17 April 2022]
- Jaffe, V. (2015) Female-focused Business Incubation In The Triangle, Available online: <https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/10065/Female-focused%20business%20incubation.pdf;sequence=1> [Accessed 10 March 2022]
- Jayasingam, S., & Cheng, M. Y. (2009). Leadership Style and Perception of Effectiveness: Enlightening Malaysian Managers, *Asian Social Science*, vol. 5, no. 2, pp.54-65
- Kakabadse, N., Karatas-Ozkan, M., Theodorakopoulos, N., McGowan, C., & Nicolopoulou, K. (2020). Business Incubator Manager's Perceptions of their Role and Performance Success: Role Demands, Constraints, and Choices, *European Management Review*, vol. 17, pp.485-498
- Kark, R., Waismel-Manor, R., & Shamir, B. (2012). Does valuing androgyny and femininity lead to a female advantage? The relationship between gender-role, transformational leadership and identification, *The Leadership Quarterly*, vol. 23, pp.620-640
- Kusterer, H. L., Lindholm, T., & Montgomery, H. (2013). Gender typing in stereotypes and evaluations of actual managers, *Journal of Managerial Psychology*, vol. 28, no. 5, pp.561-579
- Ljungholm, D.P. (2016). The role of work organizations in the social construction of gender, *Journal of Research in Gender Studies*, vol. 6, no. 1, pp.269-275.
- Longman, K. A. & Bray, D. L. (2017). The role of purpose and calling in women's leadership experiences, in Madsen, S. (eds.), *Handbook of Research on Gender and Leadership*, Northampton, MA: Edward Elgar Publishing, pp.207-222.

- Marlow, S., Henry, C., & Carter, S. (2009). Exploring the impact of gender upon women's business ownership, *International Small Business Journal*, vol. 27, pp.139-48.
- Marlow, S., & McAdam, M. (2011). Analyzing the Influence of Gender Upon High- Technology Venturing Within the Context of Business Incubation [Pdf], Available at: <https://journals.sagepub.com/doi/full/10.1111/j.1540-6520.2010.00431.x> [Accessed 08 March 2022]
- Mattis, M. (2004). Women entrepreneurs: out from under the glass ceiling, *Women in Management Review*, Available online: www.emeraldinsight.com/0964-9425.htm [Accessed 2 May 2022]
- Miranda, S. (2019). Preferred leadership styles by gender, *Journal of Management Development*, vol. 38, no. 7, pp.604-615
- Monsson, C. K., & Jørgensen, S. B. (2016). How do entrepreneurs' characteristics influence the benefits from the various elements of a business incubator? *Journal of Small Business and Enterprise Development*, vol. 23, no. 1, pp.224–239
- Mukiza, J., Kansheba, P., & Wald, A.E. (2020). Entrepreneurial Ecosystems: A Systematic Literature Review and Research Agenda, *Journal of Small Business and Enterprise Development*, vol. 27, no. 6, pp.943-964
- NBIA. (2016). National Business Incubation Association, Available at: <http://www2.nbia.org> [Accessed 21 February 2022]
- NUTEK in Sweden. (n.d.). Available online: <https://www.nutek.se> [Accessed 1 April 2022]
- O'Brien, D. Z., & Rickne, J. (2016) Gender quotas and women's political leadership, *American Political Science Review*, vol. 110, no.1, pp.112–126
- Oliveira, S. R. M., & Vieira, M. T. (2016). Empirical evidence about the characteristics and business Incubators performance: A framework of multiple cases, *American International Journal of Contemporary Research*, vol. 6, no. 1, pp.62-70
- Orser, B. J., Elliott, C., & Leck, J. (2011). Feminist attributes and entrepreneurial identity, *Gender in Management: An International Journal*, vol. 26, no. 8

- Patton, D., & Marlow, S. (2011). University technology incubators: Helping new entrepreneurial firms to learn to grow, *Environment and Planning C: Government and Policy*, vol. 29, pp.911–926
- Patton, D., Warren, L., & Bream, D. (2009). Elements That Underpin High-Tech Business Incubation Processes, *The Journal of Technology Transfer*, vol. 34, pp.621–636
- Peni, E. (2012). CEO and Chairperson Characteristics and Firm Performance, *Journal of Management & Governance*, Available online: <https://link.springer.com/article/10.1007/s10997-012-9224-7> [Accessed 09 March 2022]
- Petrovic, J. (2008). Unlocking the role of a board director: A review of the literature, *Management Decision*, vol. 46, pp.1373–1392
- Phan, P. H., Siegel, D. S., & Wright, W. (2005). Science parks and incubators: observations, synthesis and future research, *Journal of Business Venturing*, vol. 20, no. 2, pp.165–182.
- Ragins, B. R. (1997). Diversified mentoring relationships in organizations: a power perspective, *Academy of Management Journal*, vol. 22, no. 2, pp.482-521.
- Redondo, M., & Camarero, C. (2017). Dominant logics and the manager's role in university business incubators, *Journal of Business & Industrial Marketing*, vol. 32, no. 2, pp.282-294
- Rudman, L. A., & Phelan, J. E. (2010). The effect of priming gender roles on women's implicit gender beliefs and career aspirations, *Social Psychology*, vol. 41, no. 3, pp.192-202
- Sahoo, D., & Lenka, U. (2016). Breaking the glass ceiling: opportunity for the organization, *Industrial and Commercial Training*, vol. 48, no. 6, pp.311-319
- Saint-Michel, S. E. (2018). Leader Gender Stereotypes and Transformational Leadership: Does Leader sex make the Difference, *Management*, vol. 21, no. 3, pp.944-966
- Schein, V. (2001). A Global Look at Psychological Barriers to Women's Progress in Management, *Journal of Social Issues*, vol. 57, no. 4, pp.675-688

- Scillitoe, J. L., & Chakrabarti, A. K. (2010). The role of incubator interactions in assisting new ventures, *Technovation*, vol. 30, pp.155–167
- Silva, S., & Mendis, K. (2017). Male vs Female Leaders: Analysis of Transformational, Transactional & Laissez-faire Women Leadership Styles, *European Journal of Business and Management*, vol. 9, pp.19-26
- Snyder, M., & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity, *Journal of Personality and Social Psychology*, vol. 51, no. 1, pp.125–139
- Stewart, R. (1976a). Contrasts in management: A study of different types of managers' jobs, their demands and choices, London: McGraw-Hill.
- Stewart, R. (1976b). To understand the manager's job: Consider demands, constraints, choices, *Organisational Dynamics*, vol. 4, no. 4, pp.22–32.
- SUMMIT-II. (2010). Business incubator management training institute, Available online: <http://www.summitii.org> [Accessed 22 February 2022]
- Sweden Tech Ecosystem. (n.d.). Available online: https://techecosystem.startupsweden.com/investors.accelerators/f/all_slug_locations/anyof_sweden?prominence=europe_seed_prominence_unique&sort=europe_seed_prominence_unique& [Accessed 1 April 2022]
- Swedish Incubators and Science Parks. (n.d.). Available online: <https://www.sisp.se/> [Accessed 1 April 2022]
- Treanor, L., & Henry, C. (2010). Gender in campus incubation: evidence from Ireland, *International Journal of Gender and Entrepreneurship*, Available online: www.emeraldinsight.com/1756-6266.htm [Accessed 10 March 2022]
- The Swedish Innovation Strategy. (2012). Ministry of Enterprise and Innovation, Available online: <https://www.government.se/information-material/2012/10/the-swedish-innovation-strategy/> [Accessed 12 April 2022]

- Trinidad, C., & Normore, A. H. (2005). Leadership and gender: A dangerous liaison? *Leadership & Organization Development Journal*, vol. 26, no. 7, pp.574-590
- Ulvenblad, P., Blomkvist, M., & Winborg, J. (2011). Academic Entrepreneurship- the structure of incubator management and best practice reported on Swedish business incubators, *International Journal of Entrepreneurship and Small Business*, vol. 12, no. 4, pp.445-458
- Verheul, I., & Thurik, R. (2001). Start-up capital: Does gender matter? *Small Business Economics*, vol. 16, no.4, pp.329–345
- Wood, W., & Eagly, A. H. (2009). Gender Identity, in M. R. Leary (eds.), *Handbook of Individual Differences in Social Behavior*, New York, NY: Guilford Publications, pp.109-125
- Xu, L. (2010). Business incubation in China: effectiveness and perceived contributions to tenant enterprises, *Management Research Review*, vol. 33, pp.90–99.
- Zhang, R., Qiu, S., Dooley, L. M., & Choudhury, T. (2021). Managerial aspiration: do gender and gender role identity make a difference in the Chinese context? *Gender in Management: An International Journal*, vol. 36, no. 2, pp.189-204

Appendix A- Interview Guide

This interview guide looks to gather data for the thesis topic Womens' Perception of their Role as CEOs and Managers of Business Incubators: leadership, environment and challenges. The participation in this research is voluntary and anonymous. Your name will not be used in the analysis of the data and we will also not use the name of the incubator. Your responses will be allocated anonymously in the group of incubators that support any field or in the group of incubators that support tech, science or engineering fields. The data will be used for the thesis for us to analyse patterns in our data. You are free to withdraw from the research at any time.

Information about the incubator

Industry of the startups that the incubator supports

Number of employees: Women Men Other

Private or public?

Founding date of incubator:

What are the services that the incubator offers to the incubatees?

What are the specific objectives that this incubator has?

Introduction

Name of your role

Time in the position:

Perception of managerial role in an incubator:

Can you tell us briefly about your current role?

Can you describe a typical day for you as a manager of an incubator?

From your point of view, what are your principal qualities as an incubator CEO?

Role and demands

Why did you choose to apply to this position at this incubator?

What did you do to get to the position that you have now?

What are the 3 most important tasks of your role?

What needs to be done in your current role? (Things that are not super important but need to be done)

From your background and previous experiences, what is helping you carry out your role now?

Leadership

Have your colleagues ever approached you and talked to you about your leadership qualities?

What did they say?

Can you describe what actions you take as a leader to nurture the relationships with your personnel?

Constraints

Can you give us an example of when you felt frustrated at work?

Have you talked to your colleagues about it?

What got in the way of you fulfilling your most important tasks?

Are there any challenges from outside the incubator?

Dealing with challenges

How did you deal with X challenge?

Environment

What is it like working in the Entrepreneurial Ecosystem as a CEO of an incubator?

Are there any challenges for YOU working within the EE as a manager?

How would you describe a gender-balanced work environment?

Do you think the environment where you work is gender-balanced? Why?

Does this influence your actions as a manager/CEO at a business incubator?

(Follow-up: do you have role models?)

Gender related questions

Can you give an example of some expectations from people internally and externally in terms of your role as an incubator manager?

Are they different from the ones that men need to fulfill? What kind of expectations?

Were there any challenges in getting the leadership position in the incubator that you have now?

Appendix B- List of Incubators

Incubator	CEO/Manager	Focus Field	Location
Brewhouse	Woman/Man	music, stage and new technology.	Västra Götaland
Things	Woman	Deep tech	Stockholm
Impact Startup	Woman	All industries	Stockholm & Malmö
Level	Woman	All industries	Malmö
Umeå Biotech Incubator	Woman	Life Science	Umeå
Framtidens Företag	Woman	Digital Service	Göteborg
KI Innovations	Woman	Life Science	Solna
LEAD Incubate	Woman	B2B	Norrköping and Linköping
Create Business Incubator	Woman	All industries	Västerås
Smile Incubator	Woman	Life Science	Lund
Venture Lab	Woman	All industries	Lund
SU inkubator	Woman	All industries	Villa Bellona
GU Ventures	Woman	All industries	Göteborg
Hi5	Woman	Sustainability	Halmstad
DigitalWell Ventures	Woman	Digital Health and Welfare Tech	Karlstad
Movexum	Woman	All industries	Gävle
SSE Business Lab	Woman	All industries	Stockholm
Walerud Ventures	Woman	Science, planet	Stockholm
KTH Innovation	Woman	Technology	Stockholm
Ignite Sweden	Woman	All industries	Stockholm & Malmö & Göteborg
eXpression Umeå	Woman	Artistic and cultural industries	Umeå
Fast Track Malmö (part of Minc)	Man	Technology/Digital Startups	Malmö
Bizmaker	Man	Sustainability	Sundsvall
Unboxx	Man	All industries	

Artic Business + ESA Business Incubation Center	Man	Technology	Luleå
Inkubera	Man	All industries	Örebro and Karlskoga
Umeå Biotech Incubator	Man	Biotech	Umeå
The Game Incubator	Man	Software	Skövde & Göteborg
Blekinge Business Incubator	Man	All industries	Karlskrona & Karlshamn
Ideon Innovation	Man	All industries	Lund
Game Habit	Man	Software	Malmö
Sweden Game Arena	Man	Software	Skövde
Startup Sweden	Man	Technology	
Increasor	Man	Technology	Stockholm
Yuncture	Man	Technology	Möndal
Nordic Tech House	Man	Technology	Stockholm
Krinova Incubator & Science Park	Man	All industries	Kristianstad
Sting	Man	Technology	Stockholm
Uminova Innovation	Man	Technology	Umeå
Boras Ink	Man	Technology, Textile and Fashion	Borås
Peak Incubator	Man	All industries	Östersund
Breed Ventures	Man	All industries	Stockholm
Uppsala Innovation Center	Man	All industries	Uppsala
Atrinova	Man	All industries	Oskarshamn
Innovation Skane	Man	Software	Lund