Masteroppgave

NTNU
Norges teknisk-naturvitenskapelige universitet
Fakultet for økonomi
Institutt for industriell økonomi og teknologiledelse

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Entrepreneurial Efficacy Beliefs: Uncovering the Missing Factors in the Equation

A Longitudinal Case Investigation on Factors Affecting Entrepreneurial Self-Efficacy and Entrepreneurial Team-Efficacy in New Venture Teams

Masteroppgave i NTNUs Entreprenørskole
Veileder: Torgeir Aadland
Medveileder: Mariel Hjelle
Juni 2023

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Abstract

Entrepreneurial self-efficacy (ESE) has been widely acknowledged as a significant factor in determining entrepreneurial intention (Newman et al., 2019; Shinnar et al., 2014; Taneja & Bhatia, 2022). However, the influence of entrepreneurial team-efficacy (ETE) has received less attention from scholars and practitioners. With the field of entrepreneurship increasingly emphasising team collaboration over individual efforts, research on team performance has shifted accordingly (Black et al., 2019). Moreover, efficacy beliefs in New Venture Teams (NVTs) remain scarce (Klotz et al., 2014). This study aims to address these gaps by adopting a longitudinal qualitative approach, considering individual and group levels in NVTs enrolled in a Norwegian Venture Creation Programme (VCP). To guide the research, the following research question is addressed:

What factors influence new venture teams' members' entrepreneurial self-efficacy and the teams' entrepreneurial team-efficacy over time?

Ten students were interviewed in two data acquisition rounds with two months in between, resulting in 20 interviews in total. This provides an understanding of the dynamics of ESE and ETE within new venture teams. The data acquisition revealed the need for discussion around concepts such as task commitment and motivation, team cohesion, entrepreneurial ecosystems, VCP, and the inner life of the entrepreneur in order to comprehend how the NVT's efficacy beliefs evolved.

The findings suggest that changes in task commitment and motivation drive fluctuations in levels of entrepreneurial self-efficacy. Additionally, the study reveals that the development of an individual's entrepreneurial self-efficacy influences team cohesion, mediated by their attitudes and feelings towards the venture. However, no direct relationship is found between team cohesion and entrepreneurial team-efficacy. Expanding on this concept, the authors argue that the enhancement in entrepreneurial team-efficacy primarily stems from factors beyond team development and internal dynamics within the studied new venture teams. Instead, they propose that the surrounding environment, particularly the venture creation program in which the teams actively participate, and the profound inner perceptions of the entrepreneurs involved, play crucial roles in fostering both entrepreneurial team-efficacy and entrepreneurial self-efficacy.

Sammendrag

Entreprenøriell mestringstro (Entrepreneurial Self-Efficacy) er anerkjent som en av de viktigste faktorene som påvirker og bestemmer entreprenøriell intensjon (Newman et al., 2019; Shinnar et al., 2014; Taneja & Bhatia, 2022). Til tross for dette har ikke akademikerne viet like mye oppmerksomhet til entreprenøriell mestringstro i team (Entrepreneurial Team-Efficacy).

I økende grad vektlegger entreprenørskapsfeltet teamarbeid høyere enn individuell innsats, noe som også gjenspeiles i forskning på teamprestasjoner (Black et al., 2019). I tillegg er mestringstro i NVT (New Venture Team) fortsatt lite forsket på (Klotz et al., 2014). Denne studien forsøker å adressere disse identifiserte gapene i forskningen ved å ta i bruk en longitudinell kvalitativ tilnærming, med fokus på individene og gruppene i NVT-er som tar del i et praktisk orientert entreprenøriell utdanningsprogram (Venture Creation Program). For å guide forskningen videre, har følgende forskningsspørsmål oppstått:

"Hvilke faktorer påvirker nye venture teams medlemmers entreprenørielle mestringstro og teamets mestringstro over tid?"

Gjennom to intervjurunder ble ti studenter intervjuet i to omganger, som resulterte i 20 intervjuer totalt. Dette har bidratt med dybdeforståelse i dynamikken av ESE og ETE innad i oppstartsteamene. Datainnsamlingen avdekket et behov for diskusjon rundt konseptene; oppgave forpliktelse, motivasjon, teamsamhold, entreprenørielt økosystem, VCP og entreprenørens indre liv for forståelse av hvordan sin mestringstro utvikler seg.

Funnene som er gjort, foreslår at endring i oppgaveforpliktelse og motivasjon påvirker svingninger i nivåene av ESE. I tillegg viser studien at utviklingen av individets mestringstro påvirker teamsamhold, som blir balansert av deres holdninger og følelser mot oppstartsbedriften. Det ble ikke funnet en direkte relasjon mellom teamsamhold og teamets mestringstro. Forfatterne argumenterer for at forbedringen i teamets mestringstro primært kommer fra andre faktorer enn teamutvikling og intern dynamikk. Forfatterne foreslår at omgivelsene innenfor VCP hvor teamene befinner seg, og oppfatningen av med-gründerne har en avgjørende rolle for å fremme både ETE og ESE.

Preface

This master's thesis is a collaborative effort by three students enrolled in the master's degree program at the NTNU School of Entrepreneurship. It was conducted under the guidance and supervision of the Department of Industrial Economics and Technology Management (IØT) at the Norwegian University of Science and Technology (NTNU).

Writing this master thesis has been a challenging and complex yet rewarding journey, allowing the authors to dive deep into the, at least for the authors, the unknown abyss of entrepreneurial self-efficacy and entrepreneurial team-efficacy. We would like to thank Torgeir Aadland for his invaluable guidance, unwavering support, and insightful feedback throughout the entire process. Their expertise and mentorship have been instrumental in shaping our understanding, refining our research approach, and enhancing the quality of this thesis. - Det ble riktignok avhandling til slutt!

We would also like to thank Mariel Hjelle for her support and guidance throughout the writing process. Lastly, we would like to thank friends and family for their support.

Have a good read!

Trondheim, June, 2023

Ingrid Marie Brandt

Lise Tholin Lien

Heidi Andersen Grande

Abbreviations

The following abbreviations have been used in this thesis.

EE	Entrepreneurship Education
NSE	NTNU School of Entrepreneurship
VCP	Venture Creation Program
ESE	Entrepreneurial Self-Efficacy
ETE	Entrepreneurial Team-Efficacy
NVT	New Venture Teams

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1. Introduction

The essence of entrepreneurship lies in exploring and discovering profitable opportunities (Shane & Venkataraman, 2000). By actively seeking and recognising profitable opportunities, entrepreneurs discover areas of inefficiency within an economy or society and contribute to enhancing its economic performance (Shane & Venkataraman, 2000). This, in turn, leads to sustainable economic growth and fosters innovation while simultaneously generating new employment opportunities (Matlay, 2008; Shabbir et al., 2022). Therefore entrepreneurs play a significant role in driving both economic prosperity and job creation.

In order to maintain sustainable economic growth, both private and public initiatives aim to foster entrepreneurial activity (Rasmussen & Sørheim, 2006). Universities are one of the public initiatives expected to contribute to economic development (Etzkowitz et al., 2000; Nowinski et al., 2019), leading to the widespread expansion and growth of entrepreneurship courses and programs within higher education (Piperopoulos & Dimov, 2015). The rise of entrepreneurship as an academic field has led to a significant increase in research focused on entrepreneurship education (EE) and students currently or previously engaged in EE programs. Moreover, the landscape of entrepreneurial education has evolved, giving rise to venture creation programs (VCP) that adopt a "learning by doing" approach (Rasmussen & Sørheim, 2006; Robinson et al., 2006). These programs offer students the invaluable opportunity to actively participate in the entrepreneurial process and launch real ventures. Within such programs, students are expected to join an entrepreneurial team, also known as New Venture Teams (NVTs) (Aadland & Haneberg, 2019; Barr et al., 2009; Lackéus & Middleton, 2015; Ollila & Middleton, 2011). When enrolled in such programs, the students usually work in different team settings and leverage the ecosystem surrounding the program (Rasmussen & Sørheim, 2006).

The literature on entrepreneurship education has shifted its focus to studying entrepreneurial intention instead of measuring entrepreneurial behaviour based on demographic factors and personal traits (Nabi et al., 2017; Taneja & Bhatia, 2022). The concept of entrepreneurial intention is influenced by various variables, including the propensity to take action, social norms, and self-efficacy. One of the highest influential factors when determining entrepreneurial intention is entrepreneurial self-efficacy (ESE) (Newman et al., 2019; Shinnar

et al., 2014; Taneja & Bhatia, 2022). Self-efficacy was first introduced by Bandura as a part of the social cognitive theory. It refers to an individual's belief in their ability to utilise cognitive resources and motivation and take action necessary to exert control over events in their life (Wood & Bandura, 1989). Bandura later extended this notion to include team-efficacy, representing a significant group-level counterpart to self-efficacy (Bandura, 1997). When assessing team-efficacy, individuals shift their focus from the individual level to the collective level, with consensus among team members contributing to the elevation of this construct. Gibson (2003) defined team-efficacy as; *"a group's collective belief in its capability to organise and execute the course of action required to produce given levels of attainments on a specific task"* (Gibson, 2003, p. 2156).

Building upon this concept, the notion of entrepreneurial self-efficacy has been defined as; "*the strength of an individual's belief that he or she is capable of successfully performing the roles and tasks of an entrepreneur* " (Chen et al., 1998, p. 301). It is generally acknowledged that ESE plays a crucial role in determining whether individuals pursue entrepreneurial careers and engage in entrepreneurial behaviour (Newman, 2019). However, the construct of entrepreneurial team-efficacy (ETE) has received comparatively less attention. Hmieleski and Cole (2022) defined entrepreneurial team-efficacy within new venture teams as " *the degree of confidence that an NVT has in its ability to effectively perform the roles and tasks of entrepreneurship*" (Hmieleski & Cole, 2022, p. 1788). Furthermore, Hmieleski and Cole (2022) argue that the level of entrepreneurial team-efficacy among new venture teams quickly forms and stabilises, given the critical need for collaboration and interdependence in their work. Their research is the first to empirically demonstrate the effects of entrepreneurial team-efficacy when new venture teams confront uncertain environmental conditions, emphasizing the significance of considering ETE in new venture team research (Hmieleski & Cole, 2022).

When examining new venture teams, the question of how individuals come together as a cohesive unit emerges. One of the most influential models has been Tuckman's stages of development in small groups (Bonebright, 2010). Created by Bruce W. Tuckman in 1965 and revised by Tuckman and Mary Ann Conover Jensen in 1977, the model presents the stages of forming, storming, norming, performing, and adjourning. The practicality of Tuckman's model persists, as it provides a starting point for addressing crucial aspects of group dynamics (Bonebright, 2010). In this study, the authors consider this model to be valuable

when investigating the development of NVTs, as it offers insights into the challenges these teams may encounter.

Moreover, the process of keeping members of small groups together and united is defined as cohesion (Dion, 2000). In the entrepreneurial team literature, team cohesion is recognised as an essential emergent state that enhances collaboration among team members (Klotz et al., 2014). Similarly, in the context of NVTs, team commitment and trust have been identified as influential factors contributing to their effectiveness (Chowdhury, 2005). Additionally, previous studies have indicated that there is an impact of self-efficacy on team cohesion (Lent et al., 2006; Black et al., 2019), and the mediating role of team cohesion in the relationship between team efficacy and performance (Park et al., 2017). Nevertheless, its specific relevance within the entrepreneurial domain, particularly concerning entrepreneurial self-efficacy and entrepreneurial team-efficacy in NVTs, remains an area that warrants further investigation.

Thereby, the scope of this thesis is within the domain of venture creation programmes and new venture teams, exploring the entrepreneurial self-efficacy and entrepreneurial team-efficacy construct as illustrated in figure 1.

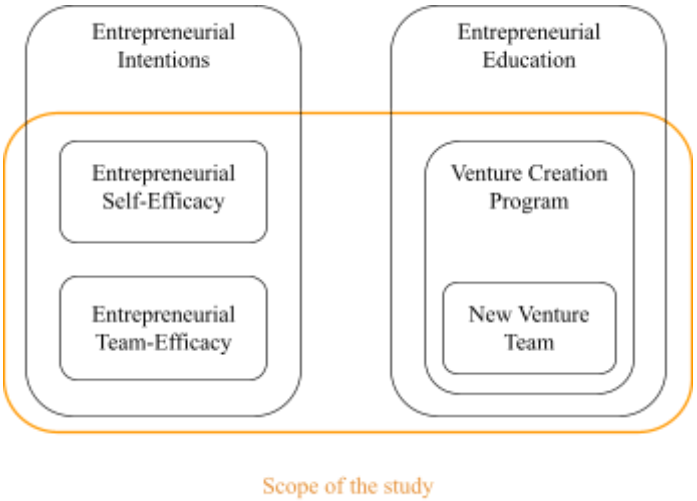

Figure 1: Scope of the study

1.2 Purpose and Research Question

Entrepreneurial self-efficacy has been extensively studied in relation to its antecedents and outcomes, revealing its significant impact on individuals' motivation and performance in entrepreneurial endeavours. However, existing research has primarily focused on understanding ESE as a relatively stable trait, neglecting the examination of short-term fluctuations and the potential developmental nature of ESE (Newman et al., 2019). Furthermore, team-efficacy has been proposed as a meaningful group-level parallel to the concept of self-efficacy (Bandura, 1997). In the domain of entrepreneurship, however, little attention has been paid to the antecedents and outcomes of entrepreneurial team-efficacy (Hmieleski & Cole, 2022). Furthermore, the research on efficacy beliefs in NVTs is deficient (Klotz et al., 2014).

Therefore, the purpose of this study is twofold: first, to investigate the short-term development of entrepreneurial self-efficacy in NVTs, and second, to examine the drivers of entrepreneurial team efficacy over time. By adopting a longitudinal approach and considering both individual and group levels, this study aims to provide a comprehensive understanding of the dynamics of ESE and ETE within new venture teams in a venture creation program environment. To guide this research, the following research question will be addressed:

What factors influence new venture teams' members' entrepreneurial self-efficacy and the teams' entrepreneurial team-efficacy over time?

The authors acknowledge that entrepreneurial self-efficacy does not necessarily equate to entrepreneurial team-efficacy, but recognise the importance of examining these concepts together for several reasons. Firstly, research conducted outside the realm of entrepreneurship indicates a link between them (Park et al., 2017). Secondly, the existing framework for investigating ETE alone is not sufficient. Lastly, studying the interplay of these concepts in the context of New Venture Teams (NVTs) can provide a deeper understanding of their relationship.

1.3 Structure of the Thesis

The study builds upon a literature review conducted by the authors in their project thesis, Exploring entrepreneurial self-efficacy development in entrepreneurship education from a Gender Perspective. The next chapter of the thesis introduces the theoretical foundation, delving into the relevant literature on self-efficacy and team-efficacy, venture creation program, team characteristics and social psychological concepts. Additionally, the study introduces the qualitative method used in this thesis, beginning with a description of the research design and following up with an abductive thematic analysis. The findings from the approach are presented separately in accordance with the sequential layout. In the following chapter, the findings are discussed, and a conclusion is drawn. The study also highlights its contribution, suggests areas for further research, and acknowledges the limitations of the study.

2.0 Literature Review

The authors conducted a thorough literature review that synthesised relevant theories and findings from multiple research fields in order to provide a solid foundation for our qualitative research. Additionally, as a result of the abductive research approach, other relevant theoretical frameworks will be presented. The following chapter will contain the relevant theory about self-efficacy, team-efficacy, venture creation programmes, new venture teams, team characteristics and social psychological theories.

2.1 Self-Efficacy

Self-efficacy, initially proposed by Bandura as a concept within social cognitive theory, refers to an individual's belief in their ability to utilise cognitive resources, motivation, and action necessary to exert control over events in their life (Wood & Bandura, 1989).

2.1.1 Entrepreneurial Self-Efficacy

In the context of entrepreneurship, the concept of entrepreneurial self-efficacy has been developed and extended from Bandura's original concept of self-efficacy. ESE is defined as the strength of an individual's belief in their capacity to successfully perform the roles and tasks of an entrepreneur (Chen et al., 1998).

According to the social cognitive theory, self-efficacy is developed and reinforced through four sources of information. First, enactive mastery, or performance accomplishment, involves the individual's past experiences of successfully completing similar tasks (Newman et al., 2019; Shinnar et al., 2014). Second, vicarious experience, or role modelling, refers to observing and learning from the experiences and successes of others (Newman et al., 2019; Shinnar et al., 2014). Third, subjective norms, or social persuasion, involve receiving feedback and support from significant others that reinforces one's belief in their entrepreneurial capabilities (Newman et al., 2019; Shinnar et al., 2014). Finally, physiological states, such as arousal and emotional states, can influence self-efficacy beliefs (Newman et al., 2019; Shinnar et al., 2014). By understanding the concept of entrepreneurial self-efficacy and its sources of development, researchers and practitioners can explore strategies to enhance individuals' belief in their entrepreneurial capabilities, ultimately fostering their motivation and performance in entrepreneurial endeavours.

Newman et al. (2019) highlighted a significant gap in empirical research regarding the fluctuations and changes in ESE over both short and long periods. They also emphasised the need to explore the factors that influence these changes, suggesting that further investigation is necessary to determine whether ESE should be considered as a relatively stable trait or a developmental state. Gielnik et al. (2020) used a longitudinal approach finding that self-efficacy is not a fixed belief but a dynamic process.

2.1.1 How Entrepreneurship Education Aids the Development of Entrepreneurial Self-Efficacy

The impact of entrepreneurship education on ESE remains unclear (Shinnar et al., 2014). EE may provide opportunities for students to work on real-world initiatives that will boost their self-assurance when performing as entrepreneurs, like pitching, conducting market research, or creating a business plan. Several studies and research have focused on how entrepreneurship education might strengthen ESE through the four sources (Shinnar et al., 2014). While some studies have found that some forms of EE improve ESE by increasing students' confidence in their ability to perform entrepreneurial tasks and roles (Chen et al., 1998; Piperopoulos &Dimov, 2014; Taneja & Bhatia, 2022; Zhao et al., 2005; Saeed et al., 2015), others have found a negative impact (Costin et al., 2022; Kassean et al., 2015).

In a previous literature review by the authors (Brandt, Tholin Lien & Grande, 2022) the results provided suggestions for the inconsistent findings in the literature on the impact of EE on ESE. Firstly, different studies employ different definitions and approaches to EE, resulting in variations in students' starting points and making it difficult to compare results and draw definitive conclusions about the impact of EE on ESE. Secondly, the authors (ibid) suggest that the suitability of surveys to study how students experience changes in their ESE through EE should be reevaluated. Social desirability bias and a lack of knowledge about ESE among informants may make it difficult for them to accurately report on their actions and beliefs, potentially resulting in sub- or over-reported data that could impact study outcomes. These issues highlight the importance of taking a critical approach when interpreting research on the relationship between EE and ESE (Brandt et al., 2022).

In conclusion, based on the findings presented in this chapter, entrepreneurial self-efficacy is shaped and reinforced by enactive mastery, vicarious experience, subjective norms, and

physiological states (Newman et al., 2019). However, further research is required to determine whether ESE should be viewed as a developmental state and explore the impact of entrepreneurial education on ESE.

2.2 Team-Efficacy

In both conceptual and empirical research, the concept of perceived mastery and competence has been studied primarily at the individual level. However, it is important to recognise that social factors influence individual behaviour (Maddux, 2013, p. 305). Individual perceptions of self-efficacy may not be sufficient to explain group performance when working on tasks requiring high levels of interaction among team members. These perceptions do not reflect members' judgments of team processes that are critical for team performance (Weldon & Weingart, 1993). When the emphasis shifts from individual competence to group competence, the meaning of efficacy must change. As a result, collective-efficacy has been proposed as a meaningful group-level parallel to the concept of self-efficacy on the individual level (Bandura, 1997). Gibson (2003) defined team-efficacy as *" a group's collective belief in its capability to organise and execute the course of action required to produce given levels of attainments on a specific task"* (Gibson, 2003, p. 2156). Collective-efficacy influences what people do as a group, how much effort they put into the group's goals, and how persistent they are when group efforts fail to produce results (Bandura, 1997).

Collective efficacy has been linked to antecedent factors such as prior group achievement, training, and self-efficacy (Ballesteros et al., 2002). Additionally, it is associated with group process, environmental factors, team cohesion and leadership climate (Chen & Bliese, 2002; Paskevich et al., 1999). Furthermore, affective outcomes such as job satisfaction, physiological strain, organisational commitment and group performance have been found to be influenced by collective efficacy (Jex & Bliese, 1999; Parker, 1994). Additionally, Lent et al. (2006) discovered that the relationship between self-efficacy and collective efficacy is in line with Bandura's (1997) claim that group members use estimates of their own efficacy in assessing the efficacy of their teams; earlier studies have also demonstrated this relationship (Fernandez-Ballesteros et al., 2002; Parker, 1994).

2.2.1 Entrepreneurial Team-Efficacy and Entrepreneurial Collective-Efficacy

Despite the significance of collective efficacy in team performance, empirical research on the topic in the context of entrepreneurial teams is scarce. While individual ESE has been extensively researched, little attention has been paid to the impact of team efficacy on entrepreneurial outcomes. To address this gap in the literature, some scholars have introduced the concepts of Entrepreneurial Team Efficacy (ETE) and Entrepreneurial Collective Efficacy (ECE). Hmieleski & Cole (2022) defined entrepreneurial team-efficacy within new venture teams as " *the degree of confidence that an NVT has in its ability to effectively perform the roles and tasks of entrepreneurship*" (Hmieleski & Cole, 2022, p. 1788).

Furthermore, Hmieleski and Cole (2022) argue that entrepreneurial team-efficacy quickly forms and stabilises among new venture teams due to the critical need for collaboration and interdependence in their work. They also found a positive relationship between shared coping humour and ETE, suggesting that encouraging shared coping humour may enhance team efficacy and new venture performance. Their research is pioneering in empirically demonstrating the effects of entrepreneurial team efficacy in the face of uncertain environmental conditions, highlighting the importance of considering ETE in new venture team research (Hmieleski & Cole, 2022).

Additionally, Schoss et al. (2022) investigated the relationship between deep-level diversity, conflicts, team efficacy, and team satisfaction in entrepreneurial teams. Deep-level diversity, specifically differences in values and beliefs, led to increased conflicts in the team, which negatively impacted team-efficacy and satisfaction. The study also suggests that conflict resolution strategies may aid in the improvement of ETE and satisfaction (Schoss et al., 2022).

Chowdhury and Enders (2014) researched to develop a measure of entrepreneurial collective efficacy. The authors discovered that ECE was related to team cohesion and team performance. The study also discovered that ECE differed from individual self-efficacy, implying that ECE is an essential factor in understanding entrepreneurial team performance (Chowdhury & Endres, 2014). Later, Chowdhury and Enders (2015) also found that both ECE and individual self-efficacy were found to be positively related to individual effort and performance. According to the findings, fostering both ECE and individual self-efficacy may result in increased individual effort and performance in entrepreneurial teams (Chowdhury & Endres, 2015).

Some researchers, like Chowdhry et al. (2014, 2015), argue that collective efficacy is more than just the sum of individual self-efficacy perceptions. Instead, the group as a higher-level entity focuses on team members' shared perceptions of their team's efficacy or collective efficacy (Chen, 2002). According to Katz-Navon & Erez (2005), collective-efficacy solidifies as a meaningful team construct and influences team performance only when a highly interdependent task requires team members to interact and coordinate their efforts closely. Self-efficacy, on the other hand, emerged as a meaningful construct that explained individual performance under low task interdependence conditions (Katz-Navon & Erez, 2005).

In conclusion, while individual self-efficacy in the context of entrepreneurial teams has been extensively studied, the impact of team efficacy on entrepreneurial outcomes has received less attention. Deep-level diversity and conflicts have been shown to have a negative impact on ETE and satisfaction. However, conflict resolution strategies and shared coping humour may improve ETE and new venture performance. Furthermore, ECE has been linked positively to team cohesion and performance, and encouraging both ECE and individual self-efficacy may result in increased effort and performance in entrepreneurial teams. Collective efficacy is found to be a meaningful team construct that influences team performance in highly interdependent tasks, whereas self-efficacy explains individual performance in conditions of low task interdependence.

2.3 Venture Creation Programs

Venture creation programs are academic programs that employ a practical teaching methodology, distinguishing them from traditional entrepreneurial education by offering direct experience in forming a real-life venture (Lackéus, 2014). Lackéus defines a VCP as an entrepreneurship education program that utilises the creation of a real-life venture as the primary learning vessel (Lackéus, 2014). These programs provide students with the opportunity to engage in the entrepreneurial process and launch a genuine venture. Student teams in VCPs are often considered as New Venture Teams (NVTs) (Barr et al., 2009; Aadland & Haneberg, 2019; Lackéus & Middleton, 2015; Ollila & Middleton, 2011).

The implementation of VCPs allows students to learn through experiential and hands-on approaches, working in different team settings and leveraging the ecosystem surrounding the

program (Rasmussen & Sørheim, 2006). While the adoption of VCPs in entrepreneurial education is gaining momentum, it remains a relatively uncommon concept, with only a limited number of programs established (Adams, 2016; Hägg, 2017). VCPs have been recognised as catalysts for transforming students into entrepreneurs, providing them with a supportive and stable environment to test and experience the entrepreneurial journey rather than solely acquiring theoretical knowledge (Aadland & Haneberg, 2019; Lackéus, 2015).

VCPs emphasise learning from failure and gaining new perspectives in various markets, encouraging students to apply their entrepreneurial mindset (Lackéus & Middleton, 2015). Students are encouraged to take risks, learn from mistakes, and develop a resilient entrepreneurial attitude (Aadland & Haneberg, 2019; Lackéus & Middleton, 2015). Through VCPs, students can experience the challenges and uncertainties of real-life entrepreneurship, fostering their entrepreneurial capabilities and nurturing their innovative thinking (Lackéus, 2015; Ollila & Middleton, 2011).

2.3.1 Development of Entrepreneurial Self-Efficacy in VCPs

Venture creation programs provide a comprehensive learning experience that extends beyond mere positivity. As entrepreneurs, individuals inevitably encounter problems and challenges (Bonesso et al., 2018), which present unwelcome and demanding situations that participants must overcome (Van Gelderen et al., 2005). Successfully navigating these challenges fosters a sense of mastery and enhances confidence in entrepreneurial abilities, often even more than easy success (Bandura, 1977). However, certain problems can result in feelings of failure, thereby diminishing participants' entrepreneurial self-efficacy (Fretschner & Lampe, 2019; Gielnik et al., 2020; Nabi et al., 2018).

Bohlayer and Gielnik (2023) found that individuals' error mastery orientation influenced the impact of problems on entrepreneurial self-efficacy during education. Participants with a low error mastery orientation experienced reduced entrepreneurial self-efficacy when faced with problems during training. On the other hand, participants with a high error mastery orientation did not experience a detrimental impact on their entrepreneurial self-efficacy when encountering problems (Bohlayer & Gielnik, 2023).

Overall, VCPs offer a unique and immersive learning approach in entrepreneurship education, enabling students to gain practical experience in venture creation while receiving guidance and support to enhance their entrepreneurial mindset and skills. Furthermore, error mastery orientation has been identified as a mediating factor that influences the relationship between the potential problems encountered during training and the level of entrepreneurial self-efficacy (Bohlayer & Gielnik, 2023).

2.4 New Venture Teams

As the industry has shifted toward a focus on team collaboration rather than individual efforts, so has research on team performance (Black et al., 2019). According to Chowdhury (2005), the manner in which entrepreneurial team members collaborate can have a significant impact on venture outcomes. However, it is unclear why some entrepreneurial teams can develop teamwork that leads to successful entrepreneurial outcomes while others are not (de Mol et al., 2015).

In this research, the definition of NVT by Klotz et al. (2014) will be applied. It is defined as *"a firm that is in its early stages of development and growth"* (Klotz et al., 2014, p. 227). The effectiveness of NVTs is crucial for successful venture development, as indicated by research by Kamm et al. (1990) and Klotz et al. (2014). Both the venture development process itself (Aadland & Haneberg, 2019) and the behaviour of NVTs (Hytti et al., 2010) play significant roles in the learning outcomes of students (Aadland & Haneberg, 2019). It is important to recognise that creating a new venture is a co-emergent process for both the venture and the NVT, and the learning experiences of students heavily rely on their engagement in venture creation (Aadland & Haneberg, 2019; Ollila & Middleton, 2011).

Initially, an NVT's role involves interpreting and responding to the external environment while concurrently managing internal venture operations (Hambrick, 2007; Schjoedt & Kraus, 2009). However, this role is complicated by the novelty and unstructured nature of venture activities (Amason et al., 2006) and the lack of previous knowledge (Cooper et al., 1994). For students, the inherent tension arising from combining real-life venture creation with the learning objectives of their academic coursework further compounds the complexity of NVTs. Student NVTs bear responsibility for the progress and performance of their

ventures (Aadland & Haneberg, 2019) while simultaneously aiming to achieve learning outcomes for individual team members.

The initial structuring of teamwork within NVTs significantly impacts the learning processes of team members (Ravasi & Turati, 2005), subsequent phases of venture creation (Bird et al., 2012), and ultimately, venture success (Knipfer et al., 2018; Schjoedt & Kraus, 2009). These factors impose substantial demands on NVTs (Knipfer et al., 2018; McMullen & Shepherd, 2006). Understanding how NVTs establish their teamwork is crucial for enhancing the learning experiences of team members (Ravasi & Turati, 2005), facilitating later phases of venture creation, and achieving successful venture outcomes (Knipfer et al., 2018; Schjoedt & Kraus, 2009).

Overall, teamwork and collaboration within New Venture Teams have a significant impact on venture outcomes, but the factors that contribute to successful teamwork and venture development are still unclear. It is thereby important to study the structuring of teamwork within early-stage ventures to enhance learning experiences and achieve successful outcomes.

2.5 Theoretical Framework

In order to understand the intricacies of team dynamics, the authors explore concepts such as team development, team cohesion and composition, as well as psychological factors that influence decision-making and behaviour, throughout the abductive research approach. This chapter delves into the importance of team cohesion, examining its antecedents and the impact on team efficacy and performance. Furthermore, it investigates the significance of team composition, emphasising the delicate balance between heterogeneity and homogeneity. Additionally, the chapter explores cognitive biases, social comparison, and cognitive dissonance as psychological concepts that shape the attitudes, beliefs, and behaviour of entrepreneurs and their teams.

2.5.1 Tuckman's Team Development Model

Tuckman's Team Development Model (1965) has been widely recognised and utilised as a framework for understanding the stages of team development (Bonebright, 2010), namely forming, storming, norming, performing, and adjourning (Tuckman, 1965). While originally developed for traditional teams, this model will be adapted and applied to the unique context

of entrepreneurial settings, where teams are formed to pursue innovative ventures. The authors will use Tuckman's model as a foundation for team development in the studied NVTs.

In the forming stage, entrepreneurial teams assemble with diverse backgrounds, skills, and perspectives, driven by the common goal of launching a new venture. During this phase, team members experience a mix of excitement and uncertainty as they navigate unfamiliarity with one another (Tuckman, 1965). Establishing clear communication channels, defining shared objectives, and delineating roles and responsibilities are critical to establishing a solid foundation for the team (Tuckman, 1965).

As the team progresses to the storming stage, conflicts and tensions may arise as members assert their ideas, opinions, and preferred working methods (Tuckman, 1965). This stage is characterised by potential power struggles, divergent decision-making approaches, and the challenge of aligning individual visions with the team's overall objectives. To navigate this stage effectively, teams must emphasise effective communication, foster open dialogue, and employ constructive conflict resolution techniques to find common ground (Tuckman, 1965).

In the norming stage, the team establishes shared norms, values, and a sense of cohesion (Tuckman, 1965). Members develop an understanding of each other's strengths and weaknesses, cultivate mutual respect, and collaborate more effectively. Clear roles, well-defined processes, and established protocols enhance coordination and synergy within the team (Tuckman, 1965).

The performing stage represents the team's peak level of productivity and effectiveness (Tuckman, 1965). At this stage, team members have built strong working relationships, trust, and a deep understanding of each other's capabilities. Leveraging their diverse skills and experiences, they generate innovative ideas, make sound decisions, and execute tasks efficiently. The team becomes highly self-managed, requiring minimal supervision (Tuckman, 1965).

While the adjourning stage may not always be applicable in entrepreneurial settings, it may occur when ventures conclude or when team members disperse to pursue new opportunities.

This stage involves reflecting on achievements, celebrating successes, and facilitating a smooth transition for team members (Tuckman, 1965).

It is important to note that the entrepreneurial context introduces higher levels of ambiguity, rapid change, and uncertainty compared to traditional team environments. Consequently, the progression through the stages of Tuckman's model may be less linear and necessitate adaptability and flexibility. Furthermore, entrepreneurial teams often experience development cycles as they navigate various projects, pivot strategies, and undergo growth phases.

By applying Tuckman's Team Development Model (1965) to the entrepreneurial setting, teams can gain valuable insights into the challenges they may encounter and identify strategies to foster effective collaboration, communication, and innovation throughout their journey of building and scaling ventures.

2.5.2 Team Cohesion

Cohesion or cohesiveness is described in psychology and social science as the process of keeping members of a small group together and united to varying degrees (Dion, 2000). According to Forsyth (2021), the antecedents of group cohesion are attraction, task commitment, social categorisation and identification, group affect, group structure and entitativity. Individual-level factors that affect group cohesion include members' feelings for one another, how much they respect the group, and how much they identify with it. Cohesion is also influenced by group-level dynamics, such as leadership, informational and normative impact, group density, interconnection, and climate (Forsyth, 2021). Cohesion is a property of groups rather than individuals (Whitton & Fletcher, 2014).

2.5.2.1 Cohesion and Efficacy

Cohesion has been linked to team efficacy in previous studies. Lent et al. (2006) found a strong connection between collective efficacy, team cohesion, and self-efficacy, suggesting that collective efficacy may have a distinct predictive power for project team performance compared to self-efficacy, and suggests that individual levels of self-efficacy influence team cohesion (Black et al., 2019; Lent et al., 2006). Additionally, Park et al. (2017) examined the relationship between team efficacy and performance and discovered a curvilinear relationship mediated by cohesion. The study revealed that the relationship between team-efficacy and

performance was strongest when cohesion was high, while the relationship weakened when cohesion was low (Park et al., 2017).

2.5.2.2 Cohesiveness in Entrepreneurial Teams

In the entrepreneurial team literature, team cohesion has been recognised as a crucial emergent state facilitating collaboration among individuals (Klotz et al., 2014). When a team shares attachment and commitment, team members are more likely to interact with each other and feel the excitement in their team (Foo et al., 2006). It ultimately increases venture performance satisfaction (Chen et al., 2017; Yoo & Lee, 2021).

Cohesion has also gained interest from NVT researchers (Klotz et al., 2014). According to Foo et al. (2006), higher degrees of social integration among group members, such as interpersonal contact, pride, and excitement, contribute to higher perceptions of viability and satisfaction in new venture teams. Ensley & Pearce (2001) observed a negative relationship between coherence and affective conflict, which impacted new venture profit and revenue. Furthermore, Ensley et al. (2002) discovered that social categorisation and identification predicted firm sales growth, hence tying NVT cohesion to business performance. Additionally, Chowdhury (2005) demonstrated that team commitment, characterised by members' loyalty, the expectation of long-term involvement, and trust in the team, positively influenced NVT effectiveness.

To summarise, team cohesion is the process of keeping group members together, influenced by factors such as attraction, commitment, and identification. It has been linked to self-efficacy, team-efficacy and performance in entrepreneurial teams, where higher cohesion leads to increased collaboration, viability, satisfaction, and effectiveness.

2.5.3 Team Composition

Schjoedt et al. (2009) assert that successful entrepreneurial teams require a balance of both heterogeneity and homogeneity in their composition. These two factors significantly impact the team's ability to respond effectively to the environment. Heterogeneity within the team regarding human capital, such as experience, knowledge, skills, and abilities, contributes to its overall capabilities. On the other hand, homogeneity involves members sharing the same knowledge, abilities, perspectives, and experiences.

Moreover, Finkelstein and Hambrick (1990) emphasise the direct and indirect influence of the environment on venture performance through team composition. They underscore the importance of combining and balancing both heterogeneity and homogeneity within the team. In the context of venture creation, heterogeneous team compositions have been found to lead to superior team performance (Filley et al., 1976; Hambrick & Mason, 1984), whereas homogeneous teams are more efficient in handling routine tasks (Filley et al., 1976).

However, it is crucial to note that both constructive and destructive conflicts can arise from heterogeneity. This relationship suggests that there should be limitations on the extent of heterogeneity (Schjoedt & Kraus, 2009). Conversely, based on surface- and deep-level characteristics, excessive homogeneity can have detrimental consequences for entrepreneurial teams and venture performance (Schoss et al., 2022). In the absence of constructive conflict, teams may fall into the trap of groupthink (Janis, 1972), which restricts the range of options considered and hinders information processing (Eisenhardt & Schoonhoven, 1990; Finkelstein & Hambrick, 1990). Despite the aversion towards excessive team homogeneity, it is essential to note that some degree of homogeneity is necessary for the team's functioning, with the issue lying in an overabundance of homogeneity.

Groupthink, as initially conceptualised by Janis, refers to a cognitive process wherein individuals within a tightly-knit and cohesive in-group prioritise unanimity over critically evaluating alternative courses of action (Janis, 1972). According to Janis's definition, groupthink occurs primarily in situations characterised by high levels of cohesiveness. It necessitates members sharing a pronounced sense of unity and a strong desire to preserve interpersonal relationships within the group, even at the expense of objective assessment and exploration of alternatives (Janis, 1972).

Overall, team composition requires a balance of heterogeneity and homogeneity, with heterogeneity contributing to overall capabilities and homogeneity facilitating routine tasks. However, excessive homogeneity can lead to groupthink.

2.5.4 Cognitive Bias, Social Comparison and Cognitive Dissonance

As entrepreneurial development involves individuals and teams facing various challenges and engaging in complex decision-making processing, it becomes natural to explore some psychological concepts that might shape the informants' attitudes, beliefs or behaviour. In this context, integrating social psychology theories, as ESE is based upon, might offer valuable insights into the cognitive processes and biases that the young entrepreneurs in the new venture teams may experience. The theoretical psychological concepts presented result from the abductive approach used in this study. Therefore only a few concepts will be presented as these have shown to be influential factors for how the informant chooses to express their ESE, ETE and development over time. The concepts this chapter will present are; cognitive bias, social comparison and cognitive dissonance. The study does not include other possibly fitting psychological concepts, such as cognitive schemes, cognitive scripts, and a deep dive into heuristics. This is because the study is not constructed to say anything reliable or valid about those psychological aspects. Additionally, the informants do not express significant information on the mentioned constructs.

2.5.4.1 Cognitive Bias

The concept of cognitive bias was introduced by Amos Tversky and Daniel Kahneman in the 1970s (Kahneman, 2003). In short terms, a cognitive bias is the by-product of process limitation in humans (Haselton MG, 2005, p. 727). Humans naturally use cognitive shortcuts (heuristics) in order to process information and stimuli so that we use less time to process and break down what we perceive. In their studies, Kahneman and Tversky (1972) demonstrated that human judgement might deviate significantly from what is considered normative or simple logic because making a logical judgement is either not possible or insufficient (Haselton, 2005). In other words, cognitive bias can be described as a systematic deviation in a person's ability to make logical and rational assessments and decisions (Blanco, 2017).

Dunning-Kruger Effect

The Dunning - Kruger effect is a form of cognitive bias and is about overestimating one's performance and ability based on incompetence on how comprehensive or complex the task may be (Kruger & Dunning, 1999). People tend to possess excessively favourable opinions about their abilities across various social and intellectual domains. Kruger and Dunning (1999) suggest that this overestimation of one's skill arises partially due to a lack of skills and knowledge within the given domain. People with little domain knowledge bear two burdens, according to Kruger and Dunning (1999). These are (1) that people reach erroneous conclusions and make mistakes, and (2) that incompetence robs a person from recognising when they are making mistakes (Kruger & Dunning, 1999; Dunning, 2011). In other words, a lack of experience and domain knowledge may accumulate confidence.

2.5.4.2. Social Comparison Theory

Social comparison theory was put forward by Leon Festinger in the 1950s (Gilovich et al., 2019). The theory revolves around individuals actively seeking information about themselves by comparing themselves to others since they lack an objective standard to evaluate their own traits or abilities. Ergo, in order for people to obtain an accurate assessment of their own abilities, internal states and opinions, they compare themselves to others. Festinger observed that to obtain a reliable assessment of one's skills, one must compare oneself to individuals who possess a similar skill level. Despite Festinger's explicit guidance on the importance of accurately comparing ourselves, individuals tend to seek comparisons with others who are slightly less skilled or accomplished (Gilovich et al., 2019). This biased preference for “downward social comparison” allows us to define ourselves in a more favourable light, boosting our self-esteem and self-evaluation (Lockwood, 2002). Conversely, when prioritising self-improvement, individuals tend to engage in "upward social comparison" instead (Sedikides & Hepper, 2009).

2.5.4.3 Cognitive Dissonance Theory

The cognitive dissonance theory, also derived from Leon Festinger, focuses on individuals' desire for their thoughts to align and be consistent with each other (Gilovich et al., 2019). People will engage in substantial mental work to attain cognitive consistency. Failure to achieve such consistency results in cognitive dissonance, an unpleasant emotional state caused by the inconsistency between a person's thoughts, emotions and actions. When faced

with hard and challenging decisions, it is common to experience feelings of cognitive dissonance (Gilovich et al., 2019). This is because in making a difficult choice, the alternative option that was not selected likely had appealing aspects, while the chosen option may have had drawbacks or undesirable features, or both. The clash between the appealing aspects of alternative options and the presence of undesirable elements in the chosen option may lead to cognitive dissonance (Gilovich et al., 2019). In short cognitive dissonance is an unpleasant emotional state caused by your inner conflicts.

When you take a demanding and challenging decision, you will engage in substantial mental work and rationalise the desire to reduce the dissonance (Gilovich et al., 2019). A commonly acknowledged notion is that when individuals invest significant amounts of money, time or effort in something, they often experience a sense of dissonance. The mental energy you use in order to justify the investment is called “effort justification”, where you try to reduce the dissonance (discomfort) by justifying the money, time or effort used (Gilovich et al. 2019). Moreover, when people perceive a high cost associated with a purchase or endeavour, they tend to develop a stronger emotional attachment to the product, thereby reducing the perception of its actual cost (Shah et al., 2015). When more money, time and effort is put into something, people are more likely to signal commitment or repeat the action/transaction publicly (Gilovich et al., 2019; Shah et al., 2015).

Overall, psychological concepts such as cognitive bias, social comparison, and cognitive dissonance may also play a role in understanding entrepreneurs' attitudes, beliefs and behaviour. Cognitive bias and the Dunning-Kruger effect might explain entrepreneurs' high confidence when working in a high-risk - high-reward profession. Social comparison theory can explain how entrepreneurs compare themselves to others, boosting their own confidence and increasing their motivation to continue creating new ventures. Lastly, cognitive dissonance may explain how entrepreneurs early on signal commitment to their venture even though the venture has yet to create profit. Understanding these concepts can give valuable insights to the entrepreneurs' rich inner life.

3. Methodology

For this master thesis a longitudinal study was conducted, with two rounds of interviews, two months apart. The upcoming chapter will elaborate on the qualitative method used in order to answer the research question. As the authors' primary objective is to offer comprehensive and descriptive data concerning the factors influencing change in ESE and ETE over time, the data was collected and analysed through an abductive thematic analysis (Thompson, 2022; Smith, 2015). The chapter will present the research design, followed by a presentation of the sample and context. Subsequently, the thematic analysis will be put forward, and any limitations will be addressed. In addition, the chapter will reflect on how the research question evolved throughout the thesis with the abductive approach, as there have been several iterations of the RQ, but the final question the thesis answers is as stated;

What factors influence new venture teams' members' entrepreneurial self-efficacy and the teams' entrepreneurial team-efficacy over time?

Even though the research questions have gone through some iterations, the authors have always had the idea of how ESE and ETE have developed over time as their core starting points of the thesis. Ergo, there has been stability in the topic studied, but the authors have been open to potential iteration when needed.

3.1 Research Design

As put forward, the study aims to shed light on factors influencing ESE and ETE over time in an NVT, and understand the factors that drive the potential development. For the study, an abductive research approach inspired by Thompson (2022) was used, allowing the researchers to have an iterative and recursive process, concentrate on the data and try to conduct research to fill the current gap in ESE and ETE studies.

Ten informants, from three different new venture teams were interviewed through two semi-structured in-depth interviews lasting from 45 to 120 minutes. As the study is looking at students enrolled in a venture creation program, the informants were chosen through nonprobability sampling. The venture creation program the informants were retrieved from is “NTNU School of Entrepreneurship”. Because the study investigates the potential factors

influencing ESE and ETE over time within informants enrolled in a VCP program, the data acquisition took place in two sessions during the spring semester. One round of interviews was conducted in February 2023, and the second round at the beginning of March 2023, giving the students approximately two months between the two interviews. The study is considered longitudinal, which creates triangulation and enrichment in the data increasing the study's validity (Smith, 2015).

The data was gathered, coded and analysed through an abductive thematic analysis. As mentioned, the data was gathered in two different rounds before the data was compared and interpreted as a whole. The results of the data acquisitions are presented together as seen in chapter 4. "Findings". Figure 2 illustrates how the data is collected through two rounds of data acquisition before the data is gathered and interpreted as a whole.

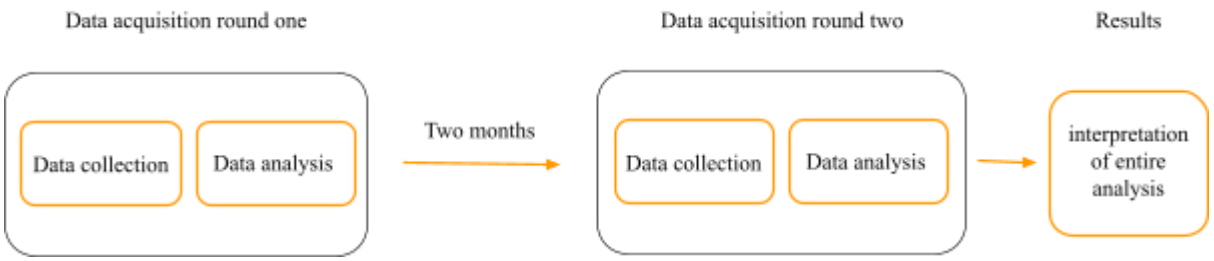

Figure 2: Method of procedure

3.2 Sample and Context

For the qualitative acquisition the sample of informants is narrowed down to students currently enrolled at the NTNU School of Entrepreneurship.

3.2.1 NTNU School of Entrepreneurship

The NTNU School of Entrepreneurship is recognised as a prominent institution for hands-on entrepreneurship education programs in Norway (Aadland et al., 2018). This two-year, 120 ECST master's program at the Norwegian University of Science and Technology is a venture creation programme, with the primary learning method being establishing and developing startups. Students enrolled in the program dedicate their full academic workload to business development while simultaneously working on their startup initiatives (NTNU School of Entrepreneurship, 2023).

The student body at NSE comprises individuals from diverse academic backgrounds, including the natural and social sciences, business and management, health, engineering, and technology. Each class typically consists of approximately 35 to 40 students who are selected based on various criteria, with a common trait being their entrepreneurial motivation (Aadland & Haneberg, 2019). In the first semester, students undergo a feasibility studies course that lays the groundwork for cultivating an entrepreneurial mindset and identifying business ideas for the ventures they will develop over the following three semesters. Within each class, teams comprising two to five students are formed, and each student is expected to pursue the creation of a new venture (Aadland et al., 2018). If they encounter failure, they have the freedom to make another attempt or continue their master's degree as regular students. On average, 50% of NSE graduates go on to work for their startups after completing the program (Aadland & Haneberg, 2019).

3.2.2 Sampling

For this thesis, nonprobability sampling was used to gather relevant informants for the project (Meltzoff & Cooper, 2018). As the master thesis focused on NSE, the authors found a convenience sample with purposive and homogeneous sampling the most relevant form of nonprobability sampling (Meltzoff & Cooper, 2018). This is in order to gather as rich and specific data as possible.

The purposive sampling was deliberately restricted to the homogeneous group of master students within industrial economy, and the entrepreneurship field. Since the data is gathered from NTNU School of Entrepreneurship, the nonprobability sampling enables the authors to study a pool of potential participants that are easily available (Meltzoff & Cooper, 2018). At the same time, the specific purposely chosen sample increases the study's validity, because it enables the study to focus specifically on aspects the authors consider most relevant and intentionally want to measure (Smith, 2015).

Although the sample is homogeneous, the ten informants handpicked for the qualitative part of the study are chosen on the basis of differences within the homogeneous group. The ten informants are spread across three start-ups with different academic backgrounds, genders and ages, as illustrated in figure 3.

Participants with high-tech case						Participants with software case			
Technical backgrounds			Mixed backgrounds			Mixed backgrounds			
Informant A1 Technical	Informant A2 Technical	Informant A3 Technical	Informant B1 Technical	Informant B2 Technical	Informant B3 Social science	Informant C1 Social science	Informant C2 Social science	Informant C3 Technical	Informant C4 Technical

Figure 3: Overview of participants

3.3 Data Acquisition

This subchapter will present the theoretical approach of the study, the interview guide used for the semi-structured in-depth interviews, as well as a short presentation of how the two interview rounds were conducted.

3.3.1 Abductive Approach

Deductive, indicative and abductive are all forms of logical reasoning and are three of the most common research designs (Reichertz, 2014; Thompson, 2022). Because of the lack of literature on the research question, the authors consider using the deductive approach as less relevant. A deductive approach often has a theoretical starting point. For this thesis, the authors might not be able to systematically test a theory on the data, as one does in a deductive approach, because it is a less research area and lacks prior assumptions, theories and former hypotheses identified by others (Braun & Clarke, 2006; Thomas, 2006). Moreover, the authors will be unable to free themselves from all previous theoretical knowledge in a true inductive fashion (Braun & Clarke, 2006). This is because we are conducting a study on entrepreneurial self-efficacy and teamwork in the context of a venture creation program, and the authors require knowledge of these topics to expand on and test the research question. In addition, the authors are familiar with both working in a team and being enrolled in a VCP. Further, the authors will bring their social position to the analysis when having a personal relationship with several of the informants. As a result, the data will not be managed inductively or in an epistemological vacuum (Braun & Clarke, 2006). Consequently, the abductive approach will be applied to this thesis, as the authors do not enter the research with an unaffected mind because of prior experience, knowledge and the

theoretical understanding acquired through the project thesis prior to writing the master's (Thompson, 2022).

The abductive approach seeks to strike a balance between the inductive and deductive approaches, representing a distinct method rather than a mere fusion of the two (Dubois & Gadde, 2002; Thompson, 2022). The approach involves assimilating a substantial volume of data and subsequently interpreting and utilising it to derive a meaningful conclusion (Reichertz, 2014). It proves fruitful for researchers aiming to explore new aspects, such as identifying previously unrecognised relationships (Dubois & Gadde, 2002). Since the abductive approach is used for this thesis, the author's previous theoretical understandings will set the direction for what the authors are going to be looking for. As the thesis conducts 20 semi-structured interviews, the predetermined direction will decrease the chances of discovering arbitrary or abstract results irrelevant to the research question (Thompson, 2022). Moreover, the method allows the authors to concentrate on the data and its meaning rather than having to fit it into pre-existing theory, which may increase the data's richness (Braun & Clarke, 2006; Thompson, 2022). The authors have some preconceptions of the former theory on ESE and ETE. However, at the same time, we are asking a question about the development of ESE and ETE over time, on which there is little existing theory. The abductive approach will open a more iterative and recursive process, which is fitting for the study (Thompson, 2022).

3.3.2 Semi-Structured In-depth Interviews

As the authors want to gather detailed and high-quality data for the thesis, a semi-structured interview is applied. As the authors did not want to constrain the informants with a more structured interview and risk overlooking a novel aspect of the subject by missing important information not considered important by the informant (Smith, 2015, p.30). Unlike in a structured interview, the informants will not be limited to rigid methods of responding (Landridge, 2017). An unstructured interview is not applied because the study considers specific aspects such as entrepreneurial teams and ESE. The study is in need of answers that are easier to categorise and compare in order to conduct the thematic analysis (Landridge, 2017). The interview guide (appendix) contains predetermined questions that were followed throughout the interview (Landridge, 2017).

The interview guide developed for the semi-structured interview is based on the ESE measurements presented in a paper written by McGee, Peterson, Mueller and Sequeria (2009); “Entrepreneurial self-efficacy: refining the measure”(McGee et al., 2009. p.965). The study focuses on the standardisation and refinement of ESE measurements after a longer period of the inconsistency of the definition, measures and dimensionality of ESE as an explanatory variable (McGee et al., 2009). The study divides ESE into four dimensions; searching, planning, marshalling and implementing. These dimensions are also reflected in our guide. The operationalised question measuring ESE in McGee et al.´s (2009) study was used in a quantitative setting, and the informants answered on a likert-scale. Because of this, the interview guide for this thesis is not a copy of McGee et al. (2009) but is rather inspired by it, and the guide is modified as the authors saw fit for this study. The questions are in alignment with semi-structured interview open-ended, and the guide facilitates for any follow-up questions (Langdridge, 2017). The semi-structured interview will enable the researchers and informant to engage in dialogue in which initial questions may be modified based on the responses of the participants, and the authors are free to probe important and interesting areas as they occur throughout the interview (Smith, 2015). The semi-structured interview also encourages a more reliable study because it will be simpler for future scientists to replicate through the available interview guide (Smith, 2015). For the second round of interviews conducted in May, in real abductive style, the authors added four additional questions based on what we needed further information about the second time around. These questions addressed the change in perception of one's own entrepreneurial abilities, change of role in the team and if former experience has affected the start-up or team. The added questions are apparent in the second interview guide in the appendix

The interview guided starts with an introduction where the informant is informed about the purpose of the study, their right to withdraw from the study without giving a reason, and that the informants will be kept anonymous as well as the data will be saved only for the purpose of the thesis, and deleted when the study is over. The guide continues with some introductory questions regarding their age, gender, educational background and former entrepreneurial experience. By asking these questions, the informant gets warmed up, and data such as age, gender and former education is revealed and can be taken into consideration when looking at casualties later, as well as making the study easier to replicate (Meltzoff & Cooper, 2018). The guide continues by asking questions considering entrepreneurial self-efficacy in the

context of a venture creation program and team. Before the interview is wrapped up by a conclusion, where the informant is able to add to what is already discussed.

3.3.3 The Data Gathering for Both Rounds

The first data gathering was done at the start of the semester. Mostly in February and some at the beginning of March. The second round was conducted in the first week of May, making the study longitudinal. The ten informants were interviewed one by one. The informants were randomly divided between the authors. The team was not interviewed as a whole but separated and interviewed individually in order to avoid any social desirability bias effect, which can occur in group interviews. The interviews lasted between 45 to 120 minutes, and the second round of interviews was significantly shorter than the first, most likely because interview two had fewer questions. The interviews were recorded on Microsoft Teams in order to adhere to data safety regulations/policy.

3.4 Thematic Analysis

This section aims to provide a clear description of the thematic analysis, following the guidelines outlined by Thompson (2022) and Braun and Clarke (2006). The intention is to establish a transparent and replicable process for potential future research (Smith, 2015).

Because there are few direct longitudinal studies on entrepreneurial self-efficacy in VCP, the authors sought some theoretical freedom and flexible research tools that is also able to provide detailed and rich data (Braun & Clarke, 2006). Because of this, thematic analysis (TA) is used, and the authors will be able to capture patterns across raw data and structure the codes into understandable and meaningful themes (Braun & Clarke, 2006; Brown & Clark, 2019). The thematic analysis is a dubbed-edged sword; while it gives flexibility and freedom to an author, the flexibility makes the thematic analysis fitting with a lot of different theoretical approaches and methodical philosophies, making different varieties of TA emerge (Brown & Clark, 2019; Nowell et al., 2017; Thompson, 2022). The analysis is widely used, creating conceptual mismatches and making the analysis form less credible over time (Bown & Clark, 2019; Nowell et al., 2017). In order to increase the trustworthiness and credibility of the thematic analysis conducted in this thesis, the authors will follow Thompson's “abductive thematic analysis”, adding a demarcated and rigorous structure to the TA (Nowell et al., 2017; Thompson, 2022).

The authors find Thompson's (2022) abductive thematic analysis as a fitting framework for the thesis, which takes a starting point in Brown and Clark´s (2006) thematic analysis and adapted concepts such as “codebook” from Guest et al. (2012) and “thematic network analysis” from Attride-Stirling (2001) (Thompson, 2022). Thompson's (2022) abductive thematic analysis is actually eight steps, but not every step needs to have its own paragraph as steps such as “Data display” come forward in the paragraph of “development of themes”. The thesis will not follow Thompson’s (2022) step six as rigorous as the theory expects but rather follow Brown and Clark´s (2006) step on “write up”.

For the thesis, the step of “coding” and “codebook”, as well as “development of team” and “data display” are merged, making the abductive analysis six steps consisting of (1) transcription and familiarisation, (2) coding and codebook, (3) development of themes (where the data display step will be incorporated), (4) comparison of dataset, (5) theorising, and (6) writing up. The “codebook” part of step 2, step 5 (theorising) and part of step 3 (data display) differs significantly from Brown and Clark's (2006) initial thematic analysis. This presents the steps of the analysis and describe what was done by the authors. In a true iterate and abductive manner, the research question changed approximately four times during the TA, based on the direction the data sent the research and based on what former theories did and did not explain.

3.4.1 Transcription and Familiarization

The first step of the thematic analysis is the transcription of the data (Thompson, 2022). The authors divided the transcribing between them, where each author transcribed the interview of one informant from each team. Giving the authors an understanding of the different teams. The interviews were transcribed authentically by staying true to the actual way the informant spoke, by transcribing every sound and pause made by the informant as well as transcribing in the informant’s mode of speaking (Thompson, 2022). The transcription was done with the help of Microsoft Teams and was rewritten, edited and overseen by the authors. Data was saved in NTNUs Teams database, and the informants were anonymised by giving a letter and number instead of their name. After the transcription was done, the data was read through once more, and potential narratives, meanings and potential relationships were noted for the findings. The transcriptions were done in two rounds, one right after the interviews in

February and one right after the interviews in May. The finished transcribed interviews were saved at a closed NTNUs database so that every author, and only the authors, had access to the data. The benefit of conducting parallel data collections, where apparent points that demanded further clarification, made the researchers adapt their interview guide for the second data acquisition to gain a deeper understanding of certain concepts such as; former experience and commitment.

As described, the research question went through many iterations before the current RQ emerged. Before the analysis took place, the authors were set on the research question:

"How do entrepreneurial self-efficacy and entrepreneurial team-efficacy develop over time"

3.4.2 Coding and Codebook

When coding the transcribed interviews NVivo, as recommended by NTNU, was used to keep track of, analyse and structure, unstructured data (NTNU, n.d.). Mostly short phrases were coded through the program, and all three authors coded the data. As the coding was conducted by three different individuals, who had little to no former experience with qualitative methods, we chose to try to establish a set of standard codes that could be used for the complete data analysis. Making both the coding and the analysis easier. In order to do so, the authors chose to code one interview each as freely as possible, accepting the codes emerging from the data set. As the study has an abductive approach, the codes were affected by ESE and ETE theory, where parts of the codes are connected to the degree of confidence in ESE and ETE, and the other parts of the codes came organically while coding the data. The authors gathered all the emerging codes, compared them and sorted them into a codebook. Even though there was an agreed set of codes, the authors were free to add new codes when needed. The codebook explains the name of the code, its definition and when to use the code in order to code the data the same way more easily (Thompson, 2022). The authors did not clarify when not to use the code as Thompson (2022) recommends, risking that two codes might overlap because there is no framework closing off the code. This was done to give the authors more freedom to code the interviews and increase their confidence without too many limitations. The codebook will make it more accessible to replicate the study later on. Table 1 is an extract from the codebook. The full codebook with sub-code descriptions, codes and themes are presented in Appendix.

Table 1: Code-Book extraction for the Code: High confidence in own entrepreneurial ability

Code #1: High confidence in own entrepreneurial ability
Definition: Informant expresses high confidence in conducting an entrepreneurial task.
When to use: Apply code when an informant expresses direct or indirect confidence in their own entrepreneurial ability across any of the entrepreneurial tasks asked about.
Example (Informant 3C)**: "**[On problem-solving skills] I think I'm good. I have been taught that you should just watch your steps and do what you can. Either it goes well, or it ends."

Because there is always a risk that different researchers might draw different conclusions from the same data, all of the authors went through all the coded interviews in order to be able to discuss and compare the potential disagreement of coding, increasing the study's validity (Bengtsson, 2016; Smith, 2015). The total codes ended on 17 for round one of data acquisition and 19 for round two, without counting the subcodes. Examples of how data was coded are presented in table 2.

Tabel 2: Example of coding

Informant	Raw data	Sub-code	Code
B2	*"[B2 about the team's ability to do startup-related tasks has evolved] We have been very good at reflecting in the group on what we feel works and has not worked"* - *Informant B2, first round*	Positiv team development	Team development
C1	*"[C1 about their entrepreneurial development]I think perhaps the study, or the academics at school, is perhaps what I have done the most. I know that we, in the last six months, have been involved in start-ups, but I think I have almost got more back [learned more] from the academics at the school."* - *Informant C1, second round*	Positive personal development	Personal development

While in the phase of coding, the first research question pivot occurred. Understanding that "how" the development occurred was too big of a question to answer, making the authors go back to the drawing board. The research question was iterated four times during both rounds one and two of coding. In the coding phase, the authors iterated the RQ to;

"Will teams with diverse educational backgrounds have higher entrepreneurial team efficacy (ETE) levels, compared to teams with similar educational backgrounds leaving the diverse teams with higher ETE at the end of the semester?"

This again transformed into a new RQ during the same round of iteration;

"Will the different team members' increase in entrepreneurial experience, team cohesion and entrepreneurial education throughout the semester increase the teams total entrepreneurial efficacy?".

3.4.3 Development of Themes

Themes in a thematic analysis are distinctly separated from the codes by being more complex when containing and summarising several codes (Thompson, 2022). The process of theme development started by examining the connections among various codes and categorising them according to their ability to collectively explain parts of the story of the data (Braun & Clarke, 2006; Thompson, 2022). The authors have not chosen which themes are considered primary, secondary or sub-themes, as all of the themes help explain the final research question (Thompson, 2022). As with the codes, the themes are conceptually guided by ESE and ETE but are not determined by existing theory (Thompson, 2022). Figure 4 show all the codes and themes presented from both rounds of coding, seven total themes represent the data gathered from 20 interviews.

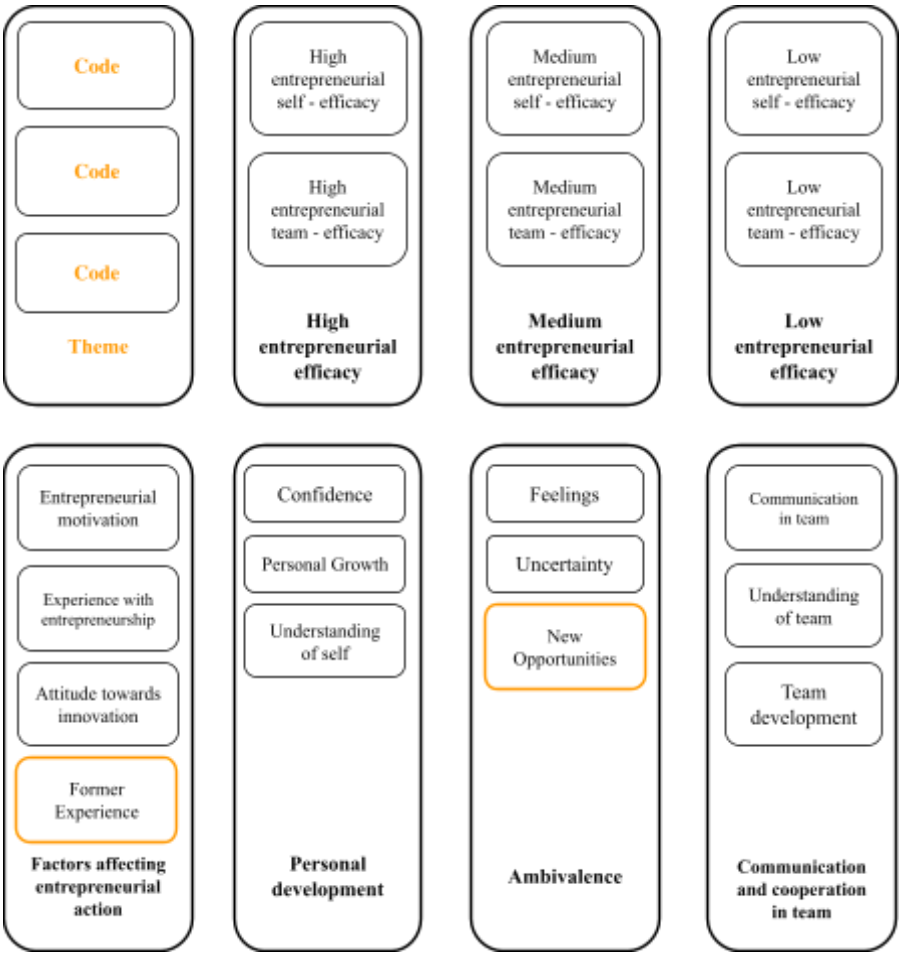

Figure 4: Codes gathered in themes

Codes consisting of "entrepreneurial self-efficacy" and "entrepreneurial team-efficacy" are only organised in the same themes based on high, medium or low efficacy. This does not mean that the

authors believe that self-efficacy and team-efficacy are the same. New codes added to the second interview round are highlighted in orange.

3.4.4 Comparison of Dataset

In order to dig deeper into the data, reveal connections and try to unveil the factors behind the development of ESE and ETE over time, the authors compare datasets (Thompson, 2022). The datasets were compared by asking questions such as; what themes are present in some datasets and not others, what may be the reason, are there different expressions of the themes between the groups, and why might there be different expressions? By making these comparisons, the authors were able to unveil what is behind the data and get an understanding of how the research may give new value to the research field. This will be reflected in the discussion.

After the comparison of the dataset, one more iteration of the RQ occurred, where two research questions emerged:

RQ1: "How does ESE influence ETE"

RQ2: "What factors are influencing new venture teams' members' entrepreneurial self-efficacy and the teams' entrepreneurial team-efficacy over time?".

3.4.5 Theorising

The theorising step introduced to the thematic analysis by Thompson (2022) explains the relationship between the theme and the data set. In the abductive thematic analysis, this stage involves revisiting theoretical knowledge and literature to assess whether the relationships between the themes can be effectively explained or not explained by the literature (Thompson, 2022). In this phase, it became apparent that the already sound theory on ESE and ETE could not account for all the empirical findings. Therefore new theories had to be adapted, and some parts of the theory chapter got refined so that the authors could better account for the empirical data through other conceptualised ideas (Thompson, 2022). The theorising made the authors aware of the possibility of explaining their empirical findings using other theoretical ideas. Something that has been very useful when there are few

longitudinal studies on the development of ESE and ETE. Examples of theories added to the study are team composition, team cohesion and groupthink. According to Thompson (2022), one may be creative in theorising different explanations of data that do not fit in with the core themes of the study (Thompson, 2022). This is reflected especially in the theory and discussion concerning cognitive bias, social comparison and cognitive dissonance.

After the theorising, the authors reflected and discussed, agreed that how entrepreneurial self-efficacy influence entrepreneurial team-efficacy is not the main focus of the thesis, landing on the one final RQ:

What factors influence new venture teams' members' entrepreneurial self-efficacy and the teams' entrepreneurial team-efficacy over time?

3.4.6 Writing Up

The writing up part is reflected in chapter 4. Findings. Where the data is restructured and condensed into meaningful information based on the research question that the thesis is trying to answer (Thompson, 2022). The authors chose not to follow step six as rigorously as Thomson (2022) explains in his theory but rather follow what Brown and Clark (2006) explained. Where the authors aim to tell the complicated story of the data in an understandable manner in order to convince the reader of the validity and merit of our analysis (Braun & Clarke, 2006). The findings aim to provide a thick description of relevant finds, context and social settings, aiming to provide a non-repetitive, logical, coherent and interesting understanding of the data across and within themes (Thompson, 2022; Braun & Clarke, 2006).

3.5 Summary of Method

For this thesis, an abductive research approach was used. A total of ten informants enrolled at NTNU School of Entrepreneurship from three different new venture teams were selected. They were interviewed through two semi-structured in-depth interview sessions lasting between 45 to 120 minutes each. Given that the study examines students enrolled in a venture creation program, the informants were chosen using a nonprobability sampling method. In order to analyse the data, an abductive thematic analysis was conducted following the steps of Thompson (2022) and Braun &Clarke (2006). As the study was done in an abductive

fashion, the research question has been through many iterations to represent what the authors actually found upon factors influencing NVT members' ESE and ETE over time.

3.6 Limitations of Method

As one strives to reach a gold standard for data acquisition in a study, it is difficult to do so when human error is common. The authors' prior knowledge of qualitative methods is somewhat limited; how to perform an interview, code it, and analyse it, as well as three various judgments of the gathered data, limits the study (Meltzoff & Cooper, 2018). This subchapter will discuss the method limitations for the thesis.

3.6.1 Biases

As the authors are all enrolled at NSE, have gone through the VCP program and worked in teams, the results of the data gathering are more easily influenced by the author's idiosyncrasies and personal biases (Johnson & Onwuegbuzie, 2004). Especially since the authors have little to non-interview experience, this issue has been discussed between the Authors so that they are aware and try not to act biased. The informants are encouraged to put their personal relations with the authors aside during the interviews to decrease this bias.

Random sampling is seen as the golden standard in empirical science, and every member of the population has an equal chance to be chosen as an informant for the study (Meltzoff & Cooper, 2018). On the other hand, a randomised sample is beyond the author's resources to implement, and the study wants to research more specific variables, making a randomised sample less relevant. The convenience sample chosen for this study creates a sampling bias because of the use of volunteers in the study, and their willingness to participate in the study affects the reliability (Meltzoff & Cooper, 2018). This is because the participants already have an interest in the study, which may disrupt their way of answering questions in the interview. This is inescapable when the authors choose to be ethically driven and only gather data from those who volunteer. However, it makes the study under-representative of the population and much less generalisable. Even though the study will suffer from sample bias, this is not necessarily a negative consequence. Because we are studying such specific measures, hand-picking the informants will give the study richer data.

Even though handpicking the informants enriches the data, social desirability does not vanish and may influence how the informants respond (Langdridge, 2017). It is difficult to avoid this social desirability, but the authors have addressed that we do not want the participants to give answers and behave in a way that they believe would benefit the researchers. Since the participants were informed, the studies' reliability increased. In addition, the chosen participants might have been comfortable around people they already knew and answered more thoughtfully in the interviews, which again works against desirability and enriches the data (Langdridge, 2017).

3.6.2 Saturation

The data collection did not come to a point where no additional insights were identified, hence the data collection did not reach saturation (Hennink & Kaiser, 2022). Within the second interview round, new information, such as team disagreements occurred, and codes got added to the codebook, implying that more theoretical insights could have emerged (Hennink & Kaiser, 2022). The saturation was not reached because the authors did not have an adequate sample size and did not gather more data trying to reach saturation when new information came forward. The reason for the authors not reaching saturation is the limited time within the course of the master thesis, making the authors have to limit the number of informants and interviews conducted. That the study is not saturated confirms that further research on the matter is needed in order to investigate other insights or important issues overlooked or missed by the authors. Not reaching saturation decreases the content validity of the study and makes the study less robust (Hennink & Kaiser, 2022).

3.6.3 Other Human Mistakes

In a data gathering and analysing process, human mistakes are always possible (Bengtsson, 2016). The mistakes may be caused by circumstances, errors in interpretation, bias or fatigue (Bengtsson, 2016). For this thesis, human errors such as inexperience in creating and conducting interviews had an impact. Because of their lack of experience and knowledge, the writers did not conduct a pretest of the interview on anyone other than themselves. Making the authors not identify the importance of pre-draft follow-up questions.

In retrospect, it may have been useful to recognise the need to draft follow-up questions, as this was something the writers discovered early on as useful to have prepared in advance. In

addition, unforeseen personal situations caused one of the interviews to be postponed by two weeks. This implies that one of the informants was interviewed with less time between the first and second interviews.

Even though the study may be affected by biases, sample size, human errors, and external variables, the authors have taken a few precautions to make the study more trustworthy indicated in the method. For example, triangulation via longitudinal study, recognising the type of bias with which we enter the study, and the application of a methodological framework for data analysis.

4. Findings

This chapter provides the findings of the thematic analysis conducted on the data acquired in February and May. The authors will first highlight significant changes that occurred during the study, as some teams experienced notable transformations between the rounds of data acquisition, impacting the results. Furthermore, the findings focus on the three teams involved in the study, presenting their individual progress in terms of entrepreneurial self-efficacy and entrepreneurial team-efficacy. In addition, this section also presents relevant contextual and additional information extracted from the semi-structured interviews conducted with each team.

To gain a comprehensive understanding of how the informants developed their entrepreneurial efficacy and to identify variations in their responses, the authors categorised their responses into low (L), medium (M), and high (H) efficacy levels. The informants mostly self-assessed their efficacy using a rating scale of one to ten. The author's understanding of the situation and comparisons with other informants was used to categorise those who did not provide explicit ratings most accurately.

4.1 Impactful Changes During the Study

Team A did not undergo significant changes between the two data acquisitions, aside from pivoting the market. For team C, there were no noteworthy changes that emerged beyond what was revealed in the interviews. However, team B experienced a notable change, presented in the following paragraph. The description of the change is based on how the informants shared the happening with all students in the venture creation programme.

In between the two data acquisition sessions, there were some changes happening, with team B choosing to “kill the idea” as they framed it. They worked really hard on trying to find a market-fit for the technology but found that the market was not ripe. The team explained that they had gained a lot of insight into their technology over the past month. While they had made progress in understanding the technology and identifying customer needs and problems, doing so in such a technically complex field was difficult. They discovered that the development of their product was slow and that the prototype was more difficult to obtain than they had anticipated. Furthermore, the prototype was expensive, making development

capital-intensive from the start. Finally, the team had to weigh their options, given that their technology was specialised and they had not identified a market to target. In light of these obstacles, they concluded that there were no attractive markets to enter at the time, and their personal motivation to pursue the venture was insufficient to keep going.

They emphasised the importance of finding a new project on which everyone is excited to work. They recognise that their formation as a team was primarily based on the chosen case, and thus it is not a given that they will have common interests in future endeavours. The specifics of how they intend to carry out their plan are unknown until they determine whether their interests match up. Because the team is still working together, the authors decided that including team B in the research would be beneficial in order to include their reflections on teamwork during difficult times, and how this affects their perception on themselves, and the team.

4.2 Team A's Development in Entrepreneurial Efficacy and Team Dynamics

Team A consists of three members with technical bachelor's degrees, as shown in figure 5. They formed as a team in early January 2023.

Team A Exploring high technology in collaboration with research institution		
Informant A1 Technical	**Informant A2** Technical	**Informant A3** Technical

Figure 5: Team A; case and team-members

4.2.1. Prior Experience with Entrepreneurship

Before starting at NSE, all informants in team A stated that they had little to no experience with entrepreneurship. A1 has the greatest experience, having participated in an entrepreneurship program before attending the VCP. A3 expressed that they always wanted to attend NSE and motivation to be a part of a change in society. Similarly, A2 indicates that positive technological development contributes to their motivation for innovation.

4.2.2. Levels of Entrepreneurial Self-Efficacy and Levels of Entrepreneurial Team-Efficacy During Two Months

During the two rounds of data acquisition, informants provided insights into their personal confidence and their confidence in the team across five dimensions of entrepreneurial efficacy: searching (identifying customer needs), planning (estimating market size), marshalling (conveying vision) and implementing people (problem solving and recruiting). Table 3 displays self-assessed levels of entrepreneurial self-efficacy (ESE) and entrepreneurial team-efficacy (ETE) for Team A, categorised as low (L), medium (M), and high (H) efficacy levels. In the data acquisition round, the arrows represent changes in confidence levels regarding individual abilities and team abilities. These arrows indicate whether there is an increase or decrease in confidence in the same round between ESE and ETE. For example, in the case of A1, there is low trust in its own abilities for market estimations but medium trust in the team's abilities, resulting in an upward arrow. The explanation behind the arrows is applied to all three teams.

Table 3: Self-assessed levels of entrepreneurial self-efficacy (ESE) and entrepreneurial team-efficacy (ETE) for Team A, categorised as low (L), medium (M), and high (H) efficacy levels.

Explanation:
[Grey] no change in efficacy from round one to round two. [Dark grey]: increased efficacy from round one to round two.
[white]: decrease in efficacy from round one to round two. [↑] higher levels of ETE than ESE. [↓] lower levels of ETE than ESE.

Main Theme	**Sub-Theme**	**Informants**					
		A1		A2		A3	
		Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
ESE	Searching *(identifying customer need)*	M	M	L	M	M	H
	Planning *(Estimating market size)*	L	L	L	M	M	L
	Marshalling *(Conveying vision)*	H	M	M	H	M	M
	Implementing-people *(Problem solving)*	M	H	M	M	H	H
	Implementing-people *(Recruiting)*	M	M	M	H	H	M
ETE	Searching *(identifying customer need)*	M	H (↑)	L	H (↑)	H (↑)	H
	Planning *(Estimating market size)*	M (↑)	L	L	M	H (↑)	M (↑)
	Marshalling *(Conveying vision)*	H	H(↑)	H (↑)	M (↑)	M	H (↑)
	Implementing-people *(Problem solving)*	H (↑)	H	M	M	H	L (↓)
	Implementing-people *(Recruiting)*	M	H (↑)	L (↓)	H	H	H (↑)

During the initial round of data collection, all three informants regarded their overall entrepreneurial self-efficacy at a medium level, with A3 expressing the highest level of confidence in their own entrepreneurial talents. A2 demonstrated a considerable increase in ESE over the course of two months, whereas A3 experienced a slight decrease. A1 has no development in overall ESE.

The team mostly considered the team's entrepreneurial team-efficacy to be higher than their individual self-efficacy. In the first round, all of the informants indicate, at least once, that the

whole team performs better together. In the second round, the team together have more faith in the team's ability to convey vision than themselves. Furthermore, the team showed an overall increase in confidence in entrepreneurial abilities. The team gained more confidence in tasks such as identifying customer needs and recruiting, but in tasks such as estimation of market size, conveying vision and problem solving, the team seemed to be split.

4.2.2.1 Development of Entrepreneurial Self-Efficacy from February to May

In cases where the informants initially express medium or low confidence in their entrepreneurial abilities, they often attribute it to a lack of experience in performing the specific task at hand. If the informants gained experience, it is reflected in their confidence in performing the task. An example of this is seen when it comes to identifying customer needs, as described by informants A2 and A3.

" [A2 on their ability to identify customer needs] I believe I have more [ability] than last time we spoke. (...) I have researched customer needs a lot since the last time, and we have entered a new market which I feel has helped. (...) To kill the [original] market was done because I understood that the customer need wasn't that great. So experience, yeah"

- *Informant A2, second round*

"I think I have a much better ability [to identify consumer needs] now than what I had before I started at NSE. Maybe a better development now since February. I have a good understanding of the customer's needs. (...) there is a lot of research, I think I've picked up different methods [on how to identify customer needs] here and there as I've been at the Norwegian School of Entrepreneurship".

- *Informant A3, second round*

When it comes to estimating market size, it is evident that all informants in team A find it challenging, not showing much improvement over the two months. Informant A3 explains that this has not been a focus of the venture, hence the lack of experience and development in the area. A1 does not know how to complete the task before the venture starts selling.

"[A1 on their confidence regarding estimation of market size] Zero. I think it's impossible. I can say something about the market size being big, medium or small. But actually finding numbers on it, that I don't know until you actually start selling".

- *Informant A1, second round*

In the second round, A1 demonstrated decreased confidence in conveying vision but maintained confidence in balancing storytelling and logic. A2 showed improvement in the task and expressed high confidence when possessing specific expertise in the field and product. Regarding recruiting, all informants except A3 acknowledged a lack of experience (reporting medium confidence), indicating that this aspect did not significantly develop over the two-month period, as it was not a focal point during that time.

A2 expresses in round one that they find it challenging when the problems are interconnected. In round two, they express a common experience of not having control, but when problems are handled, the outcome is usually positive. A1, on the other hand, gained more confidence in their problem-solving skills over the two months, attributing it to their ability to take action when confronted with problems.

4.1.2.2 Development of Entrepreneurial Team-Efficacy from February to May

In the initial round of data acquisition, the team displays an intriguing pattern in the areas of searching, planning, and implementing people (recruiting), with each informant providing different responses. While their answers vary across all parameters, they maintain a consistent level of confidence in the team. Informant A1 expresses medium confidence, A2 expresses low confidence, and A3 expresses high confidence in all three areas. However, in the second round of data acquisition, this trend has significantly shifted, with all informants expressing similar levels of entrepreneurial team efficacy on every parameter except for one.

In the first round of data acquisition, each team member perceives the team differently in their entrepreneurial ability to identify customer needs. Informant A3 has more confidence in the team's ability to conduct searching than themselves because the team has complementary academic expertise.

"[A3 about why the confidence in the team is higher when identifying customer needs] Since we have the interdisciplinary discussion in the team. (...) so in a way it is a discussion that is from different starting points, it has become a kind of synergy (...) I would say that if we had done it alone, then we probably wouldn't have gotten as much out of the conversations we have with each other."

- *informant A3, first round*

In the second round, all informants express high confidence in the team to uncover customer needs, explaining that the team is better together because of the different viewpoints. Regarding the estimation of market size, the team is split in their confidence in the team. For example, A3 expresses high confidence because of the team's ability to be realistic, while A2 does not believe in the team at all.

"[Informant A3 on the team's ability to identify marked size] High. Yes, they [the team] have the same logic as me (...). When we work together, we become much more realistic on what we are doing."

- Informant A3, first round

"We have zero clue."

- Informant A2, first round

After two months, this perception does not seem to have changed, and A1 and A2 even report lower confidence in the team than they did in the first round.

In the first round, marshalling is where the entire team feels that they collectively perform medium to high, attributed to the team's ability to engage with others. In May, A2 addressed their concerns about the team not satisfactorily reaching out to different actors and industries based on their lack of interdisciplinarity. Regarding the team's problem solving abilities, informants A1 and A3 express high confidence in the team's problem-solving performance, attributing it to effective teamwork and diverse problem-solving approaches. In May, however, the team members are split on how they believe the team performs. Informant A1 expresses that the team members are straight to the point and do specific actions to succeed. Informant A2, however, expresses concerns because the team constantly stumbles upon problems and fails to structure themselves when the problem occurs. Informant A3 has high confidence in their ability to solve problems but perceives the team's ability to be low.

"[Informant A3 on the team's ability to problem solve] Less [confidence in the team] than myself, (...) we don't have any routine [for problem solving]. I think I feel it more intensely, because I myself have routines for it. I have tried to implement it in the team in some ways, and it has worked before. Now it has become a diffuse zone between school and startup, where they merge into each other. It has been a bit forgotten (...)."

- Informant A3, second round

Informant A2 believes that they are not aligned on the matter.

"[Informant A2 on recruiting] I don't think we're completely aligned on it now, because we're not really. (...)We had a conversation, and then I was the one who brought it up, and said that we can hire soon (...). By then I had been diving deep into the technical stuff and realised that this is not my job. And this is extremely tiring. "

- *Informant A2, first round*

In the second round however, the team agrees that they have high confidence in their ability together for reasons such as team members having different expertise fields, which contribute to different perspectives on the candidates. Where informants A1 and A3 have higher confidence in their team than in themselves.

4.1.2.3 Team Development: February to May - Relevant Additional Context

Role understanding and trust

During the first round of interviews, informants were asked to characterise themselves in a team context and to comment on the role they were used to undertaking. Notably, all participants expressed a shared tendency towards analytical thinking, possessing a comprehensive understanding of situations, and a strong desire to assume leadership responsibilities. A2 implies they are comfortable with the current situation, while A3 indicates some degree of dissatisfaction.

"[A2 about what role they are used to undertake] I'm the CTO so I tend to take the smarter role, [laughs].(...) I really enjoy having a kind of leadership role in a team context. Taking control. But I'm also very good at sitting back and letting others take control."

- *Informant A2, first round*

"[A3 elaborating on their role in the team] Since A1 is in a way the CEO, so I have more responsibility for customers and product development. And A2 has more of the technical skills, so I don't have that[organisational responsibility] now. (...) I feel that I take an organisational role, (...) Since there hasn't been as much control as I had hoped, so I've kind of implemented scrum, for example."

- *Informant A3, first round*

The topic of role distribution and self-characterization emerged as a major theme in the second data collecting as well as in the first interview. According to A1, their position as CEO primarily entailed holding meetings, allocating assignments, and being involved in both marketing and sales. A1 does not feel that their role has changed in any way since the first round of data acquisition.

> *"[A1 about their role in the team] What I contribute with most is perhaps booking meetings, and driving things forward in a way."*
>
> - *Informant A1, second round*

On the other side, A2 explains that they believe their position has shifted somewhat in that they have greater sense of control due to their expertise in technology.

> *"[A2 about their role in the team] I could steer the ship if I wanted to. Because I'm the one who handles the technology. The other two have almost no clue. Or they have a clue, but I'm the one who sits with it every day. So if I say something, we do it. So I may have gained more power."*
>
> - *Informant A2, second round*

A3 expresses dissatisfaction with the team's progress and highlights their concerns regarding the structure and information sharing within the startup. They mention their efforts to implement better practices, particularly through the utilisation of Scrum methodology (a management framework that teams use to self-organise and work towards a common goal). However, they feel that these attempts have not yielded the desired results.

> *"[A3 responding to a question about if they believe they have a more CEO [Chief Executive Officer role in the team.] In terms of experience, I have no idea what those roles do. Everyone does everything, that's the way it is. Theoretically, I would have claimed it [the CEO role], but I don't think it will happen anyway. "*
>
> - *Informant A3, second round*

In continuation of this topic, A2 describes a situation in which A1 stated that they did not believe A2 did any work.

"[A2 telling about a conversation within the team] A1 didn't think I was working. Because I didn't make contact with people. After all, I was deeply concerned with understanding the technology. (...) So I think they had a very wrong idea of how much I was doing."

- *Informant A2, second round*

A2 goes on to talk about the roles of the other two team members. They state that A1, the daily manager, primarily contacts firms and leads on financing applications, although they are unsure of the specifics. They define A3´s function as comparable to A2, focusing on contacting firms and maintaining a feeling of organisation within the team. A2 stresses the need for additional conversations to better grasp each other's jobs, admitting that they are currently unaware of their teammates' tasks.

"[A2 answering if they want any change regarding the role distribution] It would be nice to know a little more about what they do. We've had conversations where they could tell a bit more about what they did, I'm just... I'm a bit unsure if they actually do anything more."

- *Informant A2, second round*

In addition, A2 expresses difficulty with giving writing assignments to A1, stating that they need to have a role in it for it to be good.

"[A2 talking about a study assignment the team has together] I trust that things will be done to the best of my ability. But I don't trust that it will be a good assignment without me having a look at it."

- *Informant A2, second round*

Communication within the team

Additionally, the informants mention limitations when it comes to communication in the team several times during the first interview round. A1 describes communication as their personal weakest skill when it comes to working with others while also mentioning it as the skill developed the most in the team since they first gathered.

"[A1 elaboration about how the team has developed since they first started] we have had more communication than we had at the start, and more cooperation and coordination actually. Because we really like to work hard and keep going, but discussing things and doing it together and coordinating what we are doing has been difficult. Have started it now."

- *Informant A1, first round*

A2, also elaborates on the challenges the team has experienced with communication in the team, expressing some degree of dissatisfaction.

"[A2 elaborating on their perception on how the team handles challenges] There were challenges with communication (...) in the beginning, but we have dealt with that by talking about it and (...)had an exercise with feedback, which we realised was actually very valuable (...). Some were [in conversation] much more direct and careless than others. Which is actually good, of course, because then it lowers the threshold precisely for being "disgusting" if I may say so (...) I tried not to be (...) directly mean. I may have held back a little. After we finished it, I wish I hadn't."

- *Informant A2, first round*

This theme resurfaces in the second round of data acquisition. All informants report that there has been a positive development in communication, owing mostly to a subject at NSE focused on communication.

"[A2 about the development in communication] We have more organised conversations. And then we are better at communicating together. And since the last time, we've probably also learned a lot more about each other. About how we communicate. So, in a way, we have learned to interpret each other a little more correctly."

- *Informant A2, second round*

Both A2 and A3 say that the startup's psychosocial environment has gained a lot of focus since the last round of interviews. However, an observation was made that A2 and A3 do not fully agree on how the psychological environment is at the time of the interview.

"[A2 about the psychosocial environment] And before it was a very big theme that we were more... We had a much more professional relationship than friendly. But we are very focused on that now. Maybe we should focus more on becoming friends. So I feel we have done that now. And that contributes to better communication. Which means that we can also be a little more open and efficient."

- *Informant A2, second round*

"[A3 about the psychosocial environment] We work a lot with psychosocial issues in our company. We have done that in EiT [subject at NSE]. It is also an aspect that we have been very bad at. We see each other as colleagues, rather than friends. (...) It creates a lot of trust in

having a friend relationship, rather than a colleague. It's hard to say what kind of impact that has, but it's at least what we have to work with since we think it can benefit us more to be confident in each other than just seeing each other as colleagues."

- *Informant A3, second round*

4.2.3 Summary of the Main Findings from Team A Over Two Months

Table 4 summarises the main findings from both rounds of data acquisition. Both development of efficacy levels, and other themes emerging from the codebook.

Table 4: Team A, summary of main findings

Summary of main findings: Team A	
Development of ESE/ETE	**Other significant findings**
Informants A2 and A3 experienced an increase in their overall ESE attributed to more experience, while A1 showed no development. The informants often attributed their initial medium or low confidence in specific entrepreneurial tasks to a lack of experience. The team showed an overall increase in confidence in entrepreneurial abilities. A3 had high confidence in their own problem-solving ability but perceived the team's ability to be low because of lack of routine.	**Role understanding and trust** - Dissatisfaction with the current roles continuously through both rounds - dissatisfaction with the team's progress and concerns regarding the structure and information sharing within the startup. - Mistrust and avoidant in each other's roles **Communication within the team** - Positive development in communication because of the subject in school - The team experienced more organised conversations and a deeper understanding of each other's communication styles and preferences. - A2 and A3 emphasised the shift from a strictly professional relationship to a more friendly one, fostering better communication and openness among team members.

4.3 Team B's Development in Entrepreneurial Efficacy and Team Dynamics

Team B consists of one team member with a social science background and two with technical backgrounds, as illustrated in figure 6. They formed as a team in early January 2023.

Team B Exploring high technology in collaboration with research institution		
Informant B1 Technical	**Informant B2** Technical	**Informant B3** Social science

Figure 6: Team B; case and team-members

4.3.1. Prior experience with entrepreneurship

Prior to NSE, the informants in team B had varying levels of entrepreneurship experience. B1 describes some market research experience, but most importantly, the experience of being a part of the innovation ecosystem through a student organisation and having leadership experience running a student organisation. Additionally, B3 has entrepreneurship experience through a student organisation working with startups. B2 has little to no previous experience with entrepreneurship. All informants express a desire to learn, and this being one of their biggest motivations in this period of time.

4.3.2. Levels of Entrepreneurial Self-Efficacy and Levels of Entrepreneurial Team-Efficacy During Two Months

Table 5 shows Team B's self-assessed levels of ESE and ETE across both rounds of data acquisition. Informants provided insights into their personal confidence and their confidence in the team across five dimensions of entrepreneurial efficacy: searching (identifying customer needs), planning (estimating market size), marshalling (conveying vision) and implementing people (problem solving and recruiting).

Table 5: Self-assessed levels of entrepreneurial self-efficacy (ESE) and entrepreneurial team-efficacy (ETE) for Team B, categorised as low (L), medium (M), and high (H) efficacy levels.

Explanation:
[Gray] no change in efficacy from round one to round two. [Dark grey]: increased efficacy from round one to round two. [white]: decrease in efficacy from round one to round two. [↑] higher levels of ETE than ESE. [↓] lower levels of ETE than ESE.

Main Theme	**Sub-Theme**	**Informants**					
		B1		B2		B3	
		Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
ESE	Searching *(identifying customer need)*	M	H	M	H	L	M
	Planning *(Estimating market size)*	M	M	L	M	M	M
	Marshalling *(Conveying vision)*	H	H	M	H	H	H
	Implementing-people *(Problem solving)*	H	M	M	H	M	M
	Implementing-people *(Recruiting)*	H	M	M	H	M	M
ETE	Searching *(identifying customer need)*	H (↑)	H	H (↑)	H	H (↑)	H (↑)
	Planning *(Estimating market size)*	H (↑)	M	M (↑)	H (↑)	M	M
	Marshalling *(Conveying vision)*	L (↓)	M (↓)	H (↑)	H	H	H
	Implementing-people *(Problem solving)*	H	H (↑)	H (↑)	H	H (↑)	H (↑)
	Implementing-people *(Recruiting)*	H	M	M	H	H (↑)	M

All informants in team B exhibited medium to high entrepreneurial self-efficacy during the first round of data acquisition, with B1 having overall highest confidence in own entrepreneurial abilities, and B2 having the least confidence of the three. Over the two months, B1 showed an overall decrease in entrepreneurial abilities, with emphasis on implementing people (problem solving and recruiting). B2 however, shows a significant increase in ESE over the two months, with improvements across all parameters.

In both rounds of data acquisition, the participants in Team B exhibited a higher level of confidence in the team's collective abilities than in their own individual abilities. However, there was no significant overall change in ETE levels over the two-month period. The team members had differing perceptions regarding which specific parameters had changed over the course of the two months.

4.3.2.1 Development of Entrepreneurial Self-Efficacy from February to May

Both B1 and B2 express a moderate level of confidence in identifying customers' needs due to their lack of experience in their domain. However, after two months, all informants increased their level of confidence. B1 realises they have greater capabilities compared to others in their field.

"[Informant B1 on their own confidence in identifying customer needs] (...) I feel I was really able to identify it in the case we chose to kill. I felt I was more able to identify it than those who deal with the technology at CERN. I noticed that my level of competence was higher than theirs, which made me able to identify problems they did not see, or that they downplayed.

- *informant B1, second round*

Among the informants, only B2 reports an increase in confidence when it comes to estimating customer needs, but overall, none of them appears to be comfortable with this task. In particular, B1 does not anticipate becoming comfortable with it in the future. When it comes to conveying vision, B1 express high confidence and explains being better than their teammates. In the second round, however, all informants express high confidence in doing the task.

"[B1 about conveying vision] But I think at this point in time I think I am the best of us [out of the team] to talk to an investor. Sell in stories much better because I go straight to it, what I, what I know are pain points for them in relation to the tech, and I know the question they are going to ask that they are sceptical about, because I too have been in several meetings with external parties (...)"

- *Informant B1, first round*

Furthermore, B1 exhibits a decrease in confidence in their problem-solving skills over the two-month period. Initially, they displayed unwavering certainty in themselves, emphasising their determination to do whatever it takes. However, in the second round,

they reflect on their tendency to amplify crises and experience a sense of lacking control.

"[Informant B1 on their own confidence to problem solve] (...) there is sometimes full crisis maximisation if something goes wrong. I get stressed very easily if it's not something I have full control over. I suffer a bit of perfectionism, to the point where it sometimes seems to hinder me rather than help. (...) But then maybe that's where the team comes in. That one is complementary. That I am not in a team with the same people as myself. (...) I'm improving [at problem solving] but it's still there."

- *Informant B1, second*

B2 show higher confidence in their problem handling skills over the two months and express that they do not stress and let the lack of control override the actions that have to be done.

4.3.2.2 Development of Entrepreneurial Team-Efficacy from February to May

In the initial interview round, all three informants have more confidence in the team than in themselves as individuals when identifying customer needs, and all three informants point out the value of combining several perspectives and skills.

"[B1 about confidence in the team to detect customer needs] And I have great confidence in that because we have different angles on things. I have more confidence in the team as a whole than in myself, or in [B2] alone or in [B3] alone because I believe that overall we can uncover customer needs much better than if we… [thinking pause] than individually."

- *Informant B1, first round*

Both Informants B2 and B3 recognise that they have less technical skill than the other members of the team and, as a result, believe that B1 is capable of understanding the customer's needs on a different level.

"[B2 about confidence in the team to detect customer need] I would say a balance in a way, because I would say [B1] is quite good at it. Because they have more of a technical understanding, know a little more lingo and such, while B3 and I have to work a little more on actually being able to extract the customer's needs because it requires such, so technical in a way, understanding."

- *Informant B2, first round*

In the second round of data acquisition, all informants express high confidence in the team, citing the valuable combination of knowledge, interdisciplinary backgrounds, and diverse experiences that contribute to a range of perspectives within the team. This collective expertise is also mentioned as the reason for their confidence in the team's ability to estimate market size, despite the team acknowledging their relative lack of experience in this particular task. When it comes to conveying the venture's vision, B1 continuously expresses that they believe more in themselves than the team, attributed to their expertise in the domain.

Both informants B2 and B3 express high confidence in the team as a whole, as they believe that each member is able to communicate the vision with high confidence, in a relatable way and with strong persuasive voices. After two months, B1 still has higher confidence in their own abilities than the team as a whole.

Regarding the team's problem solving skills, informants B2 and B3 have high confidence in the team's ability to deal with difficulties as they arise. B2 explains that the team is communicating well and are efficient when needed. At the same time, B3 expresses concern about how reliant the team is on B1, noting that the team would face significant issues if B1 were absent for an extended period of time.

> *"[B3 about their confidence in the team to handle problems] If, for example, B1 had fallen ill over a longer period then, I think... I think we would have had greater challenges considering that then you are missing the very key aspect of our start-up company, which is pure technological competence."*
>
> - *Informant B3, first round*

In data acquisition round two, the team has high confidence in their ability to problem solve. They emphasise that they have strong confidence due to the different personalities, how they complement each other, and that they experience the team as proactive in dealing with challenges, as well as recognising that there is room for improvement.

4.3.2.3 Team Development: February to May - Relevant Additional Context

Team Dynamics

In February, all informants in team B uniformly expressed their satisfaction with the team's composition, affirming a high level of contentment. Furthermore, they consistently emphasised the robustness of their communication and collaboration, attesting to the effectiveness and strength of their collaborative processes.

"[B1 about the team's ability to do startup-related tasks has evolved] I actually think we've been really good from the start. (...) We set very clear expectations early on and talked about motivation in great depth, while everyone else started to, in a way, start doing market research. We then spent a good deal of time establishing work routines."

- *Informant B1, first round*

This continues in May, and B2 even says that the progression was better near the end because the team was "too structured" when they first started.

"[B2 about the team progress since the first interview] We were a bit more organised at the start. We tried to work according to the scrum framework, while it gradually faded away (...)I don't know if it was negative, because we were perhaps a bit too rigid at the start (...). But towards the end we were a bit more like, let's find answers to things, let's not create too many tasks. I felt we had a bit more momentum at the end."

- *Informant B2, second round*

Role understanding and team structure

Additionally, an important finding from the first round of interviews is the consensus among all team members of team B regarding the indispensability of B1 as a crucial resource within the team. B1 is seen as an anchor essential to the team's dynamics and performance.

"[B1 about their position in the team] So I probably take the leadership role a lot on that, although my wish is that [B3] eventually gets to the point where they take it. (...) in the long term, we want [B3] to have more overall management responsibility, but for now, it works fine."

- *Informant B1, first round*

"[B2 about who in the team takes charge during challenges] I would say [B1] is quite a clear voice. And I think they know that too. They can be very good at forming an opinion quickly."

- *Informant B2, first round*

"[B3 about the team's ability to handle challenges] If, for example, [B1] had fallen ill over a longer period then, I think... I think we would have had greater challenges considering that then you would be missing the very key aspect of our start-up company, which is pure technological competence."

- *Informant B3, first round*

In the second round of data acquisition, there have been some changes in the dynamics and roles, particularly between B1 and B3. The indispensability of resource B1 is demonstrated in Chapter 4.3.2.2; however, a change in perspective emerges in interview round 2, when B1 mentions taking on a more technological function.

"[B1 about the change in their role] At the start, I felt that I was pulling on a lot of threads in the group. Just because I thought it was nice to have some overview. Happy to lead the group and guide teammates if needed. Now I feel I have let go a little in that role and rather taken on a more technical role over time (...) I would say that is my position. To be the catalyst."

- *Informant B1, second round*

B1 continues to explain that this is due to their lack of faith in others to complete tasks when the team is unfamiliar with one another and the need for control regarding seeing results.

Shared goal

Moreover, the team members, especially B1, articulate a shared desire to develop a team who can work together for a long time.

"[B1 explaining about the team motivation] we don't know what will end up being the case, but we have a motivation in the case, and in the startup we have a motivation that we as a team will stick together for a long time."

- *Informant B1, first round*

In the second round, it appears from team B members that their collaborative efforts as a cohesive unit have halted, owing mostly to the termination of their previous case prior to the interview. Although they continue to engage in specific academic initiatives, their personal

interests dominate the process of selecting and engaging with new cases that excite their interest. B1 expresses particularly that they would like to work with B2 and B3 again, but not at any cost.

"[B1 answering what their focus is going forward] I follow what I feel like doing. (...) So I'm very much on board with that [working as a team again]. But then, a new clarification of expectations is needed."

- *Informant B1, second round*

4.3.3 Summary of the Main Findings from Team B Over Two Months

Table 6 summarises the main findings from both rounds of data acquisition. Both development of efficacy levels, and other themes emerging from the codebook.

Table 6: Team B, summary of main findings

Summary of main findings: Team B	
Development of ESE/ETE	**Other significant findings**
The team continues to exhibit moderate to high levels of ESE. B1 showed a decrease in entrepreneurial abilities, particularly in implementing people, and B2 showed a significant increase in entrepreneurial self-efficacy across all parameters. The team continuously expresses medium to high ETE, attributed to robust communication, leadership and being a diverse team. There was no significant overall change in entrepreneurial team efficacy (ETE) levels over the two-month period.	**Team dynamics** - In February, all team members expressed satisfaction with the team composition and highlighted effective communication and collaboration. - In the second round, the team's collaborative efforts as a cohesive unit had halted due to the termination of their previous case. - Towards the end of the two-month period, the team became less structured and focused on finding answers and maintaining momentum. **Role understanding and team structure:** - B1 was seen as an indispensable resource within the team, taking a leadership role and guiding team members, considered crucial for the team's dynamics and performance - In the second round, B1 mentioned taking on a more technical role, while expressing a desire for others to take on more management responsibility.

4.4 Team C's Development in Entrepreneurial Efficacy and Team Dynamics

Team C consists of two with social science backgrounds and two with technical backgrounds as shown in table 7. The venture was started by C1 and C2 one year prior to enrolling the venture creation programme, and C3 and C4 joined the case in January of 2023.

Team C Venture developing software			
Informant C1	**Informant C2**	**Informant C3**	**Informant C4**
Social science	Social science	Technical	Technical

Figure 7: Team C; case and team-members

4.4.1. Prior Experience with Entrepreneurship

Before enrolling at NSE, all of the informants in team C had some prior experience with entrepreneurship. In the same professional field, both C1 and C2 were exposed to entrepreneurship during their undergraduate studies. They started the project together a year before they enrolled in the program. While C4 was introduced to business through a family relation who was an entrepreneur, therefore gaining some experience. C3 enrolled in an internship prior to starting at NSE.

4.4.2. Levels of Entrepreneurial Self-Efficacy and Levels of Entrepreneurial Team-Efficacy During Two Months

Table 7 shows Team C's self-assessed levels of ESE and ETE across both rounds of data acquisition. Informants provided insights into their personal confidence and their confidence in the team across five dimensions of entrepreneurial efficacy: searching (identifying customer needs), planning (estimating market size), marshalling (conveying vision) and implementing people (problem solving and recruiting).

The table 7: Self-assessed levels of entrepreneurial self-efficacy (ESE) and entrepreneurial team-efficacy (ETE) for Team C, categorised as low (L), medium (M), and high (H) efficacy levels.

Explanation:
[Gray] no change in efficacy from round one to round two. [Dark grey]: increased efficacy from round one to round two. [white]: decrease in efficacy from round one to round two. [↑] higher levels of ETE than ESE. [↓] lower levels of ETE than ESE.

Main Theme	**Sub-Theme**	**Informants**							
		C1		C2		C3		C4	
		Round 1	Round 2	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
ESE	Searching *(identifying customer need)*	H	M	M	H	M	M	H	H
	Planning *(Estimating market size)*	L	L	L	L	L	L	L	M
	Marshalling *(Conveying vision)*	H	M	H	H	H	M	H	H
	Implementing-people *(Problem solving)*	L	L	H	H	M	H	H	H
	Implementing-people *(Recruiting)*	L	M	M	L	M	H	M	M
ETE	Searching *(identifying customer need)*	H	M	M	H	H (↑)	H (↑)	M (↓)	M (↓)
	Planning *(Estimating market size)*	L	L	L	H (↑)	L	M (↑)	L	L (↓)
	Marshalling *(Conveying vision)*	M (↓)	H (↑)	H	H	H	H (↑)	H	H
	Implementing-people *(Problem solving)*	L	M (↑)	L (↓)	H	L (↓)	M (↑)	L (↓)	H
	Implementing-people *(Recruiting)*	M (↑)	H (↑)	L (↓)	L	H (↑)	H	M	M

In the first round of data collection, informants generally had moderate confidence in their entrepreneurial abilities. Informant C1 had the lowest initial entrepreneurial self-efficacy and experienced a decline over the two months. It is worth noting that C1, along with C2, initiated the venture and possesses relevant education and industry experience. C2 did not display any significant changes in ESE throughout the study. On the other hand, C4 consistently demonstrated the highest levels of ESE across both data collection rounds, while C3 exhibited the most positive ESE development over the two months.

Regarding entrepreneurial team-efficacy, the individuals displayed overall lower confidence in the team than themselves in February. This changed drastically over the two months, and the team-efficacy were considered to be lower than individual self-efficacy only for informant C4. Overall, the entrepreneurial team-efficacy increases drastically over the two months.

4.4.2.1 Development of Entrepreneurial Self-Efficacy from February to May

In February, Informant C1 displayed high confidence in their ability to identify customer needs both within and outside the venture, considering it one of their strengths.

> *"[informant C1 on identifying customer needs] like when it was a completely foreign industry, (...) I was able to often create a good relationship with them [costumer] and talk to them on the phone, and I was able to extract a lot of important data"*
>
> - *Informant C1, first round*

In May, C1 experienced a decrease in confidence due to difficulties in targeting a specific customer base. However, the other team members (C2, C3, and C4) maintained high confidence in their ability to identify customer needs. C2 and C3 noted improvement over time, despite limited experience.

> *"[C3 on their own ability to detect customer needs] I don't have the domain knowledge, but I think I can sit down and see connections."*
>
> - *Informant C3, second round*

When it comes to the estimation of market size, all team members had low confidence in themselves in February, especially in relation to the venture. Informant C1 sought assistance from others enrolled in the VCP program for help with estimation, while C2 acknowledged that estimating market size was not their strength. C3 and C4 attributed their low confidence to a lack of understanding and knowledge about the potential market to enter. In May, informants C1, C2, and C3 expressed continued low confidence in their abilities. Informant C4 had moderate confidence and perceived improvement in their ability to estimate market size due to participation in academic tasks focused on this topic.

Furthermore, C1 and C2 were highly confident in their ability to convey their vision, while C3 and C4 also exhibited high confidence due to the relatability of the venture in the initial

round. In May, C1 recognised their persuasive skills and industry background, while C2 and C4 maintained high confidence, attributing it to their storytelling and communication abilities.

Regarding problem solving, C1 expresses low confidence in both rounds of data acquisition. C1 finds it difficult to work on certain subjects and feels stressed if their lack of understanding affects others. In the second round of data acquisition, they admit to potentially overthinking and becoming emotionally entangled in events. They desire more logical people to assist them in dealing with such situations.

"[C1 on handling problems and crises effectively] I sort of put too much emotion into things, which makes it harder to deal with. Yes. So I feel that I'm actually in that situation, I'm a bit dependent on having others who are, in a way, a bit more.. rational"

- *Informant C1, second round*

On the other hand, informant C2 and C4 express high confidence in their own abilities across the two months. C2 emphasises the importance of taking a step back and being realistic about the importance of problems. At the same time, informant C4 confidence comes from them taking a practical approach to issue resolution and remaining objective and cool when difficulties arise.

"[C2 answering question about problem solving] I feel that I am good there. (...). But also here at NSE through the lessons we've had, also like in EiT [academic subject] and things that have arisen, you have to sort of grasp it when it happens. Because you don't have time for it to simmer."

- *Informant C2, second round*

Based on previous experience, informants C2, C3 and C4 express medium confidence in recruitment in the first round of interview. In the second round however, C2 expressed low confidence based on lack of experience.

4.4.2.2 Development of Entrepreneurial Team-Efficacy from February to May

When it comes to identifying customer needs, informant C4 expressed lower confidence in the team's ability to recognise customer needs in February, citing differences over the target customer and market preferences. They emphasised the need for independent thinking and

cautioned against overreliance on individual perspectives, highlighting the relevance of their own decision-making.

In May, while all team members expressed varying levels of confidence, there was an overall shift towards a more positive outlook. Informant C3 believed in the team's interdisciplinary nature and trusted their complementary expertise to understand customer needs. C4 expressed confidence in the team's ability to conduct thorough research and make critical decisions moving forward, despite a lack of confidence at this point in time.

"[C4 about the team's ability to uncover customer demands] But at the same time, I don't have much confidence in our ability to find that need right now. I kind of think we'll figure it out, but it might take quite a while. And someone who is perhaps more skilled would probably have found it in a much shorter time"

- *Informant C4, second round*

In February, all four informants expressed low confidence in the team's ability to estimate market size, mirroring their individual assessments. This lack of confidence was due to factors such as a lack of clarity about the target customer, industry-specific challenges, and limited market knowledge. The informants recognised this as the team's weakest aspect and emphasised the urgent need to enhance competence in this area. In May, it was reported that informants C1 and C4 were responsible for this assignment. However, both C1 and C4 expressed low confidence in the team, citing a lack of financial competence and specific market roles within the team. Interestingly, C2 reported high confidence and expressed faith in the work of C1 and C4.

"[C2 about confidence in their team's ability to estimate market size] As a team, I have full confidence in what the others say. In that way, I would say that I feel we have a good understanding of it. But that's because if [C1] says that this is something they have read and this is what they think they mean, then I believe it. So I don't know if we're good at it or if we think we're good at it."

- *Informant C2, second round*

In February, the team's overall confidence in communicating their vision is high, with only C1 having more faith in their own abilities than the rest of the team. C1 declares a desire to play a larger role in pitching in the future. In May, all team members had great confidence in their ability to articulate their vision, with C1 and C3 having even more trust in the team than

themselves. The team's interdisciplinary competency, engaging case, observation of presentation skills, cross-functional character, personal experiences, technical skills, and effectiveness in appealing to emotions all contribute to their confidence.

In the initial round of data acquisition, all members of team C have low confidence in the team's ability to effectively handle difficulties and crises. They recognise the need for improved decision-making procedures and faster resolutions and discuss the lack of a clear leader figure.

"[C2 on the team's ability to handle problems] In a way, we don't quite know yet how to delegate work tasks, so that things go very smoothly as it is still a bit choppy, and we can often end up having to work a lot together, even though you should probably work more individually."

- *Informant C2, first round*

In May however, all members have higher confidence in the team, emphasising more honest communication. However, C3 expresses some concerns in regard to task delegation.

"[C4 about their confidence in the team to handle problems effectively] Yes, we are completely honest with each other, and call each other out when we think something. And yes, I just think, we solve most things only with good communication and delegation."

- *Informant C4, second round*

"[C3 about their confidence in the team to handle problems effectively] (...) but it takes some time before we sort of get started. But once we get started, we get things done very quickly, so yes. (...). But we just have to manage to sit down and delegate the task to completion first."

- *Informant C3, second round*

Moreover, Team C is very divided regarding the team's ability to recruit and hire new employees to the venture in the first round. They draw attention to the difficulty in striking a balance between likability or personal ties and taking into account the requisite skills and qualifications. Team C continued to be split on the matter in round two. C2 and C4 draw attention to the minimal attention to recruitment and the difficulties in evaluating a candidate in advance C1 and C3, however, emphasise the team's unique skills and the pleasant dynamics of the team.

4.4.2.3 Team Development: February to May - Relevant Additional Context

The findings from the second round of data acquisition indicate that team C has deviated from their previous focus on the startup venture. For the past two months, the team's attention has instead been directed towards academic commitments and supplementary employment opportunities. Especially C1, C3 and C4 express there has been little devotion to the startup.

"[C4 answering how the last weeks have been] There has only been a focus on school and not so much on startup for us."

- *Informant C4, second round*

C1 also stated that they believe they have grown the most in their academic work since the previous interview round.

"[C1 about their entrepreneurial development]I think perhaps the study, or the academics at school, is perhaps what I have done the most. I know that we, in the last six months, have been involved in start-ups, but I think I have almost got more back [learned more] from the academics at the school."

- *Informant C1, second round*

Role understanding

In both rounds of data acquisition, the topic of roles and their comprehension stood out as a key theme. In February, the team members specifically stated that they intended to avoid designating responsibilities within the group. They believe that doing this may foster an atmosphere in which everyone is given the chance to take on various duties and responsibilities. Some team members have, however, also voiced their displeasure with the lack of progression.

"[C3 about the team process] No, the thing is... That we are good at planning, but we are bad at executing. So everything is planned. But it is the power of implementation that... Often fails because... Other things happen all the time."

- *Informant C3, first round*

"[C1 about the team handling challenges] and then I also think there is a lack of a leadership figure. Yes, if you had someone who took more of the lead. That would perhaps have been more effective."

- *Informant C1, first round*

In May, informants representing team C explain that a clear definition of responsibilities within their team has yet to be formed.

"[C4 about how the roles have changed] We don't really have any defined roles yet. So I also think that the whole group is a bit... aware that we haven't done much lately. Yes, it seems that not much has happened in roles, and it is something we will take action on. But I think that will happen in maybe a few weeks."

- *Informant C4, second round*

Each informant expresses uncertainty about the direction or potential of their concept. They discuss challenges in comprehending the problem they are attempting to address, as well as being affected by the solutions they propose rather than focusing on the problem itself. Furthermore, some of the informants discuss whether their motivation has been challenged because of the uncertainty and the difficulty in seeing the potential of the business case.

"[C1 about teamwork] I think you might be a little reluctant to go into it again [market research], because you know that it requires quite a lot from us as people."

- *Informant C1, second round*

This ambiguity has also led to a decrease in C1's devotion to the team, although C2, C3, and C4 describe their dedication as unchanged or even strengthened.

"[C1 about their lowered dedication to the team] But I think it's really just about uncertainty. That there are still so many things you don't know. And that you then become uncertain about the business idea."

- *Informant C1, second round*

Communication within the team

Another significant issue frequently arises is team communication. In the initial round of data acquisition, all participants share that the team exhibits qualities such as disorderliness, poor decision-making, or unwillingness to deal with problems. Informant C1 identified this as the team's most critical challenge during the initial interview.

"[C1 about communication within the team] I think it was also one of the biggest challenges for us as a team... We can sort of wrap things up. Yes. You are afraid of hurting each other's feelings, and in a way we understand that we have to say it, but it is somehow not that easy"

- *Informant C1, first round*

Several of the informants additionally expressed that the team seems to always agree in team discussions.

"[C3 about communication within the team] I think everyone has the same opinion, very dynamic team who for some reason always have the same opinion about things. Everyone feels the same."

- *Informant C3, first round*

C4 expresses some dissatisfaction with the level of group thinking, emphasising that only some team members share their opinion in discussions. Moreover, C4 is characterised as exhibiting a more reserved demeanour compared to the other team members. However, despite their reserved nature, C4 is crucial in the team, being relied upon for decision-making processes and team reflections. C4 also claims they are less devoted to the team's well-being than the others, indicating a want for more constructive communication.

"[C1 about the team structure] about And I think we're pretty even, the three of us, and then we have [C4], who is maybe a bit more reserved, but they takes its place in a startup-wise way, but less so in terms of noise, socially, speaking-wise... um, but otherwise, we three others are fairly even."

- *Informant C1, first round*

"[C4 about the team dynamic] I am perhaps the one least concerned about well-being in the group."

- *Informant C4, second round*

4.4.3 Summary of the Main Findings From Team C Over Two Months

Table 8 summarises the main findings from both rounds of data acquisition. Both development of efficacy levels, and other themes emerging from the codebook.

Table 8: Team C, summary of main findings

Summary of main findings: Team C	
Development of ESE/ETE	**Other significant findings**
Informant C1 had the lowest initial ESE and experienced a decline over two months. Mainly attributed to a lack of domain knowledge and lack of experience. Informant C4 consistently demonstrated the highest levels of ESE, attributed to their analytical and objective approach. Initially, team-efficacy was overall lower than individual self-efficacy for most informants, attributed to a lack of communication, progress and effective decision-making processes. Over two months, team-efficacy increased drastically. Attributed to more efficient communication progress with academic work	**Roles and progress** - Team C has shifted focus from the venture to academic commitments and supplementary employment opportunities - Informant C1 expressed decreased devotion to the startup attributed to uncertainty about the direction and potential of their concept - Roles and responsibilities is not clarified **Communication within the team:** - Team communication remains disorderly, and decision-making is poor - The team tends to agree without differing opinions - Informant C4 is reserved, but plays a crucial role in decision-making, and wants more constructive internal communication

4.5 Summary of the main findings

Table 9 provides a summary of the main findings across all teams from both rounds of data acquisition. The table indicates whether the ESE/ETE have increased [↑] or decreased [↓] over the two months of the study, and what the reason for this change is according to the informants.

Table 9: Summary of main findings across all teams from both round of data acquisition

Team		ESE	Comment	ETE	Comment
Team A	A1	-	No development in overall ESE levels	↑	Increased ETE level. Team A shows a weak understanding of each other's roles, as the interviewees state uncertainty about what the other team members do and their responsibilities. Furthermore, the team expresses dissatisfaction with their communication skills but emphasises that their abilities have grown from the first interview round. However, the team shows a high understanding of the technology and what is needed for the case to go forward. Resulting in progression for the team as they have moved forwards to new markets after conducting market research and concluding it to be too small. Having made advancement and progression for their venture, however, some informants state that the team development has been weak.
	A2	↑	Significant increase, only problem solving is constant		
	A3	↓	Decrease in overall ESE levels with an emphasis on planning and implementing people (recruiting)		
Team B	B1	↓	Decrease in overall ESE levels with emphasis on implementing people (problem solving and recruiting)	-	No change in perceived levels of entrepreneurial team efficacy has been identified. Team B expresses overall high confidence. Moreover, the team has a clear anchor, as the member takes the lead for the venture and its development. Additionally, the other members perceive the member as a dependable resource for the team. Some changes in this dynamic are identified in round two of data acquisition. However, there is a low conflict level in the team over the time period.
	B2	↑	Significant increase in overall ESE levels, with improvements across all four dimensions		
	B3	↑	Increase in overall ESE levels, with an emphasis on planning		
Team C	C1	↓	Decrease in overall ESE levels with emphasis on searching and marchaling	↑	Team C showed a significant increase in ETE levels. There is a lack of role distribution within the team throughout the two months, hindering decision-making processes and progression. The lack of role distribution affects the structure of the team, which is expressed by the interviewees and has resulted in uncertainty to both the venture and the next steps. However, the team emphasises the desire for change in the team progression and structure, as well as the progression for the venture specifically. The team explains that there is a very friendly environment, but some indicate a need for more constructive communication.
	C2	-	No development in overall ESE levels		
	C3	↑	Increase in overall ESE levels, with an emphasis on implementing people (problem solving and recruiting)		
	C4	↑	Increase in overall ESE levels, with an emphasis on planning		

5.0 Discussion

While entrepreneurial self-efficacy has been extensively studied in the literature, its examination over time remains relatively limited (Newman et al., 2019). On the other hand, entrepreneurial team-efficacy is a relatively nascent area of research, with few studies focusing on its dynamics and determinants. This study sought to address these gaps by investigating the factors influencing both individual entrepreneurial self-efficacy and the collective entrepreneurial team-efficacy of new venture teams over time, specifically within the context of a VCP. Building on the findings from two rounds of semi-structured interviews conducted with three new venture teams, the discussion will try to answer:

What factors influence new venture teams' members' entrepreneurial self-efficacy and the teams' entrepreneurial team-efficacy over time?

This study contributes to entrepreneurial self-efficacy research by adopting a longitudinal approach to examine its dynamics within nascent new venture teams. Previous research has predominantly focused on cross-sectional investigations (Newman et al., 2019), providing a limited understanding of how entrepreneurial self-efficacy evolves and influences entrepreneurial outcomes over an extended period. In contrast, this study follows new venture teams from their early stages through two months. By capturing the changes in entrepreneurial self-efficacy, this study provides a more comprehensive understanding of its dynamics within nascent new ventures.

Regarding entrepreneurial team-efficacy, little research has been done to determine the antecedents for the construct. Team-efficacy outside the entrepreneurship domain has been strongly connected to team cohesion (Paskevich et al., 1999), and the authors discuss whether the development of team cohesion in new venture teams is influential for their ETE. During the research, the authors also detected a possible link between the stage in which the teams are in development according to Tuckman's development model (1965) and the influence of the entrepreneurial ecosystem and venture creation programme in which the informants are enrolled.

In addition to these factors, the authors highlight the need to discuss other potential explanations for the findings. Informants indicate the presence of cognitive bias, social

comparison, and cognitive dissonance, which may influence how the informants choose to report on both entrepreneurial self-efficacy and entrepreneurial team-efficacy. It also explains the rich inner lives of young entrepreneurs and how they think of others and themselves affects their belief in their abilities.

Hence, the chapter is divided into five main topics. *Task commitment and motivation* are in this study found as the main driver for the fluctuation in levels of entrepreneurial self-efficacy and will be discussed first. Secondly, the authors delve into the development of *team cohesion* and the consequent influence on the three teams' entrepreneurial team efficacy. Thirdly, the *team development*, connecting both team cohesion and ETE levels. Fourth, the influence of the *entrepreneurial ecosystem and venture creation programme* are discussed. Lastly, the authors discuss the student's confidence in *uncharted territories* against both ESE and ETE.

5.1 Task Commitment and Motivation: Impact on Entrepreneurial Self-Efficacy

In Newman's (2019) review of the literature on entrepreneurial self-efficacy (ESE), various factors that influence ESE were identified. Although some of these factors were observed in this study, they will not be elaborated on in detail, as the study has identified task commitment and motivation as significant for the increase and decrease in ESE. For instance, the impact of gender will not be explored extensively in this section. Interestingly, while task commitment and motivation are not commonly associated with entrepreneurial self-efficacy, they were found to have the greatest impact on shaping the ESE levels of the informants in this study. Hence, this chapter will discuss the findings related to the impact of task commitment and motivation on entrepreneurial self-efficacy among the participants in the NVTs.

Task commitment refers to the extent to which a group is dedicated and focused on achieving its goals. It encompasses the members' strong commitment to the group's purpose, active participation in pursuing group objectives, and a high level of motivation (Forsyth, 2021). Four informants (A3, B1, B2, and C1) reported a decline in their motivation and commitment during the two-month study period. Interestingly, three of these four members also experience a decrease in ESE, in addition to the decrease in commitment and motivation in team, case or

both. Suggesting a correlation between ESE and task commitment. These individuals attributed the decreased commitment and motivation to various factors; team or case-related uncertainties, a lack of progress, a lack of a shared goal and inadequate communication within the team. McLaren and Spink (2020) connected task commitment to the frequency of communication between the group members, which may be part of the explanation for the informants' experience of lower task commitment. A3 and C1 express dissatisfaction with the level of interaction with their teams, and team members B1 and B2 express a much lower level of interaction in the team in round two of data acquisition. In this case, it is observed that the mentioned factors are connected with negative performance accomplishment.

The three informants that express a decrease in ESE also demonstrate less commitment and motivation for either case, team or both. Suggesting a correlation between ESE and task commitment in this study. This corresponds with the research conducted by Sahabuddin (2017), who found that the lack of commitment to entrepreneurship causes low self-confidence in students to engage in activity-oriented entrepreneurship, and research conducted by Seijts & Latham (2011), who found by using a business simulation that the commitment to the learning goal partially mediated the relationship between self-efficacy and performance.

However, not all informants experienced a decline in task commitment. Six informants (A1, A2, B2, C2, C3 and C4) reported static or higher commitment and motivation over the two months. One of the informants (C2) explains that they have had a boost in motivation after joining an incubator (institutions helping entrepreneurs develop in an early stage), while others express they want to go all in to explore the venture's potential. Motivation and commitment can provide the drive and determination necessary to overcome obstacles in entrepreneurial endeavours and further actively seek out experiences and role models that reinforce their belief in their capabilities, further strengthening their entrepreneurial self-efficacy.

A notable observation arises when examining the informants' experiences: all those who reported a decline in their commitment and motivation attributed it to internal team dynamics, whereas those who exhibited higher motivation or commitment identified external factors as the driving force behind their positive mindset. There could be several plausible reasons for this observation. Individuals may be unaware of or lack insight into the elements influencing

their motivation and commitment. They may be more concerned with external conditions and fail to notice the internal dynamics that occur within their team. In this situation, individuals reporting a fall in commitment may legitimately feel that team dynamics are completely at fault, whilst others displaying stronger motivation may be unaware of internal dynamics but notice the favourable impact of external factors. Another plausible reason for this observation could be a perception bias. People may tend to attribute negative experiences to internal factors while attributing positive experiences to external factors. This bias could be driven by a desire to maintain a positive self-image or avoid taking personal responsibility for negative outcomes. As a result, individuals may attribute their decline in commitment to internal team dynamics while attributing their higher motivation to external factors beyond their control.

Either way, these results show that the informants in this study seem to get more motivated by the entrepreneurial ecosystem they are a part of and factors external to the team itself. The VCP they are enrolled in, and the exposure to the entrepreneurial ecosystem in Trondheim, may encompass various external factors such as access to resources and support networks and exposure to successful entrepreneurial role models. On the other hand, the informants who experienced a decline in commitment and motivation primarily attributed it to internal team dynamics. This could imply that while the entrepreneurial ecosystem may provide an initial boost of motivation, it is the internal dynamics within the team that ultimately determine whether individuals can sustain their commitment over time.

In conclusion, the results of this study show that the development of task commitment and motivation over the two months had a significant impact on the informant's entrepreneurial self-efficacy. Furthermore, the findings indicate that while some individuals draw motivation from the broader entrepreneurial ecosystem they are part of, others find it challenging to maintain their commitment due to internal team dynamics. The implications of the entrepreneurial ecosystem and the informants' involvement in the Venture Creation Program will be further explored and discussed in the next chapter.

5.2 The Relationship Between Entrepreneurial Self-Efficacy, Team Cohesion, and Entrepreneurial Team-Efficacy

Team cohesion has been widely recognised as a critical factor influencing team efficacy (Paskevich et al., 1999; Lent et al., 2006). Additionally, previous research suggests that individual levels of self-efficacy influence team cohesion (Black et al., 2019; Lent et al., 2006). However, its specific relevance within the context of an entrepreneurial setting, particularly in the context of a new venture team, remains an area requiring further investigation. In this chapter, the authors aim to explore the relationship between entrepreneurial self-efficacy, team cohesion, and entrepreneurial team efficacy in the studied NVTs.

5.2.1 Development of cohesiveness in Team A

Analysing Team A over the course of two months reveals changes, especially in two antecedents of team cohesion: attraction and group structure. Attraction is defined as the strength of bonds among team members and can be identified by members being friendly to one another, expressing happiness with the group, and participating in group activities regularly (Forsyth, 2021).

Members of team A explain that the startup's psychosocial environment has gained much focus, as they wish to become friends rather than just colleagues. A3 explains that it creates trust and believes that the team could be more confident in each other if their relationship were more friendly. Team member A2 expresses how the effort put into becoming friends has affected the communication within the team for the better, resulting in increasing the team's efficiency.

The focus on fostering robust interpersonal connections within the team also contributes to members developing a positive regard for the group as a whole (Forsyth, 2021). Additionally, research indicates that valuing the group positively can benefit the team's collective self-esteem (ETE) (Marmarosh et al., 2005). Consequently, the collective endeavour of team A to cultivate friendliness has proven to positively develop their cohesiveness and entrepreneurial team-efficacy. When individuals feel comfortable and respected within the team, they are more likely to engage in open communication, share ideas, and collaborate effectively.

On the other hand, team A seems to have challenges with their group structure. Group structure refers to the team's structural integrity, including norms, roles and inter-member relations (Forsyth, 2021). A2 expresses mistrust in the other members, feeling as if oneself do all the work, not really knowing how the others contribute to progress. Additionally, A2 feels as if oneself "could steer the ship" if they wanted to, indicating an enhanced feeling of power. This change in power dynamics indicated by A2 may be affected by the informants' enhanced entrepreneurial self-efficacy, where they have gained confidence in their own entrepreneurial abilities and consequently feels as if they have more "power" over the decisions being made in the team. A2 further shows mistrust over the leader of the team, and scepticism of the other's contribution to the venture, potentially leading to conflict.

In addition, informant A3's desire to assume a leadership role for better team structure appears to intensify. In the second round of interviews, they express disbelief that this will ever happen, suggesting a potential buildup of frustration. It is possible that A3's lack of being heard or inability to implement the desired structure contributes to their decreasing confidence in their entrepreneurial abilities. Moreover, this tension may have implications for overall team cohesion. A relation between ESE and team cohesion, as seen in A2 and A3, has previously been found by Black et al. (2018), who found self-efficacy to be an important moderator of the relationship between emotional intelligence and team cohesion outside of the entrepreneurial domain.

Greater team cohesion can be fostered when team members possess self-confidence and a perception of self-efficacy regarding their problem-solving abilities and their capacity to overcome challenges (Black et al., 2019). However, as this enhanced confidence in entrepreneurial abilities is coupled with mistrust and scepticism in the case of A2, the authors observe that this contributed to tension and conflict and consequently negatively impacted the team cohesion. Due to the two-month duration of the study, there may not be enough time for the enhanced self-confidence to manifest and the benefits of a more productive debate to be felt. Consequently, the favourable elements of increased ESE may initially manifest as a higher level of conflict within the team before the team can fully leverage these positive aspects and reap their benefits. These challenges, typical of teams in their nascent stage, highlight the importance of establishing a stable and functional organisational framework to support the team's learning process and success as a venture.

Furthermore, only the appointed CEO, A1, seems to be satisfied with the role distribution and structure of the venture. These observations indicate an imbalance in team A's roles and power dynamics. The initial structure within the team and the challenges faced may have a significant impact on their learning process, how they learn from each other, and achieving a successful venture (Knipfer et al., 2018; Ravasi & Tyrati, 2005; Schjoedt & Kraus, 2009).

According to Tuckman's model (1965), groups typically become more cohesive over time as their structure becomes more stable. In the case of team A, their struggles with group structure may be attributed to the team being in its nascent stage, where they have not yet had sufficient time to establish a satisfactory organisational framework. This can hinder the development of a cohesive and efficient team at the current time, again affecting both self-efficacy and team-efficacy.

In conclusion, Team A cohesiveness has been influenced by especially two factors during the two months; attraction and group structure. The team's focus on fostering strong interpersonal connections and valuing the group positively has enhanced cohesiveness and entrepreneurial team efficacy. However, challenges related to group structure, such as role imbalances and power dynamics, have surfaced during this period.

The enhanced entrepreneurial self-efficacy of A2, coupled with mistrust towards the team leader and scepticism of others' contributions, may disrupt power dynamics, lead to conflict, and negatively impact team cohesion. Moreover, A3's increasing desire for leadership and frustration over not being heard or able to implement desired structure may negatively impact their confidence, team cohesion, and overall team dynamics. Overall, Team As cohesiveness declined over the two months.

5.2.2 Development of cohesiveness in Team B

As for Team B, they exhibited high cohesiveness in the form of attraction (friendliness with one another), social categorisation and identification (in-group favouritism), group affect (pride) and entitativity (experiences shared in common). The informants in team B showed very high levels of entrepreneurial self-efficacy across the two months. This may have contributed to the initial high team cohesion, as opposed to Lent et al. (2006) and Black et al. (2019). However, their collaborative efforts as a cohesive unit halted over the two months,

and the members of team B attributed this stagnation to the termination of their case just before data acquisition in May. With the shared venture goal no longer in place, their cohesion began to wane, and only their academic work remained as the binding factor.

It is notable that Team B was the only team whose levels of entrepreneurial team efficacy did not increase. This implies that the team's diminished cohesiveness may have also reduced the team's collective belief in themselves to perform entrepreneurial activities.

5.2.3 Development of cohesiveness in Team C

Team C demonstrated cohesiveness in terms of entitativity, attraction, group affect, and social categorisation and identification. Similar to Team A and B, Team C underwent noticeable changes in group structure over the course of two months. However, Team C faced challenges in establishing effective decision-making routines. Crucial and complex decisions were postponed, such as selecting a leader, defining roles, and determining solutions. Resulting in a lack of motivation and diminished commitment among team members. Without a clear vision to work towards and without anyone taking overall responsibility for coordinating the team and driving progress, team members lacked the necessary motivation to succeed. This finding highlights the importance of establishing a well-structured and performance-oriented New Venture Team (NVT) (Drach-Zahavy & Somech, 2001; Coad & Timmermans, 2014; Cohen & Bailey, 1997).

Additionally, it is worth noting that three out of four members of Team C exhibited similarities both in their self-perception and how others perceived them. Interestingly, the fourth team member expressed dissatisfaction with the lack of independent thinking within the team and also acknowledged the whole team is concerned with their well-being except C4. Additionally, the fourth member identified a tendency within the team to excessively prioritise friendship, which hindered constructive communication and hindered progress. The authors see that a shared perception of resemblance among the majority of team members contributes to a sense of cohesiveness and alignment, potentially fostering a collaborative environment and efficient cooperation. However, one could argue that this implies a level of groupthink within Team C. Groupthink theory, introduced by Janis (1972, 1982), suggests that cohesive groups tend to become overly focused on maintaining unity, which can hinder their ability to critically and realistically evaluate decision-making processes. Janis argues

that this weakness in group decision-making occurs when specific antecedent circumstances, combined with moderate or high group cohesion, are present (Park, 1990).

Moreover, Team C's tendency towards conflict avoidance, lack of constructive communication, and reliance on group consensus rather than independent thinking could stem from their lack of confidence in their own abilities, resulting in a reluctance to voice their opinions. Particularly, C1 and C2 demonstrate a tendency to agree with others simply to maintain harmony within the team. Notably, C1 initially displayed the lowest level of entrepreneurial self-efficacy and even experienced a decline in confidence over the two-month period. This lack of confidence in their abilities might contribute to the communication issues within the team, subsequently leading to conflicts. Drawing on Black et al.'s (2019) study on the influence of self-efficacy on team cohesion, it is worth considering whether the low levels of entrepreneurial self-efficacy observed in some members of Team C have had a detrimental impact on the team's overall cohesion.

In contrast to the rest of the team, C3 stands out for displaying a significant boost in confidence regarding their entrepreneurial abilities over the two-month period. The candidate exhibits a strong determination and expresses a willingness to invest extra time and effort in conducting thorough assessments of the venture's potential. This increased drive may be attributed to the informant's exposure to entrepreneurship through educational experiences and their venture, which has led to a greater belief in their own capabilities to carry out entrepreneurial tasks. This heightened drive can positively impact both C3 and the entire team, contributing to improved team cohesion.

In conclusion, the study revealed that Team C demonstrated cohesiveness in terms of entitativity, attraction, group effect, and social categorisation and identification. The authors observe positive team cohesion development as some members experience increased drive. However, team C faced challenges in group structure and establishing effective decision-making routines, which resulted in a lack of motivation and diminished commitment among team members. The challenge of defining roles and role distribution have functioned as strong contributing factors to stopping the progress and resulting in the team working more closely with routine-tasks than the actual venture. Additionally, while a shared perception of resemblance among the majority of team members can contribute to cohesiveness, it also raises concerns about potential groupthink, where the critical evaluation of decision-making

processes may be hindered. These challenges do however not seem to influence the overall entrepreneurial team-efficacy over the two months, as they demonstrate a significant increase in ESE levels.

5.2.4 The connection between Entrepreneurial Self-Efficacy and Team Cohesion

The authors' observations reveal that the development of entrepreneurial self-efficacy (ESE) has had a varying impact on team cohesion, both positively and negatively, depending on the specific circumstances. For instance, when enhanced ESE was coupled with mistrust, it was found to negatively influence team cohesion. On the other hand, when enhanced ESE was coupled with increased drive and motivation, it positively affected team cohesion. Therefore, the relationship between entrepreneurial self-efficacy and team cohesion was found to be moderated by individuals' attitudes and feelings towards the venture, as illustrated in Figure 8.

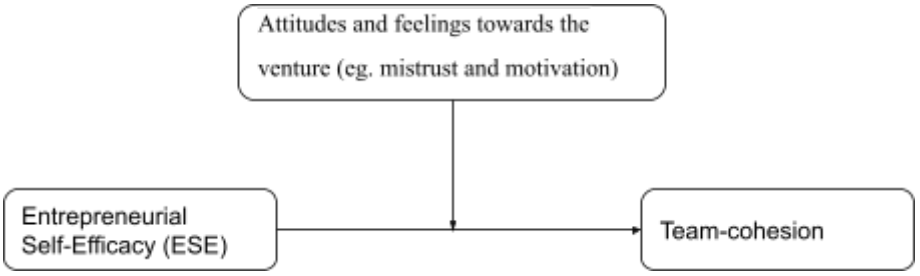

Figure 8: Relationship between ESE and team cohesion

Overall, the observations suggest that team cohesion was predominantly negatively influenced over the two-month period for all three teams. Initially, this raises questions regarding the relevance of team cohesion in relation to team-efficacy within the entrepreneurial domain of this study. However, further analysis and exploration of these findings are necessary to understand better the dynamics and implications of team cohesion on entrepreneurial outcomes. Furthermore, this raises the question of whether the team's development stage can impact their team dynamics and, consequently, their team cohesion. This is further discussed in the following chapter.

5.3 Team Development

Firstly, all of the teams in this study were newly established during the first round of data acquisition. In newly formed teams, there is a limited level of familiarity among team members, and they may not have established strong team processes to function as cohesive units. This initial stage is known as the "forming" phase in Bruce Tuckman's team development model (Tuckman, 1965), and it is characterised by group members becoming acquainted with interpersonal and task-related behaviours. During this stage, teams rely heavily on a leader for direction and structure and avoid conflicts and controversy in fear of affecting harmony.

The first interview round took place approximately one month after the teams had formed, and the authors identified that team A and C were in the forming phase according to Tuckman's (1965) development model, and team B was in the norming phase. Team A and C both show signs of feeling optimistic and full of anticipation, and uncertainty, orienting with each other's personalities and avoiding controversy. An example of this is seen in Team C, where some members are conflict-averse and prioritise maintaining harmony by actively avoiding conflict in discussions. In this phase, teams identify the roles and responsibilities of team members and establish specific objectives and tasks. This might also explain why group structure is the antecedent of team cohesion that developed the most in all teams involved in this study.

Both team A and C entered the storming phase during the two months. Team C expresses a lack of progress, role clarity, resistance to performing tasks connected to the venture, and fluctuations in attitude toward the team. Similarly, team A expresses a lack of role clarity, power struggles, lack of progress, questioning the wisdom of team members and an overall increase in tension. As discussed in Chapter 5.1.1, this affected the teams' overall cohesiveness negatively, with an emphasis on group structure. However, despite the overall downfall in team cohesion, team A and C experienced a positive development in entrepreneurial team efficacy. One of the reasons for the positive development in ETE might be due to the team experiencing a “testing and proving” mentality with both their team and venture, which results in experiencing accomplishment through iterating and producing some type of result. Team C, for instance, experiences accomplishment through their routine tasks

with academic assignments, whereas team A feels accomplished by pivoting the market and getting visible results from it.

In the initial data acquisition round, Team B demonstrates characteristics aligning with the norming phase of the team development model. From the start, they have established a robust and well-defined structural framework within the team, enabling them to operate with less need for additional structure. Moreover, the presence of a strong leader figure, B1, has contributed to a more balanced distribution of responsibilities and effective leadership within the team. Notably, team members exhibit a strong sense of belonging both to the team itself and to their entrepreneurial case, fostering an overall atmosphere of trust among team members. Team B effectively implements a structured team routine, sets milestones, and experiences a sense of accomplishment, all of which positively contribute to their entrepreneurial team efficacy.

Within Tuckman’s (1965) development model, team B experienced the phase of adjourning during the second round of data acquisition, which is the last phase. As the team has decided to scrap their initial case and later split up as a team as well, the members express signals that correlate with the adjourning phase. As the authors observe the team being restless and full of new energy in addition to tendencies of reflection on the collective learning and starting to adjust for the next opportunities to start. As the team experiences being in the adjourning phase, there is a connection between the termination and their overall increase in entrepreneurial self-efficacy. Team B shows signs of relief of it being over and demonstrates the ability to evaluate the team's efforts.

In the context of team development, the progression from the storming to the norming phase in teams A and C has revealed an interesting dynamic. Despite lower levels of team cohesion, there has been an increase in entrepreneurial team efficacy (ETE) among these teams. This leads to the question of whether team members in the early stages of team formation possess the awareness and capacity to reflect on group-level dynamics and if entrepreneurial self-efficacy (ESE) plays a crucial role in this process. The transition to the norming phase has allowed these teams to test and adapt continuously, finding strength in adversity and developing grit. This iterative process enhances the team members' sense of experience, positively influencing their confidence in handling various tasks.

Conversely, Team B, which reached the norming phase, exhibited acceptance and high confidence before moving on to the adjourning phase. However, their entrepreneurial team efficacy experienced a static development. This can be attributed to the team's decision to terminate their case, which resulted in a sense of relief among the members and provided an opportunity for reflection on their overall team development.

5.4 The Implications of the Entrepreneurial Ecosystem and Venture Creation Program

As the entrepreneurial landscape continues to evolve, understanding the role of the ecosystem and the impact of VCPs on entrepreneurial outcomes has become increasingly important. This chapter will explore the implications of the entrepreneurial ecosystem and VCPs have on new venture teams, entrepreneurial self-efficacy and entrepreneurial team-efficacy. Examining these components will bring valuable insights into how the surrounding factors impact entrepreneurial self-efficacy and the entrepreneurial team-efficacy in the NVTs. The chapter starts with exploring diversity, as the environment in the VCP is assembled and consists of interdisciplinary students.

5.4.1 The Role of Homogeneity and Heterogeneity in the NVTs

The venture creation program in which the new venture teams participate in is an interdisciplinary environment. Among these teams, Team A stands out as a homogeneous team, while Teams B and C exhibit heterogeneity in terms of experience, abilities, and academic backgrounds. However, compared to the two other teams, team C does have a high percentage of homogeneity, where the authors have observed that teams have gotten the most consequence from being homogeneous. The presence of diversity within the NVTs is considered crucial in driving sustainable progress for both the venture and the team, as highlighted by Schjoedt et al. (2009).

Furthermore, it is advocated that entrepreneurial teams should strike a balance between homogeneity and heterogeneity, as it directly and indirectly impacts venture performance. According to existing literature, Teams B and C are expected to achieve superior team performance, while Team A, as the homogenous team, demonstrates efficiency in handling routine tasks (Filley et al., 1976; Hambrick & Mason, 1984) These differences become more

pronounced after two months when the NVTs face tasks beyond routine, influencing team performance. During the data acquisition process, teams B and C highlighted the strength of interdisciplinarity within their respective teams.

Additionally, the literature suggests that while some level of homogeneity is desirable, an excessive amount of homogeneity poses challenges, as observed in Team A's lack of team progression. Additionally, this is observed in team C as well, as the team prioritises tasks they are familiar with, such as written assignments. Thus, finding the right balance between homogeneity and heterogeneity is critical for NVTs to thrive in the VCP environment.

5.4.2 Exploring the Impact of Environmental Factors on Entrepreneurial Self-Efficacy and Team Performance in VCP

It was found that the environment the informants are a part of could impact the outcomes of their perception of their own abilities- and their team’s abilities to perform entrepreneurial tasks. In relation to entrepreneurship literature, studies have found that some form of entrepreneurial education improves ESE by increasing students' confidence in their ability to perform entrepreneurial tasks and roles, while others have found a negative impact (Chen et al., 1998; Piperopoulos & Dimov, 2014; Taneja & Bhatia, 2022; Zhao et al., 2005; Saeed et al., 2015; Costin et al., 2022; Kassean et al., 2015). In relation to entrepreneurship literature, the authors draw a connection between the research on the development of ESE in an entrepreneurial education program and the respondents' development.

The authors found in the second round of data acquisition that the different teams used the subjects in the venture creation program as an arena for their venture's progression. Team A illustrated this already in the first data acquisition round, where “Experts in Teams” was used as an arena to start the dialogue on communication flow within the team, as well as feedback for personal development/growth. The informants in team A emphasised the aftermath of the activities and how the communication flow improved, and a broader understanding of each other. This reflective process propelled the team into the storming phase, as discussed in Chapter 5.2, where they actively confronted challenges and conflicts. These observations indicate that the VCP provides a conducive environment for team development, enabling the informants to engage in safe and supportive discussions, leading to a better understanding of one another. The classroom activities fostered an atmosphere of reflection, allowing Team A

to navigate through their differences and work towards achieving greater cohesion and effectiveness.

Additionally, team C emphasises the subjects' impact on their team in both rounds of data acquisitions. Firstly, C2 highlights the importance of “Experts in Teams” for their team communication and work methodology. As some members have difficulty being direct in their communication, while others do not, the subject contributed to improvements in both work- and communication flow. Furthermore, team C expresses the positive impact the subject has had in their decision-making process,

Furthermore, team C did not have any progression with the venture between the data acquisitions rounds; however, one member (C1) expressed getting more learning outcomes from working with the academics than they would by only working with the venture. Following up with how the dedication to academic assignments has affected the venture’s progression negatively, the knowledge acquired will positively affect the venture going forward. On the other hand, the same member (C1) believes it to be an obstacle for the wanted progression, resulting in a decrease in the devotion to the venture as discussed in chapter 5.1. Additionally, C1 emphasises the positive development of the team’s problem-solving abilities, as the team has gained more knowledge through the academic run of the program. The knowledge growth is highlighted by C1 but addresses that the team finds it easier to establish a business plan in an assignment than carry it out into their venture. Additionally, they recognised the value of role models provided by the VCP, utilising the role model's knowledge and experience to address specific challenges. This demonstrates the importance of leveraging academic resources and mentorship for entrepreneurial development.

On the other hand, team B does not address the academic subjects as being a significant game-changer for the team or the development of the venture. The informants have expressed the limited relevance of academic subjects to their team's specific needs. They feel that the academic curriculum primarily focuses on the progression of software cases, which is not directly aligned with the deep tech focus of Team B's work. Consequently, they believe that the academic subjects do not adequately support their team's requirements in deep tech.

However, the team emphasises being a part of the entrepreneurial ecosystem as a valuable resource prior to enrolling in the VCP. During the first round of data acquisition, B1 and B2 emphasised the entrepreneurial ecosystem's critical role in their self-confidence and belief in themselves being “good enough” for the VCP. Additionally, C1 expressed that the use of the alum network of NSE and participating in networking activities at entrepreneurial events helped them recognise the value of their personal competence in entrepreneurship, ultimately enhancing their entrepreneurial self-efficacy.

In addition, the informants may overreport on skills for reasons such as social desirability, where the informant assumes that the authors enrolled in the VCP program one year ahead of them and expects that they possess the entrepreneurial skill asked about (Holden & Passey, 2009). The social desirability might be practised through the interview and in their day-to-day life enrolled in a VCP program, where expressing confidence in one's own skills makes the students judged as desirable or favourable by others (Holden & Passey, 2009). Making their surroundings and the people they engage with increases their ESE because it is expected from them, or at least expected to express confidence out loud. Another indication of the surroundings of the VCP being affectfull in how they express their ESE is the venture creation program's own vision of *“We want to educate the best business developers in the world*” (NTNU School of Entrepreneurship, n.d.). This vision is indoctrinated in the students from the beginning to the end of the VCP program. Most likely, making the students unconsciously aware of the skills they should have or the skills it is expected for them to get through the VCP.

In conclusion, the Venture Creation Program offers students a unique opportunity to engage in real-life entrepreneurship, where they can experience the challenges and uncertainties associated with starting and growing a venture (Lackéus, 2015; Ollila & Middleton, 2011). The VCP encourages students to take risks, learn from failures, and develop a resilient attitude (Aadland & Haneberg, 2019; Lackéus, 2015). All three teams acknowledge and emphasise the role and impact of the venture creation programme and entrepreneurial ecosystem has had on their development. However, the teams have experienced this impact to varying degrees, and their individual perceptions and perspectives influence it. The observations in this study indicate that the venture creation programme, the entrepreneurial ecosystem and surrounding factors indirectly have had a larger impact on the informants' levels of efficacy, which aligns with the findings of Bohlayer and Gielnik (2023). Their study

also revealed that the influence of problems on entrepreneurial self-efficacy during training was contingent upon individuals' error mastery orientation. However, the authors have not obtained any information regarding error mastery orientation in this particular context. This is because the informants did not reflect upon the challenges and problems encountered within the VCP, thus preventing insights into their error mastery orientation. The significant influence of the VCP raises the question of what other mechanisms, beyond the specific team dynamics, contribute to the informants' perceived confidence in their entrepreneurial abilities. Further exploration of such factors is discussed in the following chapter.

5.5 Confidence in Uncharted Territories

As the discussion chapter puts forward, there are several different reasons for the development of Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Team Efficacy (ETE) within the three teams examined. Thus far, the focus has been on the accounts provided by the participants and the aspects they choose to emphasise. This subsection of the discussion aims to uncover additional explanations for why the participants perceive themselves as moderately to highly skilled in entrepreneurial tasks, despite being enrolled in the VCP program for only six months and recently forming their new venture team. Within this subchapter, we will examine how cognitive bias may influence the participants' self-assessments, how their limited domain knowledge might contribute to inflated perceptions of their entrepreneurial abilities, how social comparisons with their peers could shape their evaluations, and how uncomfortable emotional states may impact their reported levels of entrepreneurial competence and abilities.

5.5.1 Cognitive Bias and Dunning-Kruger Effect

As presented in the theory section, cognitive biases are cognitive shortcuts lacking logical judgement making humans able to conduct fast decisions and assessments (Haselton, 2005). A by-product of the bias is that human judgement may deviate significantly from what is considered logical (Haselton, 2005). Thus making the decisions and assessments affected by cognitive bias less credible.

The new venture teams interviewed in this thesis are fairly newly formed, and the former experience with entrepreneurship varies between the team members. Only two of the total informants have former experience from a startup, four of the informants have some

entrepreneurial experience through school or experience through student organisations, and four of the informants have little to no experience. Even though experience varies, the overall belief in the informants' entrepreneurial abilities is medium to high in both rounds of data acquisitions, with an overall increment of ESE and ETE in May.

According to the theory of Entrepreneurial Self-Efficacy (ESE), individuals can possess varying levels of ESE, categorised as low, medium, or high. The existing literature on ESE assumes that novice entrepreneurs would initially have low levels of entrepreneurial self-efficacy, as evidenced by the presence of the categories (Hugten et al., 2023). Building on this assumption, it is possible of argue that the participants in this study are influenced by the cognitive bias elucidated by Kruger and Dunning (1999), where their lack of domain knowledge and entrepreneurial experience makes the informants overestimate their performance and entrepreneurial ability (Kruger & Dunning, 1999). The data highlights one significant aspect regarding the informant's confidence, as they tend to exhibit medium levels of confidence when it comes to tasks they have not previously undertaken or possess limited expertise in. A few times, the informants expressed low confidence in their entrepreneurial abilities based on lack of experience, while in May, informant C2 expressed that they had high confidence in identifying customer needs, but lacked extensive experience. Ten times the informants express medium confidence in the entrepreneurial abilities they lack experience in. This can indicate an impact of the Dunning-Kruger effect where the informants, particularly those who lack prior experience or exposure to challenges of entrepreneurship, are victims of the effect. The over-optimism may create miscalibrated views about their abilities, making the informants express medium confidence outwardly because they don't know any better (Kruger & Dunning, 1999). Suppose the informants believe their entrepreneurial abilities are at a medium when they have a lack of experience with the entrepreneurial task. In that case, it is reasonable to question how well the informants are able to self-report and if the way they report is a method to boost their self-esteem.

5.5.2 Social Comparison

Another reason why the informants may evaluate their entrepreneurial abilities to a medium to high when they only worked on their new venture for two months might be social comparison. Festinger explained in his theory of Social Comparison that individuals actively

seek information about themselves by comparing themselves to others since they lack an objective standard to evaluate their own traits or abilities (Gilovich et al., 2019). We can assume that the informants do two types of social comparison. The informants compare themselves to the other team members when answering questions about their ESE and ETE and compare themselves to other NVTs in the VCP and students enrolled in the VCP one year ahead of them.

Informants comparing themselves to the other team members is prevalent in team B and C. Here the team members of team B tend to compare themselves with informant B1 who has the most domain knowledge of the domain they are entering. When it comes to team C, informants C1 tend to compare themselves to informants C4 and C2. They compare their ability to convey information and be understood by others to how well informants C4 and C2 tend to do. According to the social comparison theory, one could argue that since the informants are able to compare themselves to people who are in similar positions as them, they are able to obtain a reliable assessment of their own entrepreneurial skills and convey that. At the same time, the different informants have different former education and experience with entrepreneurship, making the informants both “downward social compare” and “upward social compare” themselves with others, making the answers the informants give when they have compared themselves to others, in some way biased.

In addition to the informants having different former education and entrepreneurial experience, they are enrolled in a venture creation program surrounded by peers who are more and less successful than themselves. When commenting on their entrepreneurial ability, one can assume that it would be natural for them to use their peers as a comparison, as they all receive the same education and are all expected to develop their entrepreneurial ability through the VCP. They all have the same classes but are active within different ventures making their progress and rate of success differentiate. Since the informants are enrolled in a two-year VCP program that only takes in around 40 students per year, students from year four, and year five and students who recently graduated know each other well and are familiar with each other's start-ups and those who are no longer actively participating in a start-up. Thus making the comparison, informants were able to do both “down social comparison” and “upward social comparison” based on whom they chose to compare themselves with.

If the informants engage in social comparison with their peers who have exited their startups or chosen to terminate them, they are likely to perceive their own entrepreneurial abilities as high, indicating a "down social comparison" (Lockwood, 2002). Lockwood explains that individuals tend to prefer comparisons that make them feel better about themselves. Despite their ventures not progressing significantly, the mere fact that the informants have a startup still in existence may lead them to perceive their entrepreneurial abilities as superior or comparatively better, thereby boosting their self-esteem (Lockwood, 2002).

The assumption that the informants engage in social comparison is supported by the observation that few of them are able to objectively evaluate their entrepreneurial abilities on a scale of low, medium, or high without understanding the criteria or measurement behind it. This suggests a need for some form of benchmark or reference point, and comparing themselves to individuals with whom they have shared their entrepreneurial education and experiences may serve as a reasonable basis for comparison.

5.5.3 Cognitive Dissonance

As stated in the theory, when individuals invest significant amounts of money, time or effort in something, they often experience a sense of dissonance (Gilovich et al., 2019). If people perceive a high cost associated with a purchase or endeavour, whether in terms of time, effort, or money, they tend to develop a stronger emotional attachment to the product, thereby reducing the perception of its actual cost (Shah et al., 2015). This tendency we can observe in the informants as well. As the informants are enrolled in a VCP program that expects them to start their own start-up while they do their master studies, there will be a time where either their leisure time or their study time will be compromised in order to develop the start-up.

One could argue that the informants tend to convey that they have medium to high ESE and ETE because outwardly believing otherwise will give them cognitive dissonance when they have put much time and effort into their start-ups. Stating that they don't believe in their overall own entrepreneurial abilities or the team's entrepreneurial abilities might give them emotional discomfort. Therefore justifying the time and effort spent by explicitly stating that they and their team have the skills needed and have over two months improved these skills, to make something great will decrease this discomfort. The informants have invested a lot of time and effort in their start-ups, which according to Shah et al. (2015), gives the informants

an emotional attachment to their product, team and start-up, reducing their perception of what they had to offer to get there.

Based on the interviews conducted, there appears to be a presence of cognitive dissonance among the informants, which may have unconsciously influenced their responses. This assumption is supported by the fact that team A decided to pivot due to a lack of market fit, team B had to shut down their startup, and team C admitted to minimal development of their venture over the two-month period. Moreover, there is a recurring pattern where the informants prioritise the idea itself over the team, evident in their sense of ownership towards the idea and contemplation of team splits to find the right concept. One informant even mentioned that they view their team more as colleagues than friends. This suggests that the progress of the startup has a greater impact on how they perceive their abilities rather than the development of the team itself. Given that the startups did not show significant improvement and the informants prioritise the idea, it becomes unclear why they expressed high levels of entrepreneurial self-efficacy (ESE) and entrepreneurial team efficacy (ETE), especially with an observed increase over the two-month period. It is possible that their discomfort arising from cognitive dissonance influences them to report higher levels of ESE and ETE as coping mechanism.

The combination of optimism and high ambitions combined with little former challenging experience with entrepreneurship creates fertile ground for confidence in their own ability. One could argue that the informants have yet to really experience a lack of mastery as they still are located in their forming stages, or honeymoon stage (Tuckman, 1965). Initial experience will give them the experience of lack of mastery, which might make the informants downward adjust their ESE (Hugten et al., 2023). But since they still are in the honeymoon phase, the lack of mastery does not penetrate their positive belief, and they think they know more than they do, making the informants report medium to high confidence in almost every parameter of ESE. The biases, social comparison and cognitive dissonance that might affect the informants' self-reporting may explain why it is hard to see a clear and common connection between the teams and their development of ESE and ETE.

While the authors have identified a few influential factors that may contribute to how the informants express their confidence, the essence of this thesis centres around the informants' chosen depictions and reports. Acknowledging the potential presence of other explanatory

factors and the possibility of human error in the informants' reporting is crucial. Nevertheless, the findings of this study are upheld by the data given by the informants and acknowledge that young inexperienced entrepreneurs sometimes tend to have a bit more confidence, which is very much needed in the competitive industry they are entering.

6.0 Conclusion

This research aimed to examine the factors that impact the entrepreneurial self-efficacy of members in new venture teams and the entrepreneurial team-efficacy of these teams over a period of time. To achieve this, a qualitative research method was employed, consisting of two rounds of data acquisition conducted for two months. Through this approach, the authors thoroughly investigated the specific factors that influence the entrepreneurial self-efficacy and entrepreneurial team-efficacy of NVT members within a Venture Creation Program environment.

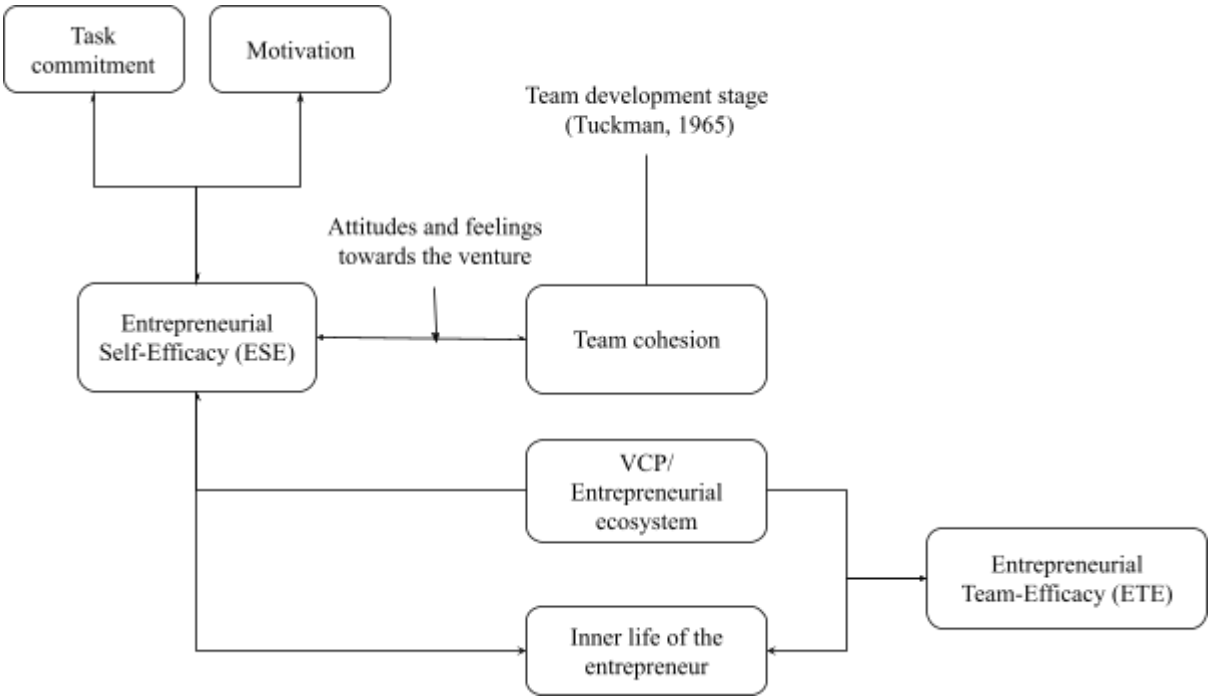

Figure 9: Interconnections of concepts in the NVTs Studied (Task commitment, motivation, ESE, team cohesion, VCP, inner life of the entrepreneur and ETE.

In order to fully investigate the RQ, the previous chapters delve into the evaluation of Teams A, B, and C based on Tuckman's development model, the development of team cohesion, the influence of the entrepreneurial ecosystem in which they operate, and the inner life of the entrepreneurs based on the findings from the data acquisitions. Figure 9 illustrates how these concepts are interconnected in the NVTs studied.

Two of the factors influencing entrepreneurial self-efficacy identified in the study are task commitment and motivation. The findings indicate that changes in task commitment and motivation drive fluctuations in levels of entrepreneurial self-efficacy. The study reveals that

a decline in commitment and motivation is associated with a decrease in entrepreneurial self-efficacy. This decline in commitment and motivation can be attributed to various factors such as uncertainties, lack of progress, lack of a shared goal, and inadequate communication within the team. On the other hand, some individuals experience static or higher levels of commitment and motivation, which contribute to their entrepreneurial self-efficacy. The study suggests that motivation and commitment provide the drive and determination necessary to overcome obstacles in entrepreneurial endeavours and strengthen entrepreneurial self-efficacy.

Moreover, the authors discuss the relationship between entrepreneurial self-efficacy, team cohesion and entrepreneurial team-efficacy. The nature of the development of the individual's ESE was shown to influence team cohesion. However, the extent to which this influence occurs depends on other underlying factors that the individual possesses and are moderated by emotions such as mistrust or motivation. In essence, the authors suggest that the relationship between entrepreneurial self-efficacy and team cohesion was found to be moderated by individuals' attitudes and feelings towards the venture.

Despite the decline in cohesiveness in all three teams studied, both team A and C showed a significant increase in levels of entrepreneurial team-efficacy over the two months. This indicates that there, in the context of this study, is no direct relationship between team cohesion and entrepreneurial team-efficacy. Further research is necessary to understand the interplay between team cohesion and ETE in the entrepreneurial domain.

This study did not establish a definitive causal relationship between entrepreneurial self-efficacy and entrepreneurial team-efficacy. However, it revealed that the venture creation program and the entrepreneur's rich inner life, where cognitive bias, social comparison and cognitive dissonance significantly influence the belief in entrepreneurial ability, both at an individual level and within the team as a cohesive unit.

Expanding upon this idea, within the framework of the studied new venture teams, the authors argue that the enhancement in ETE primarily is attributed to factors that extend beyond the realm of team development and internal dynamics. Instead, the authors propose that the surrounding environment, particularly the venture creation program in which the teams are actively involved, and the profound inner experiences of the participating

entrepreneurs, play important roles in fostering entrepreneurial team-efficacy and entrepreneurial self-efficacy.

6.1 Contribution

The authors have made a valuable contribution to research, such as examining the changes in an entrepreneur's ESE over time as they gain experience, knowledge, and other relevant involvements that could influence their ESE. This research area addresses a specific need highlighted by Newman (2019) regarding the importance of investigating the changes in an entrepreneur's ESE over time and the factors that impact this change. However, it is important to acknowledge that the study conducted by the authors has certain limitations, particularly related to time constraints, as further elaborated upon in the limitations section.

In addition, Newman (2019) highlighted the importance of conducting research on the within-person variances of motivational factors, including Entrepreneurial Self-Efficacy, over time. The authors of this study aimed to investigate the factors influencing ESE and ETE within NVTs, resulting in significant findings regarding task commitment and motivation impacting ESE fluctuations over a two-month period. Through the research, the authors identified key factors and observed patterns in the variations of ESE, as stated in the conclusion.

According to Hmieleski and Cole (2022), there is a scarcity of research examining the beneficial impacts of ETE when New Venture Teams confront uncertain environmental conditions. They express the hope that future research on NVTs will recognise the pivotal role played by entrepreneurial team efficacy. The authors of this study were able to contribute with findings, and through their research, they have made a significant contribution to this field by investigating NVTs operating within a New Venture Program and an entrepreneurial environment. The research discovered, for one, that there is no direct correlation between ESE and ETE in an NVT due to the factors of the inner entrepreneur having a more significant influence.

6.2 Limitations and Further research

In this chapter, we discuss the limitations of the study and suggest potential avenues for further research. The NVTs in this study comprised students who are enrolled in a Venture Creation Program in Norway. As such, the findings cannot be generalised to all NVTs but are specifically applicable to NVTs in similar VCPs. Furthermore, since there are various ways to design such programs (Aadland & Aaboen, 2018), it is uncertain whether these results can be extended to other venture creation programs beyond the one studied.

Another limitation of the study relates to the acquisition of qualitative data, as some interviewees exhibited restrictions in sharing information. Certain participants expressed concerns about being cautious in their responses due to their familiarity with the interviewers involved in the study. While some participants chose to be restrictive, others desired transparency during the interviews. Consequently, this led to variations in insights among different teams and types of data obtained from the interview subjects. Furthermore, the fact that the authors actively participated in the VCP could have potentially influenced their perspective, resulting in social desirability and the authors' interpretation of the gathered data. Moreover, a limitation of this study is the potential data the authors could have received by conducting team interviews in addition to individual ones. This could give valuable insights into the dynamics when conducting interviews regarding team-efficacy. Lastly, a limitation the authors have uncovered is the allocated time for the data acquisition, as a longer time span would give valuable insight into how it evolves over a longer period instead of the two first critical months.

In addition to the limitations identified in this study, the study did not reach saturation, and the authors have identified several pertinent areas that warrant further research. Since this study was conducted over a specific timeframe, it provided insights into the development and progression of the particular teams involved. As a result, the authors have recognised a gap in investigating short-term and long-term fluctuations in entrepreneurial self-efficacy. Given the study's limited generalisability, it would be advantageous to further explore this topic in a VCP setting to gain even broader insights and understanding.

Furthermore, there is an additional research area pertaining to the construct of Entrepreneurial Team Efficacy and its potential connection to team cohesion. The authors

discovered a lack of research on this particular relationship, especially in the context of NVTs. Moreover, this research gap raises questions about what team cohesion entails from an entrepreneurial perspective and whether a connection exists between ETE and team cohesion. It is worth exploring other factors beyond team structure and dynamics that may influence this relationship.

Additionally, the authors propose a further investigation into entrepreneurial teams in a more established phase, where the application of Tuckman's phases may differ compared to early-stage and newly formed venture teams in their critical initial months. In a more established team, members are likely to possess a greater capability to provide self-report data for both themselves and the team. This is due to the team having had sufficient time to establish a satisfactory organisational framework, create a stable work environment, and develop deeper familiarity with one another. Additionally, it would be valuable to close the research gap on how long each phase in the development model lasts and the causation on time and phase for a NVT.

Moreover, the authors emphasise the need for further research on NVTs over time in their early stages to fully understand the relationship between entrepreneurial self-efficacy and entrepreneurial team efficacy during this crucial development phase. The authors suggest that employing observation as a research method would be highly beneficial in gaining deeper insights into the dynamics and processes occurring within these teams. Lastly, the authors have discovered a research gap on the importance of academics when enrolled in a VCP and the motivation correlation between venture and academics.

“Entrepreneurial teams are at the heart of any new venture”

- Cooper and Daily (1997, p.144)

7. References

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Appendix

Codebook

Theme Code Subcode	**Description of theme, code or subcode, and when to use**
High entrepreneurial self-efficacy	Theme encompassing every code discussing high ESE
High trust in own entrepreneurial ability	When the informant shows a overall high confidence in their abilities
High trust in own entrepreneurial ability (Customer needs)	When the informant characterises themselves with high confidence in their ability to recognise customer needs
High trust in own entrepreneurial ability (Market size)	When the informant characterises themselves with high confidence in their ability to estimate market size
High trust in own entrepreneurial ability (Problem solving)	When the informant characterises themselves with high confidence in their ability to solve problems
High trust in own entrepreneurial ability (Recruiting)	When the informant characterises themselves with high confidence in their ability to recruit others
High trust in own entrepreneurial ability (Vision)	When the informant characterises themselves with high confidence in their ability to communicate their vision
High trust in the team entrepreneurial ability	When the informants shows a overall high confidence in the team's abilities
High trust in the team entrepreneurial ability (Customer needs)	When the informant has high confidence in the team's ability to recognise customer needs.
High trust in the team entrepreneurial ability (Market size)	When the informant have high confidence in the team's ability to do estimations on the market size
High trust in the team entrepreneurial ability (Problem solving)	When the informant have high confidence in the team's ability to solve problems
High trust in the team entrepreneurial ability	When the informant have high confidence in the team's ability to recruit others

(Recruiting)	
High trust in the team entrepreneurial ability (Vision)	When the informant have high confidence in the team's ability to communicate their vision
Medium entrepreneurial self-efficacy	Theme encompassing every code discussing medium ESE
Medium trust in own entrepreneurial ability	When the informants shows medium confidence in their own abilities
Medium trust in own entrepreneurial ability (Customer needs)	When the informant characterises themselves with medium confidence in their ability to recognise customer needs
Medium trust in own entrepreneurial ability (Market size)	When the informant characterises themselves with medium confidence in their ability to do market estimations
Medium trust in own entrepreneurial ability (Problem solving)	When the informant characterises themselves with medium confidence in their ability to solve problems
Medium trust in own entrepreneurial ability (Recruiting)	When the informant characterises themselves with medium confidence in their ability to recruit others
Medium trust in own entrepreneurial ability (Vision)	When the informant characterises themselves with medium confidence in their ability to communicate their vision
Medium trust in the team entrepreneurial ability	When the informants shows medium confidence in the team’s abilities
Medium trust in the team entrepreneurial ability (Customer needs)	When the informant has medium confidence in the team's ability to recognise customer needs
Medium trust in the team entrepreneurial ability (Market size)	When the informant have medium confidence in the team's ability to do market estimations
Medium trust in the team entrepreneurial ability (Problem solving)	When the informant have medium confidence in the team's ability to handle problems
Medium trust in the team entrepreneurial ability (Recruiting)	When the informant have medium confidence in the team's ability to recruit others
Medium trust in the team	When the informant have medium confidence in

entrepreneurial ability (Vision)	the team's ability to communicate their vision
Low entrepreneurial self-efficacy	Theme encompassing every code discussing low ESE
Low trust in own entrepreneurial ability	When the informants shows low confidence in their own abilities
Low trust in own entrepreneurial ability (Customer needs)	When the informant characterises themselves with low confidence in their ability to recognise customer needs
Low trust in own entrepreneurial ability (Market size)	When the informant characterises themselves with low confidence in their ability to do market estimations
Low trust in own entrepreneurial ability (Problem solving)	When the informant characterises themselves with low confidence in their ability to do solve problems
Low trust in own entrepreneurial ability (Recruiting)	When the informant characterises themselves with low confidence in their ability to do recruit others
Low trust in own entrepreneurial ability (Vision)	When the informant characterises themselves with low confidence in their ability to communicate their vision
Low trust in the team entrepreneurial ability	When the informants shows low confidence in the team's abilities
Low trust in the team entrepreneurial ability (Customer needs)	When the informant has low confidence in the team's ability to recognise customer needs
Low trust in the team entrepreneurial ability (Market size)	When the informant have low confidence in the team's ability to do market estimations
Low trust in the team entrepreneurial ability (Problem solving)	When the informant have low confidence in the team's ability to solve problems
Low trust in the team entrepreneurial ability (Recruiting)	When the informant have low confidence in the team's ability to recruit others
Low trust in the team entrepreneurial ability (Vision)	When the informant have low confidence in the team's ability to communicate their vision

Factors affecting entrepreneurial action	Theme encompassing codes that discuss entrepreneurial action
Entrepreneurial motivation	The informant exhibit entrepreneurial motivation in a high, medium or low manner
Experience with entrepreneurship	The informant exhibit much, some or non previous experience with entrepreneurship
Attitude towards innovation	The informant talk about their attitude towards innovation
Additional codes second interview round within the team of factors affecting entrepreneurial action	
Former Experience	The informant's reflection on former experience with entrepreneurship
Reflections on former experience	When the informant reflect upon their former experience
Former experience created negative development	When the former experience with entrepreneurship have created a negative development for the informant
Former experience create positive development	When the former experience with entrepreneurship have created a positive development for the informant
Personal development	Theme encompassing codes that discuss personal development
Confidence	The informant exhibit confidence in a positive, negative or neutral manner, and how this has evolved over time
Personal growth	The informant talked about personnel development in a positive, neutral or negative manner.
Understanding of self	The informant talk about how they perceive themselves
Ambivalence	Theme encompassing codes that discuss ambivalent feelings and conditions
Feelings	When the informant expresses big feelings such as stress, overwhelmed or frustrated
Uncertainty	Uncertainty connected to start-up and team
Uncertainty connected to	The informant express uncertainty connected to

roles	their roles in the team
Additional codes second interview round within the theme ambivalence	
New opportunities	The informant expresses that they are looking at new entrepreneurial opportunities
Indications of new team	Informants giving indications of them joining a new team
New venture	Informants giving indications of them joining a new venture team
Communication and cooperation in team	Theme encompassing codes that discuss communication and communication in the team, and how this evolves over time.
Communication in team	The informant express how the team communicates between themselves
Understanding of team	**Understanding of the team and how it works, and the norms within it**
Negative understanding of team	Views of the team in a critical or unfavorable manner, highlighting any perceived challenges, conflicts, or shortcomings within the team dynamics.
Neutral understanding of team	Views of the team without any strong positive or negative sentiment, presenting a balanced perspective.
Positive understanding of team	Views of the team in a favorable and supportive manner, highlighting positive team dynamics, collaboration, and achievements.
Team development	**Indication on team development and perceived growth over time**
Negative team development	The Informant expresses negative development of the team, and factors that contribute to negative team dynamics and conflicts
Neutral team development	The Informant expresses development of the team in a neutral manner, neither encountering major obstacles or achieving exceptional growth.
Positive team development	The Informant expresses positive development of the team and indicates favorable effective growth.

Interview guide

Data Acquisition round 1

Introduction

- Describe the purpose of the study.
- Privacy (the interview is held within the master group and anonymized unless otherwise requested).
- Inform the informant that they are able to withdraw from the project at any given time, without giving a reason.
- Promote the opportunity to contact at a later date if there are any questions.

Introduction Questions

1. Age, gender
2. Years since ended a study (last degree)
3. Can you briefly describe your previous entrepreneurial experience?
4. Can you briefly describe your current startup?

Entrepreneurial Self - efficacy

1. Briefly describe your attitude towards starting a new venture?
2. How much confidence do you have in your ability to design a product or service that will satisfy customer needs and wants?
3. How much confidence do you have in your ability to estimate customer demand for a new product or service?
4. How much confidence do you have in your ability to get others to identify with and believe in your vision and plans for a new business?
5. How much confidence do you have in your ability to deal effectively with day-to-day problems and crises?
6. How much confidence do you have in your ability to recruit and hire people?

Entrepreneurial Self - efficacy - NSE

1. In what way do you perceive your entrepreneurial abilities differently now vs. before NSE?

Entrepreneurial Team-efficacy

1. Can you describe your role and contribution within a team environment, and how you perceive your own competence in working with others towards a common objective?
2. How has the team's ability to perform entrepreneurial tasks developed since first forming the teams?
3. Can you describe the process your team goes through in preparing for a critical entrepreneurial task or activities that needs to be accomplished?
4. How do you experience challenges and who is taking the lead when a challenge occurs?
    a. Why do you think that is?
1. How much confidence do you have in your teams ability to design a product or that will satisfy customer needs and wants?
2. How much confidence do you have in your team's ability to estimate costumer demand for a new product or service?
3. How much confidence do you have in your team's ability to get others to identify with and believe in my vision and plans for a new business?
4. How much confidence do you have in your team's ability to deal effectively with day-to-day problems and crises?
5. How much confidence do you have in your team´s ability to recruit and hire people
6. Can you describe your experiences with learning from your team members and how this has affected your confidence in entrepreneurship?

Concluding

- Is there anything else you want to talk about?
- Can I get in touch again if I come up with something more to ask about?

Interview guide

Data Acquisition round 2

Introduction

- Describe the purpose of the study.
- Privacy (the interview is held within the master group and anonymized unless otherwise requested).
- Inform the informant that they are able to withdraw from the project at any given time, without giving a reason.
- Promote the opportunity to contact at a later date if there are any questions.

Introduction Questions

1. How are you today?
2. How has the last week/weeks been ?

Entrepreneurial Self - efficacy

1. Briefly describe your attitude towards starting a new venture?
2. How much confidence do you have in your ability to design a product or service that will satisfy customer needs and wants?
3. How much confidence do you have in your ability to estimate customer demand for a new product or service?
4. How much confidence do you have in your ability to get others to identify with and believe in your vision and plans for a new business?
5. How much confidence do you have in your ability to deal effectively with day-to-day problems and crises?
6. How much confidence do you have in your ability to recruit and hire people?

Entrepreneurial Self - efficacy - NSE

1. In what way do you perceive your entrepreneurial abilities differently now compared to the last interview round?
2. Do you believe your role in the team has changed since we last spoke?
    a. What role do you currently take on?
    b. Where do you contribute most ?
3. What is your goal with the venture?

Entrepreneurial Team-efficacy

1. How has the team's ability to perform tasks related to the startup developed since we last spoke?
2. Can you describe the process your team goes through in preparing for a critical entrepreneurial task or activities that needs to be accomplished?
3. How do you experience challenges and who is taking the lead when a challenge occurs?
    a. Why do you think that is?

1. How much confidence do you have in your teams ability to design a product or that will satisfy customer needs and wants?
2. How much confidence do you have in your team's ability to estimate customer demand for a new product or service?
3. How much confidence do you have in your team's ability to get others to identify with and believe in my vision and plans for a new business?
4. How much confidence do you have in your team's ability to deal effectively with day-to-day problems and crises?
5. How much confidence do you have in your team´s ability to recruit and hire people
6. Can you describe your experiences with learning from your team members and how this has affected your confidence in entrepreneurship?

Former experience

1. Do you believe your previous experiences have had an impact on how the startup has developed?

2. Do you think any of the others' previous experiences have influenced how the startup has developed?
3. Do you believe your previous experiences have had an impact on how the team has evolved?
4. Do you think any of the others' previous experiences have influenced how the team has evolved?
5. Has your dedication to the startup and the team changed since we last spoke?

Concluding

- Is there anything else you want to talk about?
- Can I get in touch again if I come up with something more to ask about?

Are you interested in taking part in the research project

The Influence of Entrepreneurial Self-Efficacy on Early-Stage Venture Teams in Venture Creation Programs

Purpose of the project
You are invited to participate in a research project where the main purpose is to determine whether entrepreneurial self-efficacy influences early-stage venture teams. This Master's thesis aims to study the impact of Entrepreneurial Self-Efficacy on early-stage venture teams in venture creation programs and factors contributing to high ESE

Which institution is responsible for the research project?
The Norwegian University of technology and Science - Institute for Industrial Economics and Technology Management is responsible for the project (data controller).

Why are you being asked to participate?
The sample for this study has been selected from the population of early-stage venture teams participating in venture creation programs at NTNU School of Entrepreneurship. The selection criteria were based on the team's stage of development, their experience in the program, and their willingness to participate in the study.

The participants' contact details were obtained through the venture creation program organizers and we have received their approval to use the contact information for this study. The information letter was sent out on behalf of the researcher conducting the study.

What does participation involve for you?
If you choose to participate in the project, this will involve participating in a personal interview. The interview will take approximately 20 minutes and will cover topics such as your background and prior experience in entrepreneurship, your experience in the venture creation program and the factors that have contributed to your team's entrepreneurial self-efficacy.

The information collected during the interview will be recorded using audio recording and notes. Your participation in this study is important as it will contribute to a deeper understanding of the impact of Entrepreneurial Self-Efficacy on early-stage venture teams in venture creation programs.

Participation is voluntary
Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data
We will only use your personal data for the purpose(s) specified here and we will process your personal data in accordance with data protection legislation (the GDPR).

The research team (Ingrid Brandt, Lise Tholin Lien and Heidi Grande) in connection with the institute responsible for the project will have access to the personal data. We will replace your name and contact details with a code. The list of names, contact details and respective codes will be stored separately from the rest of the collected data. The participants will not be recognizable in the publications.

What will happen to your personal data at the end of the research project? The planned end date of the project is 11.06.23. The audio recording will be deleted at the end of the project.

Your rights
So long as you can be identified in the collected data, you have the right to:
- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?
We will process your personal data based on your consent.

Based on an agreement with the Institute for Industrial Economics and Technology Management at NTNU, The Data Protection Services of Sikt – Norwegian Agency for Shared Services in Education and Research has assessed that the processing of personal data in this project meets requirements in data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact: ●

NTNU Institute for Industrial Economics and Technology Management via Heidi Grande o e-mail: heidi.a.grande@gmail.com

o phone: 97770186

- NTNU Institute for Industrial Economics and Technology Management via Torgeir Aadland o e-mail: torgeir.aadland@ntnu.no

If you have questions about how data protection has been assessed in this project by Sikt, contact:email: (personverntjenester@sikt.no) or by telephone: +47 73 98 40 40.

Yours sincerely,

Project Leader: Heidi Grande
Supervisor: Torgeir Aadland

Consent form

I have received and understood information about the project The Influence of Entrepreneurial Self-Efficacy on Early-Stage Venture Teams in Venture Creation Programs: A Mixed-Methods Study and have been given the opportunity to ask questions. I give consent:

□ to participate in interview

I give consent for my personal data to be processed until the end of the project.

(Signed by participant, date)

Sikt

Vurdering av behandling av personopplysninger

Referansenummer
431570

Vurderingstype
Automatisk

Dato
17.03.2023

Prosjekttittel
Masteroppgave vår 2023- Impact of ESE in early stage venture teams within venture creation programs

Behandlingsansvarlig institusjon
Norges teknisk-naturvitenskapelige universitet / Fakultet for økonomi (ØK) / Institutt for industriell økonomi og teknologiledelse

Prosjektansvarlig
Torgeir Aadland

Student
Heidi Andersen Grande

Prosjektperiode
15.01.2023 - 11.06.2023

Kategorier personopplysninger
Alminnelige

Lovlig grunnlag
Samtykke (Personvernforordningen art. 6 nr. 1 bokstav a)

Behandlingen av personopplysningene er lovlig så fremt den gjennomføres som oppgitt i meldeskjemaet. Det lovlige grunnlaget gjelder til 11.06.2023.

Meldeskjema

Grunnlag for automatisk vurdering
Meldeskjemaet har fått en automatisk vurdering. Det vil si at vurderingen er foretatt maskinelt, basert på informasjonen som er fylt inn i meldeskjemaet. Kun behandling av personopplysninger med lav personvernulempe og risiko får automatisk vurdering. Sentrale kriterier er:

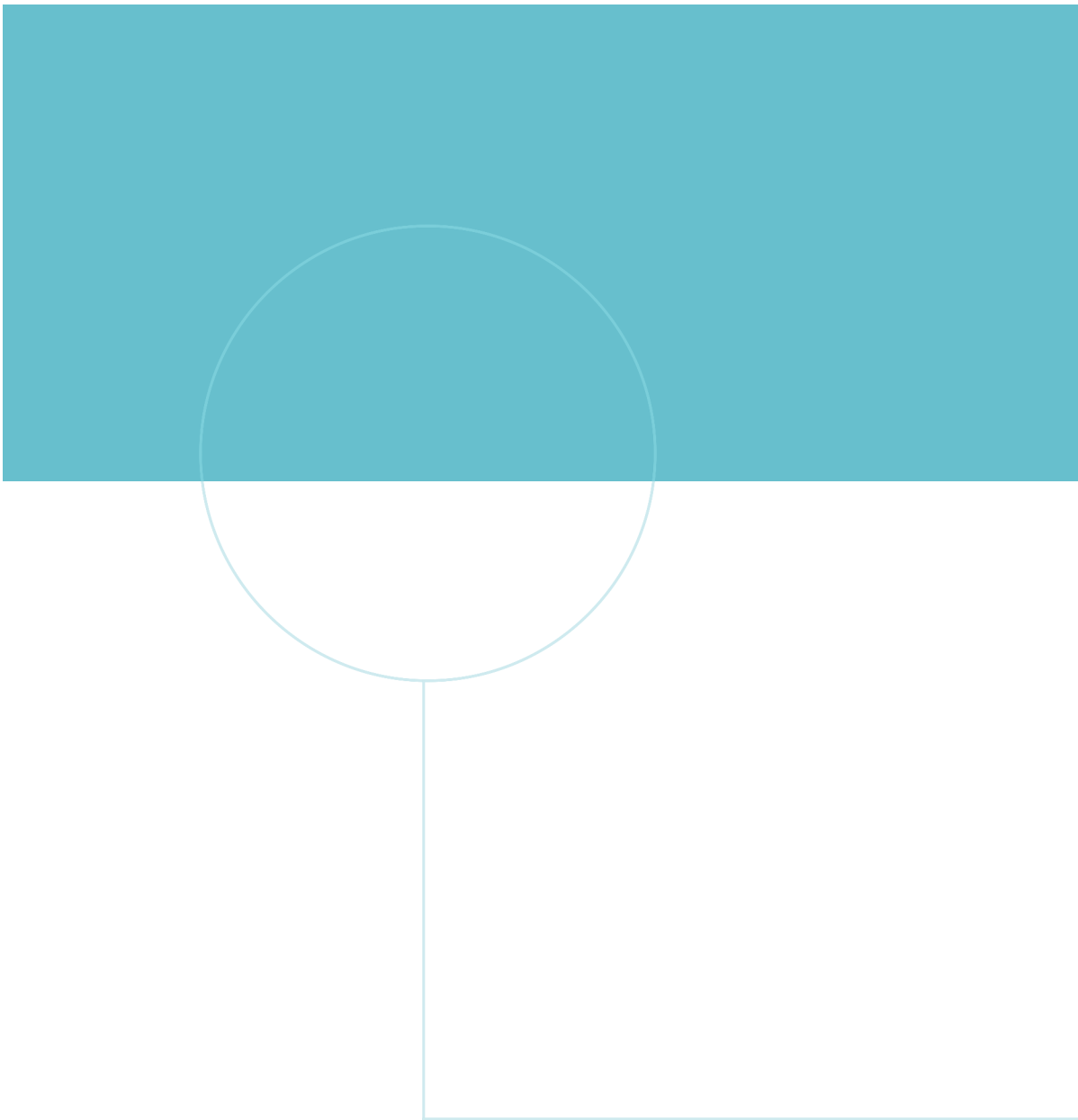
- De registrerte er over 15 år
- Behandlingen omfatter ikke særlige kategorier personopplysninger;
  - Rasemessig eller etnisk opprinnelse
  - Politisk, religiøs eller filosofisk overbevisning
  - Fagforeningsmedlemskap
  - Genetiske data
  - Biometriske data for å entydig identifisere et individ
  - Helseopplysninger
  - Seksuelle forhold eller seksuell orientering
- Behandlingen omfatter ikke opplysninger om straffedommer og lovovertredelser
- Personopplysningene skal ikke behandles utenfor EU/EØS-området, og ingen som befinner seg utenfor EU/EØS skal ha tilgang til personopplysningene
- De registrerte mottar informasjon på forhånd om behandlingen av personopplysningene.

Informasjon til de registrerte (utvalgene) om behandlingen må inneholde

- Den behandlingsansvarliges identitet og kontaktopplysninger
- Kontaktopplysninger til personvernombudet (hvis relevant)
- Formålet med behandlingen av personopplysningene
- Det vitenskapelige formålet (formålet med studien)
- Det lovlige grunnlaget for behandlingen av personopplysningene
- Hvilke personopplysninger som vil bli behandlet, og hvordan de samles inn, eller hvor de hentes fra
- Hvem som vil få tilgang til personopplysningene (kategorier mottakere)
- Hvor lenge personopplysningene vil bli behandlet
- Retten til å trekke samtykket tilbake og øvrige rettigheter

Vi anbefaler å bruke vår mal til informasjonsskriv.

Informasjonssikkerhet
Du må behandle personopplysningene i tråd med retningslinjene for informasjonssikkerhet og lagringsguider ved behandlingsansvarlig institusjon. Institusjonen er ansvarlig for at vilkårene for personvernforordningen artikkel 5.1. d) riktighet, 5. 1. f) integritet og konfidensialitet, og 32 sikkerhet er oppfylt.



NTNU

Kunnskap for en bedre verden