

Heidi Forsström-Tuominen

COLLECTIVENESS WITHIN STARTUP TEAMS – LEADING THE WAY TO INITIATING AND MANAGING COLLECTIVE PURSUIT OF OPPORTUNITIES IN ORGANIZATIONAL CONTEXTS

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ABSTRACT

Heidi Forsström-Tuominen

Collectiveness within startup teams – Leading the way to initiating and managing collective pursuit of opportunities in organizational contexts

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While traditional entrepreneurship literature addresses the pursuit of entrepreneurial opportunities to a solo entrepreneur, scholars increasingly agree that new ventures are often founded and operated by entrepreneurial teams as collective efforts especially in high-technology industries. Researchers also suggest that team ventures are more likely to survive and succeed than ventures founded by the individual entrepreneur although specific challenges might relate to multiple individuals being involved in joint entrepreneurial action. In addition to new ventures, entrepreneurial teams are seen central for organizing work in established organizations since the teams are able to create major product and service innovations that drive organizational success.

Acknowledgement of the entrepreneurial teams in various organizational contexts has challenged the notion on the individual entrepreneur. However, considering that entrepreneurial teams represent a collective-level phenomenon that bases on interactions between organizational members, entrepreneurial teams may not have been studied as in-depth as could be expected from the point of view of the team-level, rather than the individual or the individuals in the team. Many entrepreneurial team studies adopt the individualized view of entrepreneurship and examine the team members' aggregate characteristics or the role of a lead entrepreneur. The previous understandings might not offer a comprehensive and in-depth enough understanding of collectiveness within entrepreneurial teams and team venture performance that often relates to the team-level issues in particular. In addition, as the collective-level of entrepreneurial teams has been approached in various ways in the existing literatures, the phenomenon has been difficult to understand in research and practice. Hence, there is a need to understand entrepreneurial teams at the collective-level through a systematic and comprehensive perspective.

This study takes part in the discussions on entrepreneurial teams. The overall objective of this study is to offer a description and understanding of collectiveness within entrepreneurial teams beyond individual(s). The research questions of the study are: 1) what collectiveness within entrepreneurial teams stands for, what constitutes the basic elements of it, and who are included in it, 2) why, how, and when collectiveness emerges or reinforces within entrepreneurial teams, and 3) why collectiveness within entrepreneurial teams matters and how it could be developed or supported.

In order to answer the above questions, this study bases on three approaches, two set of empirical data, two analysis techniques, and conceptual study. The first data set consists of 12

qualitative semi-structured interviews with business school students who are seen as prospective entrepreneurs. The data is approached through a social constructionist perspective and analyzed through discourse analysis. The second data set bases on a qualitative multiple-case study approach that aims at theory elaboration. The main data consists of 14 individual and four group semi-structured thematic interviews with members of core entrepreneurial teams of four team startups in high-technology industries. The secondary data includes publicly available documents. This data set is approached through a critical realist perspective and analyzed through systematic thematic analysis. The study is completed through a conceptual study that aims at building a theoretical model of collective-level entrepreneurship drawing from existing literatures on organizational theory and social-psychology. The theoretical work applies a positivist perspective.

This study consists of two parts. The first part includes an overview that introduces the research background, knowledge gaps and objectives, research strategy, and key concepts. It also outlines the existing knowledge of entrepreneurial team literature, presents and justifies the choices of paradigms and methods, summarizes the publications, and synthesizes the findings through answering the above mentioned research questions. The second part consists of five publications that address independent research questions but all enable to answer the research questions set for this study as a whole.

The findings of this study suggest a map of relevant concepts and their relationships that help grasp collectiveness within entrepreneurial teams. The analyses conducted in the publications suggest that collectiveness within entrepreneurial teams stands for cognitive and affective structures in-between team members including elements of collective entity, collective idea of business, collective effort, collective attitudes and motivations, and collective feelings. Collectiveness within entrepreneurial teams also stands for specific joint entrepreneurial action components in which the structures are constructed. The action components reflect equality and democracy, and open and direct communication in particular. Collectiveness emerges because it is a powerful tool for overcoming individualized barriers to entrepreneurship and due to collectively oriented desire for, collective value orientation to, demand for, and encouragement to team entrepreneurship. Collectiveness emerges and reinforces in processes of joint creation and realization of entrepreneurial opportunities including joint analysis and planning of the opportunities and strategies, decision-making and realization of the opportunities, and evaluation, feedback, and sanctions of entrepreneurial action. Collectiveness matters because it is relevant for potential future entrepreneurs and because it affects the ways collective ventures are initiated and managed. Collectiveness also matters because it is a versatile, dynamic, and malleable phenomenon and the ideas of it can be applied across organizational contexts that require team work in discovering or creating and realizing new opportunities. This study further discusses how the findings add to the existing knowledge of entrepreneurial team literature and how the ideas can be applied in educational, managerial, and policy contexts.

Keywords: entrepreneurship, entrepreneurial opportunity, startup, team entrepreneurship, entrepreneurial team, collective entrepreneurship, discourse analysis, multiple-case study, thematic analysis

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Back in 2009, I listened to business school students who were telling me that they would not want to endeavor to entrepreneurship alone but they might become entrepreneurs with other students in a way that they could overcome obstacles to entrepreneurship together and create a jointly meaningful venture of their own. This made me think about collectiveness of entrepreneurial teams and the importance of understanding it if these prospective entrepreneurs are to be encouraged and supported in their entrepreneurial endeavors in the future.

The insights gained from the students led into this doctoral study that further examines collectiveness within functioning entrepreneurial teams. The phenomenon of interest turned out to be highly complex, multidimensional, and dynamic which made this research process emergent, interesting, and demanding for its part. There are several skilled and committed people who made this study possible, contributed to the study, and encouraged me in the process.

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Espoo, November 2015

Heidi Forsström-Tuominen

To my unit, Joni and Elsa

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PART II: PUBLICATIONS

1. Forsström-Tuominen, H., Jussila, I., and Kolhinen, J. (2015). **Business school students' social construction of entrepreneurship: Claiming space for collective entrepreneurship discourses**, *Scandinavian Journal of Management*, 31(1), 102 – 120.
2. Forsström-Tuominen, H. and Jussila, I. (2015). **The start of team startups: Collective dynamics of initiation and formation of entrepreneurial teams**, *Journal of Enterprising Culture* (submitted).
3. Forsström-Tuominen, H., Jussila, I., and Goel, S. (2015). **Collective entrepreneurial teams: Structures within high-technology team startups**, *The 75th Annual Meeting of the Academy of Management*, Vancouver, BC, Canada, August 7 – 11, 2015 (revised and further submitted version).
4. Forsström-Tuominen, H., Jussila, I., and Goel, S. (2015). **Reinforcing collectivity in entrepreneurial actions within startup teams: A multiple-case study**, *The 29th Conference of the British Academy of Management*, Portsmouth, UK, September 8 – 10, 2015 (revised and further submitted version).
5. Tuominen, H., Goel, S., Jussila, I., and Rantanen, N. (2014). **Collective entrepreneurship: Towards a process model**, *The 74th Annual Meeting of the Academy of Management*, Philadelphia, PA, USA, August 1 – 5, 2014 (revised and further submitted version).

The contributions of Heidi Forsström-Tuominen to the publications:

1. Is the main author. Prepared the research plan with the second author. Conducted and transcribed the interviews. Conducted the analysis. Wrote the first versions of the paper with the help of the other two authors. Revised the paper. Finalizing the paper was a joint effort with the other authors. Acted as the corresponding author.
2. Is the main author. Prepared the research plan with the second author. Conducted and transcribed five of the interviews. Gathered the secondary data. Conducted the analysis with the second author. Wrote and rewrote the first versions of the paper. Revised the paper. Acted as the corresponding author.
3. Is the main author. Prepared the research plan with the second author. Conducted and transcribed five of the interviews. Gathered the secondary data. Conducted the analysis with the second author. Wrote the paper with the other two authors. Revised the paper. Acted as the corresponding author.
4. Is the main author. Prepared the research plan with the second co-author. Conducted and transcribed five of the interviews. Gathered the secondary data. Conducted the analysis with the second author. Wrote the paper with the other two authors. Revised the paper. Acted as the corresponding author.
5. Is the main author. Prepared the research plan with the other authors. Reviewed the extant literature. Elaborated the model with the other authors. Wrote the first versions of the paper. Revised the paper. Acted as the corresponding author.

PART I: AN OVERVIEW OF THE DISSERTATION

1. INTRODUCTION

“If you want to go fast, go alone. If you want to go far, go together.”

African proverb, also utilized by the interviewees of this study

1.1 Research background

Entrepreneurs' contribution to the wealth and growth of national economies has increased the interest of scholars, policy-makers, educators, and practitioners in understanding, supporting, and encouraging entrepreneurship (Kuratko, 2005; Matlay, 2005; Plaschka & Welsch, 1990). Recently, the economic turmoil around the world has brought about an even more intense and expectant attention to entrepreneurship as a solution for boosting innovation and employment. Entrepreneurs in new ventures and even in established organizations (Stevenson & Jarillo, 1990) are seen responsible for major product and service innovations that drive economic growth and well-being (Chowdhury, 2005; Ribeiro Soriano & Comeche Martínez, 2007).

More specifically, entrepreneurs discover or create and realize entrepreneurial opportunities (Alvarez & Barney, 2007; Ardichvili, Cardozo, & Ray, 2003; Cha & Bae, 2010; Eckhardt & Shane, 2003; McMullen & Dimov, 2013; Shane & Venkataraman, 2000; Shepherd & Krueger, 2002; Stevenson & Jarillo, 1990). Entrepreneurial opportunities are situations for introducing new future goods, services, raw materials, markets, or organizing methods through the formation of new means, ends, or means-ends relationships (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000). As Harper (2008) puts it, “entrepreneurship involves the discovery and creation of new ends-means frameworks rather than the allocation of given (and known) means in the pursuit of given (and known) ends” (p. 616). Thus, entrepreneurs bring about new solutions, progress, and change in their environments.

Entrepreneurial opportunity processes (i.e., the pursuit of entrepreneurial opportunities over time: McMullen & Dimov, 2013) involve presence and interaction of the opportunities and entrepreneurial agents (Harper, 2008). Traditionally, the pursuit of entrepreneurial opportunities has been addressed to an individual entrepreneur (e.g., Casson, 1982; Shane, 2003; Shane & Venkataraman, 2000). There is a deeply rooted myth of the entrepreneur as a lone hero both in the general discussion (at the level of the society) and entrepreneurship literature. According to the myth, the entrepreneur battles against economic and other forces

of societies and conquers victory (or loss) by oneself. (Cooney, 2005; Cunningham & Lischeron, 1991) The myth is especially strong in the United States and other countries with individualistic value orientation and cultural beliefs and perceptions (see Hofstede, 1991).

The processes of new opportunity creation are fundamentally changing, however. The current business environments are highly complex, dynamic, and networked (Halinen & Törnroos, 2005; Kauppinen & Puhakka, 2010) which challenges the idea that the entrepreneur could do everything by oneself. Indeed, scholars have noted that entrepreneurship is a multi-individual phenomenon more often than the traditional and dominant approach leads to assume (e.g., Harper, 2008; Kamm, Shuman, Seeger, & Nurick, 1990; Lechler, 2001; Watson, Ponthieu, & Critelli, 1995). Already in 1987, Reich put forward that the entrepreneur as a hero should be reconsidered due to the changes in the business environment (e.g., globalization and increased competition). The scholar suggested that an entrepreneurial team should be seen as a relevant unit of analysis in contemporary economies (Reich, 1987; see also Harper, 2008). Since then, many scholars have embraced the idea that new ventures are often founded and operated by multiple individuals together as team or collective efforts especially in high-technology industries (e.g., Gartner, Shaver, Gatewood, & Katz, 1994; Harper, 2008; Kamm & Nurick, 1993; Kamm et al., 1990; Ruef, Aldrich, & Carter, 2003; Watson et al., 1995). Moreover, the team ventures have been suggested to be more likely to survive, grow, and succeed than enterprises established by the individual alone (Kamm et al., 1990; Ruef et al., 2003; Watson et al., 1995). Related to the higher performance of the team ventures, scholars have also found that venture capitalists (i.e., companies or institutions that provide funding and other critical resources in the early and growth stages of enterprises in exchange for equity ownership) prefer investing in well-balanced entrepreneurial teams (Cyr, Johnson, & Welbourne, 2000).

An entrepreneurial team is defined as two or more individuals who jointly establish and develop a venture (Carland, Hoy, Boulton, & Carland, 1984; Cooney, 2005; Kamm et al., 1990) in which they might or might not have an equity ownership, build engagement and commitment to common goals and outcomes that can only be achieved by combinations of individual actions (Harper, 2008), and come to see themselves as a social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009). Notably, entrepreneurial teams are not only relevant in the setting of new enterprises but established organizations that require team effort and collaboration among employees in innovative, entrepreneurial work (Comeche & Loras, 2010; Ribeiro-Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2009, 2010;

Reich, 1987; dos Santos & Spann, 2011; Stevenson & Jarillo, 1990; Stewart, 1989; Toledano, Urbano, & Bernadich, 2010; Yan & Sorenson, 2003).

The insights into the entrepreneurial teams have challenged the notion on the individual entrepreneur by including multiple individuals in recognition or creation and realization of entrepreneurial opportunities together (e.g., Kamm & Nurick, 1993; Ruef et al., 2003). Some scholars have further understood that the entrepreneurial team is more than the sum of individuals involved and accounts for over and above the individuals (Ensley & Pearce, 2001; Harper, 2008; Shepherd & Krueger, 2002; West, 2007). It is a social unit or entity (Schjoedt & Kraus, 2009) in which team members come to develop team-level cognitive and affective states, such as trust and affection (Ensley & Pearce, 2001), commitment and cohesion (Ensley, Pearson, & Pearce, 2003), and collective mind (Shepherd & Krueger, 2002; West, 2007) that function in achievement of the common goals and outcomes (Ensley et al., 2003; Harper, 2008; Lechler, 2001; West, 2007). The researchers embracing the team-level have shifted attention to interpersonal dynamics and interactions (e.g., Chowdhury, 2005; Lechler, 2001) and further suggested that team venture performance often relates to the team-level issues in particular (Amason, Shrader, & Tompson, 2006; Chowdhury, 2005; Eisenhardt, 2013; Ensley, Pearson, & Amason, 2002; Kaplan & Strömberg, 2004; Lechler, 2001; Watson et al., 1995). It is towards understanding entrepreneurial teams at the team-level that this doctoral study is directed.

1.2 Research gaps and objectives

Considering the increased acknowledgement of entrepreneurial teams across organizational contexts, it can be argued that entrepreneurship research has moved from asking whether entrepreneurial teams exist and matter to why they matter and how they come to perform. However, considering that entrepreneurial teams represent a collective-level phenomenon that bases on interactions between organizational members (Morgeson & Hofmann, 1999), rather than on the individual or the composition of individuals, entrepreneurial teams have not been studied as in-depth as could be expected from the point of view of the team-level (Chowdhury, 2005; Ensley, Carland, & Carland, 2000; Lechler, 2001; Watson et al., 1995). There are three interrelated main gaps in the existing entrepreneurial team literature addressed in this study.

First, it seems that entrepreneurial team literature has not escaped from the use of the individual as the level of analysis of entrepreneurship literature (see Davidsson & Wiklund, 2001). Examination of entrepreneurial teams and their performance is often focused on the individuals included in the team and their characteristics and roles (Lechler, 2001). For example, many scholars see that entrepreneurial teams should include an individual entrepreneurial champion or a lead entrepreneur (e.g., Clarysse & Moray, 2004; Ensley et al., 2000; Reich, 1987; Stewart, 1989; Yan & Sorenson, 2003) – the idea of which seems to be strongly drawn from the traditional entrepreneurship literature on the entrepreneurial hero. The perspective divides the team into the ‘real’ entrepreneur with superior entrepreneurial qualities and the sub-entrepreneurs who follow the ideas and visions of the lead entrepreneur (Harper, 2008). Also, many studies take the entrepreneurial team as the aggregate or sum of individuals included and focus on the individual team members’ characteristics and/or competencies especially in terms of their heterogeneity or homogeneity (e.g., Ruef et al., 2003; Ucbasaran, Lockett, Wright, & Westhead, 2003; Visintin & Pittino, 2014; Zhao, Song, & Storm, 2013). Some studies go further to apply the ideas on the individual entrepreneur’s characteristics, such as locus of control and need for achievement, to the level of the team (e.g., Khan, Breitenecker, & Schwarz, 2014, 2015). While the insights of these studies are highly important for many team ventures and relevant from the point of view of team composition to carry out a multitude of tasks related to business goals, they wrap the entrepreneurial team around the individual(s) which offers little understanding of entrepreneurial teams at the collective-level of analysis. Understanding entrepreneurial teams also at the collective-level would be important because grasping individual team members’ characteristics and skills tells us only about the individuals present in the team but nothing about the collective capacity of the team (Chowdhury, 2005). As Chowdhury (2005) finds, team venture performance often relates to team-level dynamics (e.g., systems of interpersonal interactions) more than the individuals per se. Thus, grasping the collective within entrepreneurial teams might suggest insights into the relevance and performance of the entrepreneurial teams.

Looking at the above knowledge gap in the context of contemporary business environments, it seems that the entrepreneurial team literature might not have kept pace with the changing and dynamic environments that are characterized by complex networks of relationships and increased use of information and communication technology, for example (cf. Halinen & Törnroos, 2005). The individualized perspectives on the entrepreneurial teams might not fit

into or embrace the current business environments that often require collective efforts beyond the individual(s). In other words, examining the individual leader or the set of team members might not tell enough about developing and operating a team venture in the current business environments. Catching up with the environment would be important because entrepreneurship might be different today than it was 20 years ago and the current and future enterprises might require collective efforts of individuals to an increasing degree. Hence, filling the above knowledge gap is important not only because it helps understand entrepreneurial teams and their performance at the collective-level but also because understanding collectiveness serves to encourage and support current and future enterprises and prospective entrepreneurs.

Second, most of the existing literature seems to have assumed away that there might be different kinds of entrepreneurial teams some of which may represent more the individual(s) while others reflect more collective forms of the teams. As Kamm et al. (1990) and Harper (2008) suggest there are many types of team ventures. However, entrepreneurial teams that function at the level of the collective have not yet been distinguished in the existing entrepreneurial team literature. Harper's (2008) taxonomy of entrepreneurial teams and especially his insights into emergent entrepreneurial teams that involve equal entrepreneurs with no individual taking the 'lead' and account to something over and above the individuals are an important step in the direction of distinguishing collectiveness of entrepreneurial teams. Yet, while being highly insightful, the taxonomy does not pay attention to collectiveness related to pursuit of entrepreneurial opportunities in particular although it seems that the identified differences among the entrepreneurial teams might relate especially to the level of collectiveness within the teams. For example, not all entrepreneurial teams necessarily develop or even should develop into representing collectiveness but might be formed more around the individual(s)' entrepreneurial action and responsibility as in the case of nested entrepreneurial teams in Harper's (2008) taxonomy. Other teams may become more collective which means that they share entrepreneurial action and responsibility among the team members as in the case of the above mentioned emergent entrepreneurial teams. Understanding collectiveness within entrepreneurial teams in particular would be important because collectiveness might come with specific effects on business performance and require operating and management practices that are different from the individual-focused firms. These insights would not only help understand entrepreneurial teams more profoundly but enable to establish, operate, and manage team ventures successfully.

Related to the above gap, some scholars have moved attention to the team-level by studying collective constructs within entrepreneurial teams (e.g., Shepherd & Krueger, 2002; West, 2007) or social interactions and leadership practices that support joint entrepreneurial action (e.g., Ensley et al., 2003; Ensley, Hmieleski, & Pearce, 2006; Lechler, 2001). These studies have been trailblazing in the existing entrepreneurial team literature. They have brought attention to the collective-level and sharply examined components of collectiveness within entrepreneurial teams. However, we still know little about what collectiveness as a whole phenomenon means in the entrepreneurial team contexts (see Zahra, 2007). There seems to be no study that grasps the distinctive features and dynamics of entrepreneurial teams that function at the level of the collective as a whole. Some pieces of collectiveness might be missing, to be further elaborated, or brought together. Notably, there is a lot of existing knowledge on collective phenomena in general and in organizational contexts (e.g., Katz & Kahn, 1978; Klimoski & Mohammed, 1994; Morgeson & Hofmann, 1999; Tajfel, 1982; Tajfel & Turner, 1979; Weick & Roberts, 1993) that would help gain a systematic understanding of entrepreneurial teams at the collective-level of analysis.

Third, as entrepreneurial teams are a relevant phenomenon from the point of view of different kinds of organizational contexts, the literatures with an emphasis on a context or another have approached collectiveness of entrepreneurship in a variety of ways some of which reflect collective-level ideas more than the others. Many scholars consider entrepreneurial teams in new business enterprises (e.g., Kamm et al., 1990; Ruef et al., 2003) but there is a growing body of literature that recognizes the importance of entrepreneurial teams in the context of established organizations (e.g., Comeche & Loras, 2010; Ribeiro-Soriano & Comeche-Martínez, 2007; Stevenson & Jarillo, 1990; Stewart, 1989; Toledano et al., 2010). Other scholars consider collective forms or elements of entrepreneurship in other organizational contexts, such as social and institutional settings of market and industry actors and relations (e.g., Auerswald & Branscomb, 2008; Etkowitz & Klofsten, 2005; Johannisson, 2004), alliances and networks (e.g., Burrell, Cook, & Klein, 2008; Cook & Plunkett, 2006), and co-operatives as a form of organization (e.g., Bataille-Chedotel & Huntzinger, 2004; Chouinard, Desjardins, & Forgues, 2002; Dana & Dana, 2007; Panagiota & Nastis, 2011)¹. While

¹ See Burrell and Cook (2009) for an overview of the utilization and definitions of collective entrepreneurship.

versatility of discussions is richness, the discussions might not promote a distinctive, clear and widely accepted understanding of collective-level entrepreneurship that would be neutral in terms of institutions (Harper, 2008). Considering the variety of contexts included in the literature, several scholars and organizational actors would gain from the specification and clarification of collectiveness of entrepreneurial teams. Hence, understanding collectiveness within entrepreneurial teams is important because it offers clarity in the literatures that are concerned with the same phenomenon in different organizational contexts.

The purpose of this doctoral dissertation is to offer new knowledge of entrepreneurial teams at the collective-level of analysis into the discussions on entrepreneurial teams in the settings of new enterprises (e.g., Francis & Sandberg, 2000; Kamm et al., 1990; Watson et al., 1995; West, 2007) and other organizational contexts (e.g., Chouinard et al., 2002; Etzkowitz & Klofsten; 2005; Lounsbury, 1998; Reich, 1987; Ribeiro-Soriano & Urbano, 2009). The overall objective of this study is to describe and understand collectiveness within entrepreneurial teams beyond the individual(s). The objective is put in the form of three research questions:

- *What collectiveness within entrepreneurial teams stands for, what constitutes the basic elements of it, and who are included in it?*
- *Why, how, and when collectiveness emerges or reinforces within entrepreneurial teams?*
- *Why collectiveness within entrepreneurial teams matters and how it could be developed or supported?*

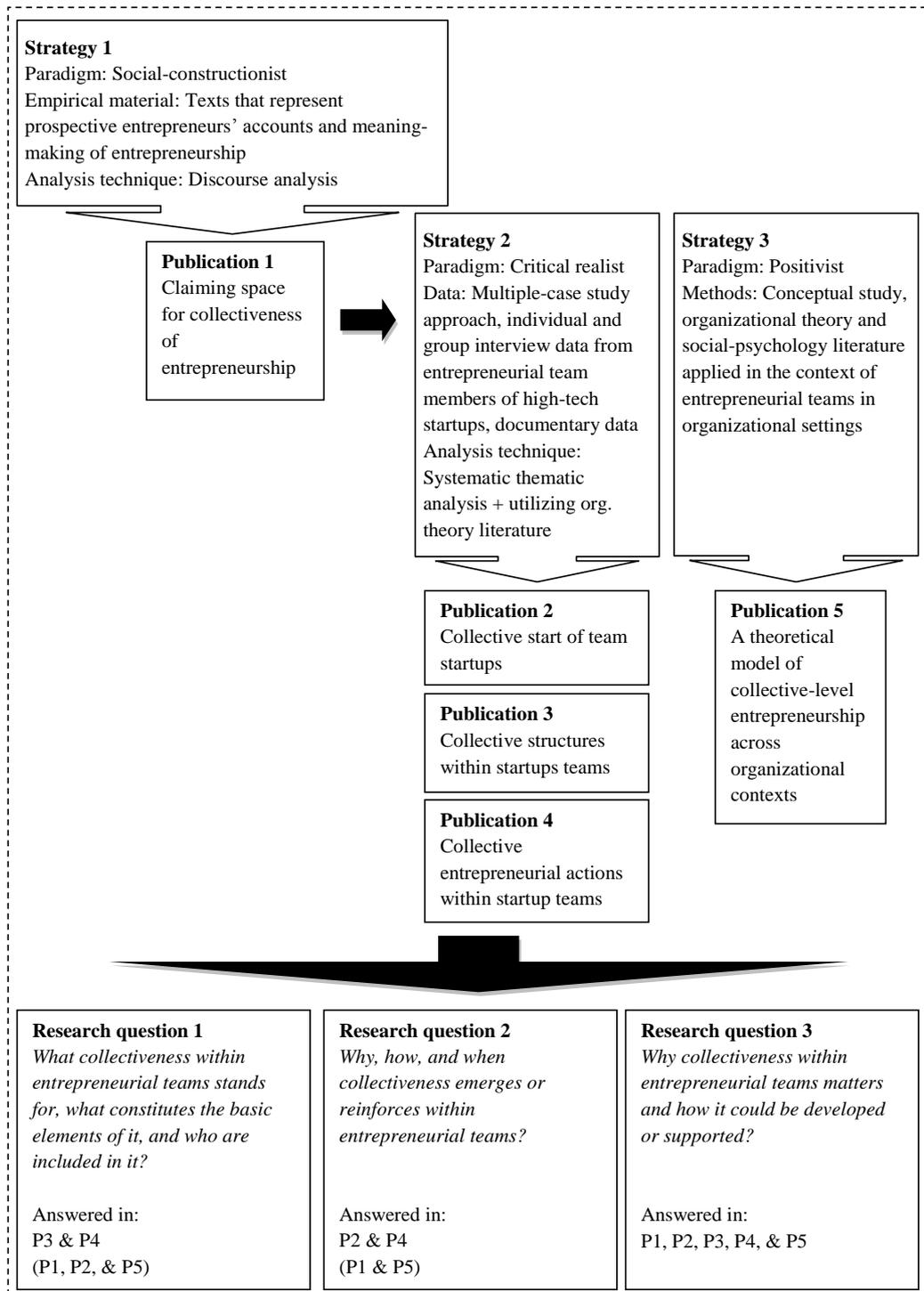
The first research question aims to grasp the collective-level within entrepreneurial teams through examining the constituent components of it. Thus, answers to the question offer the fundamentals to understanding of the phenomenon of interest. The second question aims to understand the mechanisms, processes, and dynamics through which collectiveness emerges from the beginning or reinforces along time within entrepreneurial teams. The third question aims to suggest insights into the distinctive role of collectiveness within entrepreneurial teams especially in the current business environments. The research question also forms around offering understanding of the ways through which collectiveness can be created from the beginning or embraced along time in entrepreneurial contexts.

The research questions take the entrepreneurial team with a group of people in interaction with one another as the relevant unit of analysis (Harper, 2008). The questions are focused on the in-group of the entrepreneurial team (*within*) and, thus, do not include stakeholder interactions, for example (see Schjoedt & Kraus, 2009). Also, the questions are limited to the collective-level of analysis over and above the individuals while recognizing that all collective phenomena include the individuals and base on the interactions between them (Morgeson & Hofmann, 1999).

1.3 Research strategy

The above research questions are answered through five publications in which I and my co-authors employ inductive, qualitative methods in order to elaborate theory on a complex social phenomenon of which some parts may remain unexplored in the existing literature and of which a solid theory is yet missing (Eisenhardt & Graebner, 2007). Figure 1 present the research strategy of this study. Abbreviations P1, P2 etc. stand for Publication 1, Publication 2 etc.

Figure 1. Research strategy



It is important to note and understand that this research process was highly inductive and, thus, the research strategy is emergent. According to the inductive research process, this study began with an initial aim that was specified along with the research process and accumulation of understanding of the phenomenon of interest (Eisenhardt, 1989; Gioia, Corley, & Hamilton, 2013). The research questions of the dissertation as a whole were actually formed only after writing the publications due to the inductive approach. Note that all of the publications include specific research questions when examined independently of each other but insights gained from them are synthesized at the level of the dissertation as a whole in answering the higher level research questions. Figure 1 shows which publications offer answers to which questions. The choices of methods through which the research questions are answered were based on the insights gained along with the research process and the publications emerged from the data out (Bryman & Bell, 2007; Eisenhardt, 1989; Gioia et al., 2013). For example, I and my co-authors did not decide beforehand that we would write three papers (Publications 2 – 4) utilizing the same paradigm, data, and analysis technique but the publications emerged from the inductive analysis and reflect our accumulated knowledge of the phenomenon of interest.

Emerged from the research process, this is a multi-paradigm study (Gioia & Pitre, 1990; Schultz & Hatch, 1996) with two empirical data sets, two analysis techniques, and conceptual work. The starting point of the research strategy was the aim of the Publication 1 to listen to potential future entrepreneurs' accounts in order to offer versatility for the individual-focused entrepreneurship literature constructed mainly at the macro-level of research and policy (see Alvesson & Kärreman, 2000). In the Publication 1, I and my co-authors employ a social constructionist paradigm (Berger & Luckmann, 1966; Bouchikhi, 1993; Steyaert & Katz, 2004). Empirical material consists of texts that are produced in 12 semi-structured thematic interviews (Alvesson & Kärreman, 2000) with first-year business school students and represent the students' meaning-making of entrepreneurship and their potential entrepreneurial futures (Weick, 1979). We analyze the material through discourse analysis as a technique that enables to systematically search for micro-level sets of statements found in specific use of language coupled with meaning and can be put together in the form of discourses through integrative patterns of language (Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell, Taylor, & Yates, 2001). The Publication 1 offered us insights into the importance of understanding collectiveness of entrepreneurship (the question 3) and also

shed light on some elements of it (the question 1) and reasons for it (the question 2) from the point of view of potential future entrepreneurs.

Based on the insights gained from the Publication 1, I and my co-author planned the research strategy further in order to grasp collectiveness of entrepreneurship. In Publications 2 – 4, we apply a critical realist perspective that takes phenomena as real for the people experiencing them but embraces interpretation (Bhaskar, 1975; Bryman & Bell, 2007; Guba & Lincoln, 1994). We employ a qualitative multiple case-study approach (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014) because it is especially suitable for elaborating new insights into theory in relatively new topic areas (Eisenhardt, 1989; Eisenhardt & Graebner, 2007) and in order to study in contexts that could help grasp collectiveness further. The data was gathered in individual and group semi-structured thematic interviews with entrepreneurial team members of team startups in high-technology industries because we wanted to give voice to entrepreneurs themselves. We also utilize secondary, documentary data mainly to get a better feel of the context of the startups as researchers interpreting the data. We analyze the data through systematic thematic analysis by Gioia et al. (2013) which includes presentation of informant-centric (1st order) and researcher-centric (2nd order) analyses and a data structure that shows the links between them. In the analyses, we utilize organizational theory literature in order to deepen and support the analyses in the entrepreneurial contexts (Zahra, 2007). These publications highlight the role of collectiveness within already existing entrepreneurial teams (the question 3) and suggest insights into the elements (the question 1) and processes (the question 2) reflecting collectiveness within the entrepreneurial teams.

The Publication 5 emerged roughly at the same time with the Publications 2 – 4 from the insights that entrepreneurship literature could gain from understandings of other fields of study and that the ideas on collectiveness in general and in organizational contexts could be applied into the entrepreneurial context (Zahra, 2007). The Publication 5 represents a positivist approach (Bryman & Bell, 2003) and bases on conceptual work that aims to develop a testable model of collective-level entrepreneurship in organizational contexts. The fifth publication is a theoretical paper with no empirical data but insights are drawn from organizational theory and social-psychology literatures (e.g., Katz & Kahn, 1978; Tajfel, 1982; Tajfel & Turner, 1985; Triandis, 1993) and applied in the setting of entrepreneurial teams. This publication offers insights into the importance of collectiveness within

entrepreneurial teams across a variety of organizational contexts in particular (the question 3) but also supports finding answers to the constituent elements of collectiveness (the question 1) and processes (the question 2) of collective-level entrepreneurship.

1.4 Key concepts

Reflecting the target discussions and knowledge gaps, research questions, and research strategy, the key concepts of this study include entrepreneurship, entrepreneurial opportunity, startup, team entrepreneurship, entrepreneurial team, collective entrepreneurship, discourse analysis, multiple-case study, and systematic thematic analysis.

Entrepreneurship concerns recognition or creation and realization of entrepreneurial opportunities (Alvarez & Barney, 2007; Ardichvili et al., 2003; Eckhardt & Shane, 2003; McMullen & Dimov, 2013; Shane & Venkataraman, 2000) by entrepreneurs who build and manage their own enterprise/organization or by entrepreneurial employees working within established organizations (Stevenson & Jarillo, 1990). *An entrepreneurial opportunity* is a situation for introducing new future goods, services, raw materials, markets, or organizing methods through the formation of new means, ends, or means-ends relationships (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000).

A startup is a growth-oriented enterprise aged from zero to five years. Thus, the term startup relates especially to the novel and emergent stage in which the firm is in (see van Gelderen & Jansen, 2006) and to an aspiration for growth through scalability of products or services (see Robertson, Collins, Medeira, & Slater, 2003).

Team entrepreneurship involves recognition or creation and realization of entrepreneurial opportunities jointly by multiple individuals together as an entrepreneurial team (Kamm & Nurick, 1993). *An entrepreneurial team* is two or more individuals who jointly develop and establish a business (Carland et al., 1984; Cooney, 2005; Kamm et al., 1990) in which they might or might not have an equity ownership, build engagement and commitment to common goals and outcomes that can only be achieved by combinations of individual actions (Harper, 2008), and come to see themselves as a social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009). Relating to entrepreneurial teams within established organizations and other organizational contexts, *collective entrepreneurship* is used in this overview to refer to

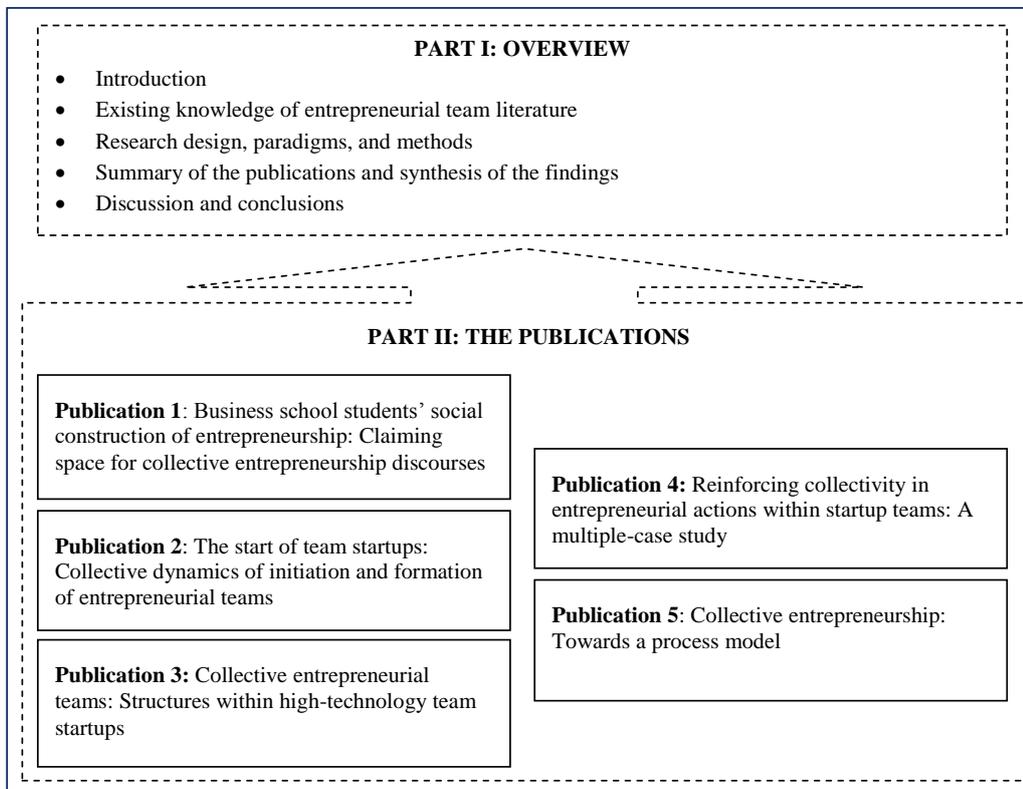
entrepreneurial efforts of teams in a variety of organizational contexts (cf. Comeche & Loras, 2010; Reich, 1987).

Discourse analysis is utilized in this study as a technique in which researchers systematically search for micro-level sets of statements found in specific use of language coupled with meaning and put them together in the form of discourses through their integrative pattern and regularity in the use of language (Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell et al., 2001). *Multiple-case study* is an in-depth empirical description of particular instances of a contemporary phenomenon in its real-world contexts where two or more cases (e.g., organizations) are included in the same study (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014). *Systematic thematic analysis* is an analysis technique that includes presentation of a 1st order and a 2nd order analysis. The 1st order analysis represents the informants' (e.g., interviewees) words while the 2nd order analysis moves the analysis into researcher-centric themes and aggregate dimensions. The technique also includes presentation of a data structure that reflects the links between the data and the new concepts and enables to build a theoretical model based on the relationships between the concepts, themes, and dimensions. (Gioia et al., 2013)

1.5 Structure of the study

The research questions of this study are answered in two parts. Figure 2 presents the structure of this dissertation.

Figure 2. Structure of the study



Part I includes an overview of the dissertation. It consists of five main chapters. The first chapter introduces the background for this dissertation, the research gaps and objectives, the research strategy, the key concepts, and the structure of the study. The second chapter presents and synthesizes the relevant existing knowledge of entrepreneurial team literature especially from the point of view of collectiveness. In the third chapter, I present in more depth and justify the choices of the research design, paradigms, and methods including data and analysis techniques used in this study. I also outline the research process in chronological order and evaluate the quality and rigor of this study. In the fourth chapter, I summarize the findings of the publications and synthesize them in answering the research questions of this dissertation as a whole. In the final chapter, I discuss the contributions of this study in relation to the existing knowledge (see Corley & Gioia, 2011). I also suggest managerial and policy implications and identify limitations of this study and questions that should be answered in future research. Part II of this study includes the five publications (see the list of publications presented in the beginning of this overview). The publications have been written together with

my co-authors and published and/or been under review by two or more reviewers in international academic journals or conferences (see the list of publications). The publications are independent articles with specific research questions and insights but all contribute to the synthesis presented in this overview when examined together.

2. EXISTING KNOWLEDGE OF ENTREPRENEURIAL TEAM LITERATURE

This chapter outlines and synthesizes the existing knowledge of entrepreneurial team literature especially from the point of view of the research questions and of collectiveness. Note that the chapter includes literatures of entrepreneurial teams (or multi-individual entrepreneurship) across organizational contexts, such as new enterprises and established organizations because the literatures intertwine and draw from one another (see Cooney, 2005; Lechler, 2001) and help gain as extensive an understanding as possible.

2.1 Towards understanding entrepreneurship as a collective phenomenon

Team entrepreneurship studies anchor strongly to individual entrepreneurship literature. For example, many team entrepreneurship scholars begin their elaboration on entrepreneurial teams by first outlining the discussion on the entrepreneurial individual and only then shift attention to the importance of entrepreneurial teams in contemporary economies (e.g., Cooney, 2005; Harper, 2008). This relates to the history of entrepreneurship research. Entrepreneurship studies initially started with and were based on the individualistic presumption on the entrepreneur. The individualistic assumption has reached far as it is still strongly rooted in the domain of entrepreneurship (Sarasvathy, 2004). Thus, the literature on the individual entrepreneur underlies and affects entrepreneurial team research and an entrepreneurial team researcher should be aware of the tradition.

The individualistic perspectives to entrepreneurship are reflected in definitions and conceptualizations in which scholars ask who the entrepreneur is and what does this person do (Shane & Venkataraman, 2000). The perspective includes a notion that entrepreneurship is predetermined by the individual (Johannisson, Landström, & Rosenberg, 1998; Low & MacMillan, 1988). Entrepreneurship is seen to emerge intrinsically and inherently from the individual out who is seen responsible for entrepreneurial action by oneself. While it can be argued that nothing happens without individuals carrying out action, the individualistic tradition highlights the individual's entrepreneurial nature in particular (Kets de Vries, 1985). The notion has supported a view of entrepreneurs as a species or a natural kind all members of which are similar to each other and different from people that are not entrepreneurs (Berglund & Johansson, 2007; Gartner, 1985; Sarasvathy, 2004). In line with the idea, entrepreneurship literature includes an intense study of successful entrepreneurs' personality characteristics or

traits. The studies examine the individual's demographic (e.g., gender, age, social status, education) and/or psychological characteristics (e.g., need for achievement, locus of control, belief in one's abilities, willingness to take risks, values, innovativeness) (Amit, Glosten, Muller, 1993; Carland et al., 1984; Hessels, van Gelderen, & Thurik, 2008). Other studies have shifted attention more clearly from the characteristics or traits to the actions or functions that the entrepreneur takes, such as innovating, establishing an organization, managing a business (Berglund & Johansson, 2007; Cope, 2005; Gartner, 1985; Howorth, Tempest, & Coupland, 2005; McMullen & Shepherd, 2006), and pursuing opportunities in particular (Shane, 2003; Shane & Venkataraman, 2000). These insights began shifting attention to the processes of new venture creation (Gartner, 1988) but maintained the focus on the individual in the heart of the entrepreneurial processes. For example, scholars continued identifying knowledge, skills, and capabilities that are necessary for the entrepreneur to carry out the actions (Gartner, 1985; Naffziger, Hornsby, & Kuratko, 1994; Robertson et al., 2003; Roper & Scott, 2009).

Many scholars still address entrepreneurial agency to the individual – some deliberately (e.g., Shane, 2003; Shane & Venkataraman, 2000) and many without paying profound attention to the level of analysis chosen (see Davidsson & Wiklund, 2001). This might be because economic theory that forms the foundation of entrepreneurship research is strongly individualistic (Cooney, 2005; Cope, Jack, & Rose, 2007; Harper, 2008). The individualistic focus means an emphasis on the activities of individuals in achieving their own goals through utilization of their characteristics and skills (Tiessen, 1997; see Schumpeter, 1934). Thus, the entrepreneurial function is seen to be embodied in an entrepreneurial individual taken as the basic unit of analysis of entrepreneurship research (Harper, 2008).

The individualized perspective becomes problematic for understanding, supporting, and encouraging entrepreneurship in modern societies if it restricts entrepreneurship as a phenomenon, does not provide a versatile and in-depth understanding enough, does not keep theory close to the phenomenon via appropriate abstractions, or does not mesh with the realities of agents who carry out entrepreneurship currently or would pursue entrepreneurship in the future. For example, the individualistic tradition has created an ideal type, a caricature, or a stereotype of the entrepreneur (Anderson & Warren, 2011) and a dichotomy of entrepreneurs and non-entrepreneurs (Berglund & Johansson, 2007; Gartner, 1985; Sarasvathy, 2004). This kind of a deterministic perspective discourages people if they do not

feel to fit the entrepreneurial profile, to be capable of carrying out the entrepreneurial tasks by themselves, or do not feel the traditional components to be a necessary part of entrepreneurship (Cooney, 2005; Fayolle, 2008; Kirby, 2004; Laukkanen, 2000; Ogbor, 2000; Sarasvathy, 2004; Sarasvathy & Venkataraman, 2011). Hence, some people or facets of entrepreneurship might be left out due to the exclusive perceptions on the entrepreneur presented in the dominant literature (Calás, Smircich, & Bourne, 2009).

However, entrepreneurial team literature has increasingly challenged the existing ideas on the entrepreneur as the key unit of analysis. Research has shown that entrepreneurship is a multi-individual phenomenon more often than the traditional approach to the solo entrepreneur leads to suppose (Cooney, 2005; Gartner et al., 1994; Harper, 2008; Kamm et al., 1990). As Harper (2008) suggests, entrepreneurship is not necessarily embodied in a solo physical person or even solely reducible to the individual team members but can be a socially distributed phenomenon that involves joint action of entrepreneurial team members in achievement of their common goals. Scholars advocating the team perspective have opened up new scenes for entrepreneurship research through including multiple individuals and seeing entrepreneurship as a dynamic and complex process that often requires involvement and actions of interrelated agents in pursuit of opportunities together (Comeche & Loras, 2010; Gartner et al., 1994; Harper, 2008; Johannisson, 2004; Kamm et al., 1990; Reich, 1987).

2.2 The prominence of entrepreneurial teams

The increased attention to entrepreneurship as a team-related phenomenon and the importance of studying entrepreneurial teams has been justified with two main reasons: 1) the entrepreneurial teams' prevalence and 2) their influence on firms' performance (Francis & Sandberg, 2000). The prevalence refers to the amount of entrepreneurial teams in general and in specific industries while influence on performance reflects the effects of the team form on venture survival and success.

Several scholars suggest that entrepreneurial teams are especially common in modern economies (e.g., Chowdhury, 2005; Harper, 2008; Kamm et al., 1990). There are many well-known examples of team ventures. Chowdhury (2005) lists Pfizer and Yahoo and Lechler (2001) points out Siemens. Other examples include Google, Facebook, Hewlett-Packard, and

Rovio Entertainment. Notably, entrepreneurial teams are particularly (although not exclusively) prominent in high-technology industries (Cooper & Daily, 1996) where multiple individuals' skills and abilities are needed to be combined in order to start and operate an entrepreneurial endeavor successfully (Chowdhury, 2005; Clarysse & Moray, 2004; Gartner, 1985; Kamm et al., 1990). Even 70 percent of enterprises in high-technology industries are founded by entrepreneurial teams (Cooper, Dunkelberg, Woo, & Dennis, 1990). The figure can be expected to have grown since the 1990s because the use of technology has increased tremendously during the past 20 years or so. Current high-technology environments are more complex, dynamic, and unpredictable than ever before which indicates more demands and opportunities for individuals to work together in entrepreneurial endeavors. Notably, high-technology team ventures are a contemporary phenomenon that strongly affects changes and dynamics of current economies and societies. High technology ventures use or invest in rapidly emerging or evolving technology as a core part of product or service development, production, or marketing (Park, 2005) which means that they are responsible for major product and service innovations that drive economic growth and well-being (Chowdhury, 2005; Harper, 2008). Yet, they are also confronted with complex challenges related to uncertainties of markets, technologies, regulations, and processes related to business and leadership (Chowdhury, 2005; Lechler, 2001).

The team form of a venture has not only been realized to contribute to overcoming the challenges but to affect the performance of the venture. Many scholars see that the effects are positive (e.g., Kamm et al., 1990; Watson et al., 1995). Researchers have suggested that multiple individuals involved may help overcome obstacles of entrepreneurship and achieve benefits in entrepreneurial action (De Carolis, Litzky, & Eddleston, 2009). Having more than one person included actively in the venture is seen to increase creativeness and innovativeness (Clarysse & Moray, 2004; De Carolis et al., 2009) and to provide access to information, resources, and networks, knowledge and skills, and professional experience and maturity (Amit et al., 1993; Clarysse & Moray, 2004; De Carolis et al., 2009; Kamm et al., 1990; Ruef et al., 2003). However, scholars also see that team enterprises might face particular complexities and management challenges related not only to their dynamic business environments but to multiple persons with possibly differing views, expectations, and ways of acting involved in interaction with one another in highly demanding tasks (Watson et al.,

1995; West, 2007). Entrepreneurial teams may include a risk of poor communication, affective conflicts², inefficient decision-making, and other dysfunctions related to groupthink, for example (Francis & Sandberg, 2000; Kamm & Nurick, 1993; Lechler, 2001; see Janis, 1982).

Entrepreneurial teams and their effects on performance have been noted to be prominent in different kinds of organizational settings. While the particular field of entrepreneurial team literature is formed mainly around examination of teams in establishing and managing *new* business ventures as collective efforts (e.g., Francis & Sandberg, 2000; Harper, 2008; Kamm et al., 1990; Ruef et al., 2003), many scholars have taken note of entrepreneurial teams in established organizations as innovative work and collaboration among employees (e.g., Comeche & Loras, 2010; Ribeiro-Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2009, 2010; Reich, 1987; dos Santos & Spann, 2011; Stewart, 1989; Toledano et al., 2010; Yan & Sorenson, 2003). The relevance of entrepreneurial teams to established organization relates especially to the idea that even established organizations operate in highly dynamic and competitive business environments in which creation of new products and services requires creative efforts of teams of individuals (see Comeche & Loras, 2010; Reich, 1987; Stevenson & Jarillo, 1990).

In addition, it must be noted that other scholars have recognized entrepreneurship at the team or collective-level in a variety of other organizational contexts. While not all of them employ entrepreneurial team as a concept, they embrace similar kinds of ground assumptions and kindred concepts with the actual entrepreneurial team literature. Some see entrepreneurship as a fundamentally collective phenomenon at the outset because entrepreneurship is embedded in social and industrial contexts of market and industry actors and relations where the entrepreneur should interact with a variety of other actors (e.g., Auerswald & Branscomb, 2008; Etzkowitz & Klofsten, 2005; Johannisson, 2004). This idea reflects a ground notion of entrepreneurship (and many other phenomena) that the entrepreneur cannot act in a vacuum nor do everything alone but entrepreneurship may require collective efforts. Thus, collectiveness is understood to relate to the social skills and the role of the entrepreneur in

² There is a difference between cognitive and affective conflicts. Cognitive conflicts are task-oriented and functional while affective conflicts are personal and dysfunctional. That is, cognitive conflicts enhance decision-making while affective conflicts impede it. (Amason, 1996)

mobilizing resources or actors in a group setting (e.g., Etzkowitz, 2003; Johannisson, 2004; Weik, 2011). Some scholars link collective-level entrepreneurship more strictly to a specific form of organization that is based on joint ownership and control and guided by social values and collective goals, called the co-operative (e.g., Bataille-Chedotel & Huntzinger, 2004; Chouinard et al., 2002; Connell, 1999; Dana & Dana, 2007; Panagiota & Nastis, 2011). Others consider the prominence of collectiveness in examination of market-driven and contractual collaboration in the form of multiparty alliances, networks, or vertical integration (e.g., Burrell et al., 2008; Cook & Plunkett, 2006) or in collaboration between employees in different organizations in advocating a common cause (Lounsbury, 1998).

2.3 Defining entrepreneurial teams

Entrepreneurial team definitions further specify what and who are included in the entrepreneurial teams. One of the most popular definitions of an entrepreneurial team is the one suggested by Kamm et al. (1990). Drawing from ideas of Carland et al. (1984) among others, Kamm et al. (1990) define an entrepreneurial team as “two or more individuals who jointly establish a business in which they have an equity (financial) interest” (p. 7). The above definition includes multiple (more than one) individuals present in the venture (Cooney, 2005; Kamm et al., 1990). Indeed, scholars have been relatively unanimous about the notion that two or more individuals are included in entrepreneurial teams (Schjoedt & Kraus, 2009). The above definition of Kamm et al. (1990) also entails a perception that entrepreneurial teams stand for establishing a business and that the individuals included should have a financial interest in the business, whether hierarchical (Ensley et al., 2000) or equal (Watson et al., 1995). The idea restricts entrepreneurial teams in new ventures (firms, enterprises). Kamm et al., (1990) further specify that the entrepreneurial team members should be present in the venture during the early startup phase before any goods or services are made available for the market (see also Schjoedt & Kraus, 2009).

Harper (2008) suggests a definition of an entrepreneurial team that is more neutral in terms of the agents and institutions compared to the definition of Kamm et al. (1990). The scholar sees that the definition of an entrepreneurial team should not exclude one or another locus of entrepreneurial action, or one or another governance structure (Harper, 2008). Entrepreneurial transactions can be pursued by various kinds of agents and in a variety of institutional settings that may include both financial and other kinds of interests of the team members in a firm or

other kind of a business endeavor (Harper, 2008; Schjoedt & Kraus, 2009). As noted by Shepherd and Krueger (2002), a team that is entrepreneurial is one that focuses on seeking and bringing into existence entrepreneurial opportunities (see also Harper, 2008). This reflects the above presented ideas of many other scholars that entrepreneurial teams are prominent in various organizational settings (e.g., Comeche & Loras, 2010; Johannisson, 2004; Ribeiro-Soriano & Comeche Martínez, 2007; Reich, 1987; dos Santos & Spann, 2011; Stevenson & Jarillo, 1990; Stewart, 1989).

Therefore, Harper (2008) defines an entrepreneurial team in broad terms as “a group of entrepreneurs with a common goal that can only be achieved by appropriate combinations of individual entrepreneurial actions” (p. 617). This definition includes a notion of a common objective and interdependence of entrepreneurs in achieving it (see also Schjoedt & Kraus, 2009). It also includes a perception of individuals’ actions intertwined in achievement of the common goal in particular. Schjoedt and Kraus (2009) go further to specify that an entrepreneurial team includes team members’ accountability and responsibility for the common goals and outcomes, commitment toward the team endeavor, and perception of the team as a social unit or entity by the team members and others (e.g., investors, customers). The notion of the social unit or entity suggests that entrepreneurial teams are a special kind of a group where the team members are close to and connected with each other and where interactions between the team members play a crucial role in becoming together of the team members (see also Lechler, 2001; Shepherd & Krueger, 2002; West, 2007).

2.4 Entrepreneurial team and opportunity emergence

A popular stream of entrepreneurial team literature that answers why, how, and when entrepreneurial teams and opportunities for them emerge includes the examination of team formation and composition (see Cooper & Daily, 1997; Harper, 2008; Francis & Sandberg, 2000; Schjoedt & Kraus, 2009). The team formation and composition stream suggests that team venture performance is affected by the stages of team and opportunity emergence and the diversity of team members who come together to pursue the opportunity. More specifically, the studies provide answers to the questions of what conditions are conducive to the collective identification or creation of entrepreneurial opportunities and the emergence of the teams (e.g., Harper, 2008), what is the relationship between the opportunity and team formation (Kamm & Nurick, 1993; Kamm et al., 1990), and why and how certain kinds of

individuals come together as an entrepreneurial team (e.g., Clarysse & Moray, 2004; Ensley, et al., 2000). These studies are interested in team evolution through different stages or events of team venturing and people who become together and stay or leave the entrepreneurial team (e.g., Vanaelst, Clarysse, Wright, Lockett, Moray, & S'Jegers, 2006).

Harper (2008) is among the few that examine conditions that affect emergence of entrepreneurial teams before the actual team formation (i.e., the primers or basis of entrepreneurial teams that explain why and when entrepreneurial teams come to be formed in the first place). He suggests that the conditions are identified best by examining the dimensions of the entrepreneurial opportunity situations that require entrepreneurial teams. Such situations are characterized and strained by structural uncertainty which means individuals' partial ignorance of possible alternatives and their outcomes (Shackle, 1955). The situation is also affected by interpersonal decision situations to cooperate with one another and how balanced (i.e., harmonious or conflicting) the interests of the individuals are. Team entrepreneurship is primed by common interests and interdependence of the individuals. Thus, a common target might be realized only together by the individuals in a way that they are able to carry out common outcomes only through joint action and not able to achieve the same outcomes alone. (Harper, 2008; see also Bird, 1989)

Further, embracing multi-individual entrepreneurship from the process view, scholars have been especially interested in stages of new team venture creation. These researchers examine the relationship between the opportunity and the formation of a team (e.g., Kamm & Nurick, 1993; Kamm et al., 1990). There are two main streams in this literature as an entrepreneurial team can be formed after or prior to the recognition or creation of an entrepreneurial opportunity (Francis & Sandberg, 2000; Kamm & Nurick, 1993). The first perspective is named as the lead entrepreneur approach by Kamm and Nurick (1993). The approach includes a notion that an entrepreneurial team is formed after the recognition or creation of an entrepreneurial opportunity (Francis & Sandberg, 2000; Kamm & Nurick, 1993). An individual entrepreneur may already have a business idea for a product or service before starting a new venture and searching for and enlisting other team members to carry out the opportunity (Kamm et al., 1990; Kamm & Nurick, 1993). For example, Clarysse and Moray (2004) suggest that there might be an individual in the team who "started it all" with her/his idea (p. 67). Lim et al. (2013) see that an individual may conceive an opportunity but usually a team works to commercialize it. Thus, according to the lead entrepreneur approach, there is

an entrepreneurial individual and an entrepreneurial opportunity before the team is formed and the lead entrepreneur sees that she/he cannot carry out the opportunity alone (Ensley et al., 2000).

The second perspective reflects a group approach according to Kamm and Nurick (1993). The perspective suggests that an entrepreneurial team can be formed prior to the actual recognition or creation of a particular entrepreneurial opportunity (Francis & Sandberg, 2000; Kamm et al., 1990; Kamm & Nurick, 1993) as individuals may recognize an opportunity to work entrepreneurially together regardless of whether or not any of them has the business idea first (Francis & Sandberg, 2000; Kamm et al., 1990). Thus, the group approach includes a notion that there might be an assembly of individuals before any opportunity is discovered or created. For example, the group might emerge based on shared experiences or friendship first and only then develop into creating an entrepreneurial opportunity (Timmons, 1990). The approach highlights benefits of relationships and the importance of social networks that influence the desirability of working entrepreneurially together (Aldrich & Kim, 2007; Kamm & Nurick, 1993).

In addition to the lead entrepreneur and the group approaches, the relationship of the opportunity and the group might be interactive in a way that the emergence of the idea and the team overlap and affect one another (Kamm et al., 1990; Kamm & Nurick, 1993). As Kamm et al. (1990) anticipate, there might be “an interactive relationship over time between the concept and the team” (p. 10). This sounds reasonable considering the dynamic nature of both the group and the opportunity that indicates that the group and the opportunity might be interlinked and co-developed. For example, getting more information may cause the nature of the business concept or the relationships between the individuals change (Kamm & Nurick, 1993). However, while there has been a call for the study of the interactional perspective (see Kamm et al., 1990), it has not received much attention in the existing literature but it seems that the lead entrepreneur approach dominates the existing knowledge (e.g., Ensley et al., 2000; Clarysse & Moray, 2004).

Regardless of the way through which the entrepreneurial opportunity and team emerge, the emergence essentially entails a decision of who will participate and with which contributions (Ruef et al., 2003). Thus, the emergence of the entrepreneurial team in one way or another entails team composition based on specific reasons to include one or another agent in the

team. Team composition in regard to team member diversity when it comes to individual team members' demographic and/or psychological characteristics and skills has been a particularly popular topic in the team entrepreneurship literature. Scholars have focused on appropriate combinations of individual team members' characteristics and skills through examination of their heterogeneity or homogeneity among the members (Schjoedt & Kraus, 2009).

On the one hand, heterogeneous teams are often suggested to be more successful than homogeneous teams especially in complex, non-routine business environments. Diversity is seen to help in problem solving and creating innovations through different kinds of individuals' contributions to the overall cognitive ability and performance of the team (Chowdhury, 2005). Therefore, heterogeneous teams are often linked to a resource approach to team formation that relies on rational, functional, and linear ideas of changing resource or competence needs of the business (Aldrich & Kim, 2007; Forbes et al., 2006; Kamm & Nurick, 1993; Ruef et al., 2003; Ucbasaran et al., 2003). According to this perspective, entrepreneurial teams often need diversity when it comes to complementary skills and abilities (Clarysse & Moray, 2004; Gartner, 1985; Kamm et al., 1990). Each team member is seen to add to the diversity of views and skills that enable to carry out complex tasks (Forbes et al., 2006; Ucbasaran et al., 2003). Thus, the members are chosen based on their functional human and social capital (Aldrich & Kim, 2007; Forbes et al., 2006; Ucbasaran et al., 2003). Notably, the ideas on heterogeneous teams might reflect the above mentioned lead entrepreneur approach where an individual has a business idea and gathers together people who could help carry out the idea through the utilization of their knowledge and skills.

Homogeneous teams, on the other hand, are often linked to an interpersonal relations perspective to team formation and composition (Aldrich & Kim, 2007; Ruef et al., 2003). According to the interpersonal approach, entrepreneurial teams might be formed on the basis of social-psychological needs of interpersonal attraction and in the presence of pre-existing networks of strong (i.e., family members) and weak (i.e., friends, colleagues etc.) ties (Forbes et al., 2006; Ruef et al., 2003). For example, Bird (1989) suggest likeability, alikeness, enjoyment of each other's company, and proximity as reasons for multiple individuals to come together to pursue entrepreneurship (and other more general outcomes). Studies acknowledging this perspective examine the team members' demographic characteristics, such as age, gender, education, and work background (Chowdhury, 2005; Clarysse & Moray, 2004; Ruef et al., 2003) and suggest that individuals with similar background may be more

likely to be in contact due to their shared social context and structural opportunity for social contact, and spatial proximity and environmental distribution of potential group members (Forbes et al., 2006; Ruef et al., 2003). For example, co-membership in an existing social group may contribute to identification of agents with each other and forming a group based on the identification (Harper, 2008). Homogeneous teams can be seen to reflect the group approach to entrepreneurial team formation where a group is formed prior to an entrepreneurial opportunity.

Finally, the resource and interpersonal relations perspectives are not mutually exclusive but might be interrelated. For example, as social networks provide sources of information about available resources (Forbes et al., 2006) interpersonal relationships might be utilized to find appropriate resources in a strategic manner (Larson & Starr, 1993). Also, assumingly rational processes may include interpersonal dimensions, such as chemistry and attraction among individuals (Forbes et al., 2006; Kamm & Nurick, 1993). Yet, the interrelated approach has not been as widely examined as the resource and interpersonal perspectives. Considering that the emergence of entrepreneurial teams is a complex collective-level phenomenon, the existing knowledge might not offer a versatile and yet integrative picture enough on the dynamics and relationships of dimensions that affect entrepreneurial team and opportunity emergence.

2.5 Entrepreneurial team functioning

Another stream of research that helps understand how entrepreneurial teams perform is the entrepreneurial team functioning stream (see Cooper & Daily, 1997; Francis & Sandberg, 2000; Schjoedt & Kraus, 2009). Compared to the team formation and composition stream, team venture functioning has received less attention in the context of entrepreneurship in particular. Team functioning relates to cognitive and behavioral dynamics, interpersonal action, interactions, and social processes within entrepreneurial teams (Francis & Sandberg, 2000). Scholars who highlight team functioning suggest that grasping individuals' characteristics is not enough to understand team ventures or their performance because the diversity of characteristics does not guarantee high team-level understanding, and the synergies of having multiple individuals involved only become viable in interactions that enable enhanced collective cognitive capability (e.g., Chowdhury, 2005; Lechler, 2001; Shepherd & Krueger, 2002; Watson et al., 1995; West 2007). For example, Chowdhury

(2005) finds that team compositional diversity is not important for team venture success but team-level process variables explain team venture performance. Also, Watson et al. (1995) put forward that team commitment and leadership at the level of the team are strongly positively connected to venture success.

Existing literature that can be put under the team functioning stream includes identification of team-level constructs that operate for the good of the team venture over and above the individual team members. Scholars suggest that entrepreneurial teams should be seen as social units (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009) and more than the sum of individuals involved as the teams are characterized by collective constructs that emerge in interactions between the team members and affect actions taken toward the team endeavor (Cohen & Bailey, 1997; Harper, 2008; Reich, 1987; Shepherd & Krueger, 2002; West, 2007). The most examined collective construct in team entrepreneurship literature is collective cognition (i.e., a common mental model) of direction and strategy of the venture that forms the basis for actions, plans, goals, coordination, management, and motivation among the entrepreneurial team members (Ensley & Pearce, 2001; Ensley et al., 2003; Pearce & Ensley, 2000; Shepherd & Krueger, 2002; Watson et al., 1995; West, 2007; for a review see de Mol, Khapova, & Elfring, 2015). Collective cognition refers to integrative cognitive patterns amongst the team members, and harmonization and synchronization of individuals' perspectives (Lechler, 2001; Watson et al., 1995; West, 2007). Thus, the individual team members' varying perspectives should turn into a collective understanding that guides decisions and actions related to business, and eventually affect firm performance (West, 2007).

In addition, researchers have examined other team-level integrative phenomena, such as team commitment which represents enthusiasm for and focusing on common goals, effort, and performance (Watson et al., 1995) and cohesion that refers to the sense of belonging to the team, the degree to which team members wish to remain as members of the team and stay loyal toward the team, and commitment toward the team goals and tasks (Ensley et al., 2003; Lechler, 2001). Other researchers have studied trust and affection toward the team (Ensley & Pearce, 2001; Zheng, 2012), identification with and obligations to the team (Blatt, 2009; Lounsbury, 1998; Toledano et al., 2010), and collective efficacy as team's belief in their capability of carrying out particular joint action and outcomes (Shepherd & Krueger, 2002). Additionally, scholars have recognized that team-level mental states of entrepreneurial spirit (Ribeiro Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2010), atmosphere

(Toledano et al., 2010), or mind-set (dos Santos & Spann, 2011) make a team more entrepreneurial as a whole (Ribeiro Soriano & Comeche Martínez, 2007).

Some scholars go further into examining how entrepreneurial teams are led or managed in a way that can be seen to reflect collectiveness. These studies consider interpersonal interactions and processes in particular (e.g., Lechler, 2001; Schjoedt & Kraus, 2009). For example, Schjoedt and Kraus (2009) include communication, conflicts, and power and politics in their consideration of entrepreneurial team processes. Entrepreneurial teams have been seen to be characterized by voluntary and informal collaboration of individuals, informality, flat hierarchy, shared control, and absence of formal leadership structures, for example (e.g., Ensley et al., 2006; Reich, 1987; Ribeiro-Soriano & Comeche-Martínez, 2007; Ribeiro-Soriano & Urbano, 2009; dos Santos & Spann, 2011; Stewart, 1989). Shared leadership reflects these ideas in particular as it includes mutual control, influence, authority, and power among the entrepreneurial team members (Ensley et al., 2003; Ensley et al., 2006).

As opposed to individual-focused vertical leadership, shared leadership is a team-level process where leadership is carried out by team members together, rather than by a solo executive (Ensley et al., 2003; Ensley et al., 2006). Everyone should have an opportunity and capacity to participate in entrepreneurial action (dos Santos & Spann, 2011), such as identifying and responding to new opportunities (Comeche & Loras, 2010), having a direct effect on strategic decisions (Gartner et al., 1994), participating in development of business actively (Cooney, 2005), and learning from previous experiences (Reich, 1987; dos Santos & Spann, 2011). As Reich (1987) sees, collective entrepreneurship is about synergetic contributions of team members. Leadership should encourage the talent and creativity of all organizational members through team work and joint effort (Comeche & Loras, 2010) where individuals' tasks are interdependent of and intertwined with one another (Reich, 1987). Shared leadership demands direct involvement of the individuals so that they can exchange and talk about ideas in a way that abstract concepts become more concrete (Carland & Carland, 2012). It includes the ways the team members share responsibilities, motivate and empower each other, share feedback, and direct activities together (Ensley et al., 2003). Notably, shared leadership requires skillful and self-confident individual team members who are able to contribute to the team effort (Ensley et al., 2000).

As collective entrepreneurial action is supposed to be lean when it comes to hierarchy, command and control are replaced by daily, on-going dialog, communication, and coordination (Lechler, 2001; Lounsbury, 1998; Reich, 1987). For example, organizational members should be able to share information and knowledge and provide and get continuous feedback (Ribeiro-Soriano & Urbano, 2009). Watson et al. (1995) find interpersonal flexibility, conflict resolution, open sharing of information, and personal communication focused on problem-solving as core dimensions of entrepreneurial team interpersonal processes. The scholars also suggest helpfulness (i.e., helping one another beyond what is required, friendliness, and cooperation which are oriented toward interaction with others) as a core component of team interactions (see also Comeche & Loras, 2010; Lechler, 2001; Lounsbury, 1998). Yet, conflicts are a part of most social interaction and studies have seen conflicts typical for entrepreneurial teams (see Ensley & Hmieleski, 2005; Ensley & Pearce, 2001; Francis & Sandberg, 2000; Lechler, 2001). For example, Ensley and Pearce (2001) argue that conflict is essential for achieving a shared strategic cognition and consensus among the team members.

Despite the notion of non-hierarchy and empowerment of organizational members, many scholars see that entrepreneurship at the collective or team-level does not eliminate the need for a solo leader (e.g., Reich, 1987; Stewart, 1989; Yan & Sorenson, 2003). Paradoxically, the existence of the “lead entrepreneur” reflects hierarchical differentiation of individuals when it comes to status, authority, leadership, benefits, and compensation (Harper, 2008; Yang & Aldrich, 2014). However, the role of the leader might be somewhat different from the traditional notions as the leader of an entrepreneurial team might act as a guide for others toward achievement of a common goal and creating a favorable context for joint action and communication (Bennis & Biederman, 1998; Comeche & Loras, 2010; Ribeiro-Soriano & Urbano, 2009).

Harper’s (2008) taxonomy of entrepreneurial teams reflects the above ideas on the division of entrepreneurial action among entrepreneurial team members. Emergent entrepreneurial teams involve two or more equal entrepreneurs who elaborate on an entrepreneurial opportunity together and take entrepreneurial action to the same degree. Hybrid entrepreneurial-economizing teams include an entrepreneur and organizational members or other agents who are not regarded as entrepreneurs but realize the ideas of the solo entrepreneur. Nested entrepreneurial teams include two or more entrepreneurs but there is a division into the lead

entrepreneur in whose mind the higher level entrepreneurial opportunity comes together and the sub-entrepreneurs who carry out other entrepreneurial action in a way that reflects specialization. (Harper, 2008)

2.6 Entrepreneurial team collectiveness

As can be seen from the above literature, acceptance and knowledge of entrepreneurial teams has increased considerably within the past 25 years or so (see Cooney, 2005). Scholars do not argue anymore if entrepreneurial teams emerge or are a phenomenon worth studying but have moved on by taking the entrepreneurial team as a unit of analysis and to examining the effects of the team-form on the venture processes and performance. However, considering that entrepreneurial teams are not a new area of research anymore, it might be seen surprising that the individualized ground assumptions might still restrict how we see entrepreneurial teams and how the idea of the team-level is embraced (see Davidsson & Wiklund, 2001; Harper, 2008). Entrepreneurial team definitions vary greatly in their depth and scope when it comes to seeing entrepreneurial teams systematically as collective phenomena (see Morgeson & Hofmann, 1999). For example, the entrepreneurial team formation and composition, and functioning streams take very different assumptions when it comes to the collective-level. While some scholars have grasped aspects of collectiveness, many definitions and conceptualizations seem to be affected by the assumptions on the individual entrepreneur. For example, formation and composition studies seem to focus more on the individuals while functioning research emphasizes more the team at the team-level of interactions. The individualized notions of entrepreneurial teams might be relevant in some settings but may offer too narrow an understanding in many other contexts, especially considering team performance (see Chowdhury, 2005). While all collective phenomena base on the actions of individuals and no collective phenomena emerge without the individuals, collective phenomena are also characterized by characteristic collective properties such as systems of interactions and collective structures constructed and re-constructed in the interactions between the group members (Giddens, 1984; Morgeson & Hofmann, 1999). These characteristic properties might not have been taken into account systematically in the entrepreneurial team literature although the ideas on the collective phenomena in general might help suggest an organized understanding of the entrepreneurial teams.

The individualistic notion of the entrepreneur is most visibly reflected in examinations of the 'real' or 'lead' entrepreneur within the entrepreneurial teams. For example, understanding of team emergence is dominated by ideas on an individual entrepreneur's business idea before the team. Many see that there must be the entrepreneurial hero or champion within the team who started it all (e.g., Carland et al., 2000; Clarysse & Moray, 2004; Lim et al., 2013). Also, insights into team functioning often highlight the role of the lead entrepreneur by taking the view that every team should have an individual leader who sets a vision and direction for others to follow (e.g., Reich, 1987; Yan & Sorenson, 2003). Many times, the lead entrepreneur approach seems to rely on the idea that the 'real' entrepreneur possesses qualities and skills that account for entrepreneurship more than the qualities and skills of the sub-entrepreneurs (see Harper, 2008). While the division of team members may be relevant in many cases, it might not reflect collectiveness if the role of the leader dominates interactions within the teams, opportunity creation and business strategy, or operation and management of the venture. That is, the actions of the lead entrepreneur within a team might be highly individualistic rather than collective which also makes the entrepreneurial team more individualistic than collective. This is why examining the lead entrepreneur might not provide understanding of entrepreneurial teams that function at the level of the collective, rather than the individual.

Related to the notion of the entrepreneur, the individualized notions are also reflected in examination of the individual team members separate of each other and their common goals. Many scholars emphasize individual team member's skills and competencies when it comes to their heterogeneity or homogeneity in team composition and action. Entrepreneurial teams are often seen as aggregates of the individuals involved (e.g., Ruef et al., 2003; Ucbasaran et al., 2003) when it comes to both the individuals' characteristics and skills, and their actions and roles. Thus, it seems that some entrepreneurial team studies address questions focused on who the entrepreneur is and what this person does but include multiple individuals in the examinations. As noted above, examination of the individuals separately (at the level of the individuals rather than the collective) may not tell us enough about the entrepreneurial teams as collective phenomena but entrepreneurial team studies could gain from shifting more attention to the level of the in-between the team members.

It must be noted, however, that some scholars have grasped collective-level in their definitions and conceptualizations (e.g., Harper, 2008; Shepherd & Krueger, 2002; West,

2007). Some of them pay particular attention to collective-level constructs, such as the collective mind, while others focus more on the activities that create collective synergies or dynamics. What is common to these studies is that they focus on a higher level of abstraction than the individuals only (while not excluding individuals). They embrace the in-between individuals and over and above the individuals. Yet, the literature might still offer a fragmented and onerous understanding since there are no systematic abstractions of entrepreneurial teams at the collective-level – ones that would suggest a versatile and in-depth but yet distinctive understanding of collectiveness within entrepreneurial teams.

3. RESEARCH DESIGN, PARADIGMS, AND METHODS

In this section, I outline and justify the choices of research design, applied paradigms, and utilized methods including data and analysis techniques. The choices relate strongly to the research process which is why insights into the process are included in the presentation of and reasoning for the design, paradigms, and methods. I also outline the assisting lenses of empirical analyses, summarize the chronological research process and evaluate the quality and rigor of the study.

3.1 Research design

Research design relates to how the study is conducted in order to answer the research questions. It represents choices of approach and methods through which certain kinds of data is collected and analyzed. The publications through which the research questions of this dissertation are answered employ different kinds of paradigms and methods that relate to the role of each publication in this dissertation. Table 1 summarizes the research design and the role of each publication.

Table 1. Research design

<i>Publication</i>	<i>Role in answering the research questions</i>	<i>Paradigm</i>	<i>Method and analysis</i>	<i>Data</i>
1. Business school students' social construction of entrepreneurship: Claiming space for collective entrepreneurship discourses	Offer understanding of importance and relevance of collectiveness in entrepreneurship, shed light on elements of collectiveness and reasons for it	Social constructionist	Semi-structured thematic interviews Discourse analysis Inductive approach	Texts produced in 12 interviews with first-year business school students
2. The start of team startups: Collective dynamics of initiation and formation of entrepreneurial teams	Suggest understanding especially of reasons for and early development of collectiveness within entrepreneurial teams and the importance of collectiveness	Critical realist	Qualitative multiple-case study Semi-structured thematic interviews Thematic analysis Inductive approach	14 individual interviews and 4 group interviews with core members of team startups in high-tech industries Documentary data
3. Collective entrepreneurial teams: Structures within high-technology team startups	Suggest insights into constituent elements of collectiveness within entrepreneurial teams and the importance of collectiveness	Critical realist	Qualitative multiple-case study Semi-structured thematic interviews Thematic analysis Inductive approach	14 individual interviews and 4 group interviews with core members of team startups in high-tech industries Documentary data
4. Reinforcing collectivity in entrepreneurial actions within startup teams: A multiple-case study	Suggest understanding of development of collectiveness in entrepreneurial processes especially from the point of view of operating and managing a team venture, and the importance of collectiveness	Critical realist	Qualitative multiple-case study Semi-structured thematic interviews Thematic analysis Inductive approach	14 individual interviews and 4 group interviews with core members of team startups in high-tech industries Documentary data
5. Collective entrepreneurship: Towards a process model	Suggest insights into relevance of collectiveness across organizational contexts and offer a model of elements, emergence, and development of collectiveness within entrepreneurial teams across the organizational contexts	Positivist	Theory elaboration and conceptual development	Existing organizational theory and socio-psychology literature on groups

This study includes three paradigms, two different empirical data sets, two analysis techniques, and conceptual work. The choices of the paradigms, methods and analysis technique, and data relate strongly to the inductive research process of this dissertation where the initial, broad research questions were specified along with the research process (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). Thus, the applied paradigms and methods were selected as I and my co-authors accumulatively developed more understanding of the knowledge gaps in the literature and the actual phenomenon that we were studying. Note that I will further specify the choices of paradigms, methods, data, and analysis techniques in below subchapters where I present them in more detail.

The first publication included in this dissertation and the choices related to it serve as the starting point for the whole dissertation. Initially, the aim was to openly see if listening to micro-level agents' accounts could provide insights into the macro discussions of entrepreneurship constructed mainly by researchers and policy-makers (see Alvesson & Kärreman, 2000). In the first publication, I and my co-authors employ a social constructionist paradigm and view entrepreneurship as a socially constructed phenomenon that takes its forms in discourses that people mobilize (Berger & Luckmann, 1966; Bouchikhi, 1993; Steyaert & Katz, 2004). Empirical material consists of texts that are produced in 12 semi-structured thematic interviews (Alvesson & Kärreman, 2000) with first-year business school students who are regarded as potential future entrepreneurs. The material represent the students' meaning-making of entrepreneurship (Weick, 1979). We analyze the material inductively through discourse analysis as a technique that enables to systematically search for micro-level sets of statements found in specific use of language coupled with meaning and can be put together in the form of discourses (Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell et al., 2001). At this point of study, the emphasis was on speech and social texts that we saw to construct entrepreneurial realities in different levels of discussions. Thus, analyzing discourses of students who were relatively new to the entrepreneurial contexts enabled us to offer new insights into the macro level discourses of the literature. This choice of approach and methods later helped us understand why other than traditional aspects of entrepreneurship, such as collectiveness might be important to understand, how collectiveness could be supported, and what may be the constituent elements of and reasons for collectiveness.

Out of the analysis outcomes of the Publication 1, we realized that it would be important to further grasp collectiveness of entrepreneurship for which we were claiming space in the first publication. Thus, our aim shifted into describing and understanding the phenomenon of interest more in-depth. We adopted a critical realist perspective that takes phenomena as real for the people experiencing them but embraces interpretation (Bhaskar, 1975; Bryman & Bell, 2007; Guba & Lincoln, 1994) because we saw that we were studying a ‘real’ phenomenon for entrepreneurs themselves but were aware of that we were only able to offer our (and their) interpretation of it. Also, we needed to choose a context or contexts in which we could find the phenomenon of which we wanted to elaborate more understanding of. Hence, we decided to apply qualitative multiple case-study approach (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014) and find entrepreneurial teams that could help us describe and understand collectiveness in entrepreneurship further. The data was gathered in individual and group semi-structured thematic interviews with entrepreneurial team members of team startups in high-technology industries because we wanted to give voice to the informants and also provide group-level understandings. We also utilize secondary, documentary data mainly to get a better feel of the context of the startups as researchers interpreting the data. We analyze the data through systematic thematic analysis by Gioia et al. (2013). The analysis technique was chosen because it offers a systematic and rigorous technique to analyze qualitative data and elaborate theory while maintaining the voice of the informants.

Notably, the same paradigm, methods, data, and analysis technique are utilized in the Publications 2 – 4. This relates to the inductive process of theory elaboration. When departing from the Publication 1, we started with broad research questions aimed at understanding collectiveness of entrepreneurship with the help of the case startups. The recurring of our understanding about the phenomenon along with the inductive analysis process led us divide the analysis into three publications. Presenting and analyzing collectiveness within entrepreneurial teams only in one publication seemed like an impossible task considering the scope of any research paper and that the phenomenon of interest turned out to be highly complex and multi-layered. In order to suggest as clear an understanding as possible, we decided to present different facets of collectiveness within entrepreneurial teams in different papers. In our analysis, we follow the context of entrepreneurship in particular (i.e., the pursuit of opportunities and entrepreneurial actions related). Hence, the first of these papers was focused on the beginning of collectiveness (team coming together and opportunity

creation). Therefore, the Publication 2 suggests understandings especially on early development of collectiveness in entrepreneurial processes. The next set of analysis was formed around the elements of collectivity (i.e., the team-level structures that form when people come together and interact with each other). The Publication 3 offers insights mainly into the constituent elements of collectiveness within entrepreneurial teams but also into the importance of understanding and supporting collectiveness. Then, the following paper was formed around the actions in which collectiveness was reinforced among the entrepreneurial team members (in operating and managing the venture). That is, the Publication 4 suggests understanding of development of collectiveness in entrepreneurial processes especially from the point of view of operating and managing a team venture and also of importance of collectiveness and the ways it can be created or encouraged.

The fifth publication was created along the Publications 2 – 4. It represents a positivist approach (Bryman & Bell, 2003) and bases on conceptual work that aims at developing a testable model of collective-level entrepreneurship across organizational contexts. The fifth publication is a theoretical paper with no empirical data but insights are drawn from organizational and social-psychological literature (e.g., Katz & Kahn, 1978; Tajfel, 1982; Tajfel & Turner, 1985; Triandis, 1993) and applied in the context of entrepreneurial teams in organizational contexts. The paradigmatic perspective was chosen based on the aim of developing the testable model. When studying entrepreneurial teams in practice and in the existing literature, we saw that they are relevant in a variety of organizational contexts but the understanding of them was yet fragmented and confusing. Scholars utilize a variety of definitions and conceptualizations and we thought social-psychology literature in general and in organizational contexts could bring in clarity. Thus, we studied the literatures and applied them to the entrepreneurial contexts. The Publication 5 helps understand the importance of collectiveness in a variety of organizational contexts and the elements and emergence and development of collectiveness within entrepreneurial teams.

3.2 Research paradigms

Individuals, including researchers, have different ontological and epistemological assumptions that guide their decisions, interpretations, and presentation of ideas. These assumptions that constitute our way of viewing the world and reality, and affect how knowledge is perceived and gathered are called paradigms (Kuhn, 1970). Ontology reflects

assumptions about reality and the role of individuals in creating that reality – how things are seen to be and how individuals' actions are seen to affect the emergence or existence of phenomena. Mainly, different perspectives take reality as objective or subjective. Objectivism includes a notion that reality exists independent of the actors within it. Subjectivism entails an assumption that people construct the reality by themselves in giving meaning to it in social interactions. The ontological assumption adopted is reflected in epistemology that refers to perception of knowledge of reality and how knowledge can be gained. Some see that we can uncover what is truly happening while others perceive that knowledge is created in interactions between individuals and can only be gained through subjective interpretations and understandings. (Bryman & Bell, 2007; Godfrey-Smith, 2003; Guba & Lincoln, 1994; Hatch, 1997) Ontological and epistemological assumptions are strongly connected to methodological dispositions that relate to how an individual can find out whatever she/he believes can be known. Methods are then drawn from the methodological perspective and represent the means through which knowledge is collected or produced in studies. (Guba & Lincoln, 1994)

This is a multi-paradigm dissertation which means that I adopt different paradigms in the publications that then come together in this overview (see Gioia & Pitre, 1990; Schultz & Hatch, 1996). The choice of the paradigm in each publication relates to the aims at the time when the publications were written, the complex, social phenomenon of interest, and the existing knowledge about the phenomenon. This study moved from social constructionist ideas to critical realist and positivist perspectives, and then to the interplay of them (Schultz & Hatch, 1996). I will go through the paradigms and give reasons for the choices of them below and then analyze the multi-paradigm perspective from the point of view of the overview and the dissertation as a whole (i.e., over and above the individual publications).

Social constructivist perspective includes a notion that reality does not exist as a fact or objective but emerges subjectively in interactions between individuals in social contexts (Berger & Luckmann, 1966). Social constructionists acknowledge that there are different kinds of realities, understandings, interpretations, and meanings of the world and phenomena, not a single universal truth (Hatch, 1997; Mead, 1934). Thus, knowledge is produced in interaction between people and we can only present our own view of the reality (Berger & Luckmann, 1966). Researchers should be interested in those people's experiences that live in and experience a specific social context (Hatch, 1997). The researchers also have an active role in interacting with the people involved in the study, interpreting empirical material, and

presenting the analysis outcomes (Guba & Lincoln, 1994). Social constructionists utilize mainly inductive approach to analysis and qualitative methods that enable to grasp novel ideas of realities and different interpretations of it apart from the existing theories. The social constructionist perspective also helps capture interpretations relevant to the people experiencing the phenomenon. (Gioia & Pitre, 1990) I employ the social constructionist approach (more specifically, a symbolic interpretative approach that highlights different understandings, interpretations, and meanings of reality: Hatch, 1997; Mead, 1934) in the first publication. The choice of the social constructivist paradigm in the Publication 1 relates to the aim of understanding different kinds of entrepreneurial realities where we wanted to reflect micro-level accounts of prospective entrepreneurs against the macro-level discussions of entrepreneurship research. Social-constructivist ideas enable openness to different kinds of interpretation of a phenomenon, embrace the micro-level agents, and may offer fresh insights into the macro-level discussions. The social constructivist perspective can also help reveal meanings and interpretations that do not come alive in the macro approaches that are tied to the traditions and history of the field of research (cf. Gioia & Pitre, 1990). Thus, the paradigm enables to set free from the single truth of macro-discussions, grasp entrepreneurship openly, and compare micro and macro-level discussions.

Positivist approach represents the traditional and dominant approach to reality and knowledge as it has dominated the field of physical and social sciences for over 400 years now (Guba & Lincoln, 1994). It is often adopted by researchers also in the field of entrepreneurship. Positivists take the reality as objective and existing external to and out of reach of actors (Bryman & Bell, 2007). Epistemologically, positivists see that researchers can discover the truth about the reality through scientific measurement, developing and testing hypotheses, and forming generalizable theories (Hatch, 1997). Researchers should prevent outside influences on results and present an objective picture of the reality. Positivists utilize mostly deductive, quantitative study in order to test hypotheses derived from the existing theory. (Guba & Lincoln, 1994) The positivist approach is utilized in this dissertation in the Publication 5. The article is not empirical but aims at developing a testable model and hypotheses based on conceptual work. The choice of the paradigm reflects the idea that there are some literatures in other fields of sciences that could be applied in the field of entrepreneurship in order to develop a model of collective entrepreneurship that could be tested through quantitative study. That is, the paper bases on existing theories from which hypotheses are developed for future studies to test and the choice of the paradigm reflects this aim. It also reflects the idea that a

coherent, single definition and conceptualization of collective entrepreneurship would bring in clarity in the field of entrepreneurship. Hence, the publication is not concerned about multiple meanings as such but aims to bring in a widely accepted understanding of collective-level entrepreneurship in organizational contexts.

Critical realist perspective adopts some social constructionist and some positivist ideas, which is also why it is outlined here after the two perspectives have been presented first. As Hatch (1997) expresses it, critical realism itself crosses paradigms. Principally, critical realism includes positivist ontology and social constructionist epistemology (Hatch, 1997) although there are several different variations of how the critical realist approach is seen and utilized. In this study, I adopt a critical realist perspective where I perceive that reality may exist as true or objective, that is there are real phenomena out there, but the real structures of societies are reproduced and transformed by individuals in continuous interaction (Berger & Luckmann, 1966; Hatch, 1997) and researchers' definitions and conceptualizations are only one way of seeing the phenomena that exist independent of the subjects' thoughts (Bhaskar, 1975; Bryman & Bell, 2007; Guba & Lincoln, 1994). Methodologically, critical realists pay attention to social contexts of people, meaning that people give to their action and phenomena, and interpretation from the data out. Critical realists have contributed to increased utilization of qualitative methods. (Guba & Lincoln, 1994) I adopt the critical realist perspective in Publications 2 – 4 because I believe that the research questions they aim to answer consider 'real' phenomena to the people that experience and construct them and also to the society in which they act but the only way I as a researcher can understand the relatively novel phenomenon is through interpretation (of the informants' interpretations). Notably, the critical realist perspective also fits the aim of elaborating theory on a new topic area where there are gaps in the existing knowledge because it allows versatility and different interpretations of reality.

The multi-paradigm approach at the level of the dissertation as a whole enables a fresh, comprehensive and integrated view of a multifaceted and complex social phenomenon as there might be more to learn than any single approach accounts for (Gioia & Pitre, 1990). Gioia and Pitre (1990) suggest that a reason for lack of development in theory building might be the adoption of a single dominant paradigm in the field of interest because use of a single paradigm might produce too narrow a view of a complex phenomenon and exclude some relevant aspects that the dominant view does not take into account. While the study of

organizations and entrepreneurship has long been dominated by paradigms derived from the natural sciences, contemporary social phenomena such as entrepreneurial teams might be difficult or even impossible to understand solely through the ideas that highlight objectivism, single truth, and stability, for example (Gioia & Pitre, 1990). Thus, from the point of view of this dissertation, different paradigms can provide not only completeness but nuance.

Utilizing multiple paradigms can be done in a variety of ways (for a review see Schultz & Hatch, 1996). There are two main ways in which multiple paradigms are utilized in this dissertation. First, multiple paradigms were applied sequentially in a way that the paradigms are mutually complementary within a research project (Schultz & Hatch, 1996). That is, the insights from a study (a publication) with one paradigm are used to move to the next study with another paradigm (Gioia, Donnellon, & Sims, 1989; Lee, 1991) in a way that the multiple paradigms come together with the help of the phenomenon of interest. This means that the different paradigms are grounded in the same field of study with related concepts and the same phenomenon – in this case entrepreneurship and entrepreneurial teams in particular – but can provide complementary views and enlarge the domain of a theory because each can bring in different perspectives into understanding the phenomenon of interest (Gioia & Pitre, 1990; Schultz & Hatch, 1996).

Second, as the publications come together in this overview, the multiple paradigms cross at the level of the whole dissertation. In this overview, the paradigms cross in a way that they interplay. Paradigm interplay embraces contrasts and connections between the paradigms and maintains tension between them. It also allows permeability of the paradigm boundaries by moving back and forth between them. (Schultz & Hatch, 1996) At the end of this dissertation, multiple paradigms offer an understanding that accounts for over and above the individual paradigms by adopting ideas of the different paradigms at the same time. This means that I move to a higher level of abstraction in this overview than in the individual publications and embrace all of the paradigms. For example, I can address the positivist idea that research could gain from a unified and clear understanding of a phenomenon while still embracing different interpretations of it and the role of interactions in elaborating theory. The overview comes close to the critical realist approach but with more weight on and sensitivity to both the social constructionist and positivist ideas because the overview does not operate in the intermediate of the two approaches but takes them as complete both from the ontological and epistemological points of view.

The multi-paradigm approach affects the conducting and writing of this dissertation. Applying multiple paradigms in a single dissertation is a challenging task. First, it demands shifts of ground assumptions from one publication to another. Presentation of phenomena and ideas and the vocabulary utilized differ a lot across the publications. The adoption of different paradigms is and should be reflected in the choice of ideas and words. For example, applying social constructionist ideas in the Publication 1 demands careful attention to how the phenomenon of interest is seen (constructing rather than existing). It also demands attention on methodological aspects. Empirical material (rather than data) is produced (rather than collected) and the researcher actively takes part in co-construction of the phenomenon (rather than observing an outside reality objectively). It also affects how the analysis outcomes (rather than results) are presented. However, in the Publication 5, the phenomenon of interest is seen as true and objectively measurable so I can talk about a phenomenon as real or about the nature of it. In Publication 2 – 4, presentation and vocabulary utilized are somehow in between the above presented two publications as I should take into account the nuanced understanding of the emergence of the ‘real’ phenomenon in social interactions and my interpretation of it.

Second, while differences between paradigms are relatively well-known, their interplay is less familiar to many and demands understanding of different levels of analysis by the researcher (Schultz & Hatch, 1996). When integrating the insights of the publications into this overview that represents the dissertation as a whole, I need to be able to look over and above the individual paradigms and not be too stuck on any of them. Also, I have to pay attention to the words I use in this overview because the overview does not represent one paradigm only but all of them. So, I adopt vocabulary that fits the higher level of analysis based on all of the publications. For example, I utilize the terms data and gather although I utilize terms more specific to the particular paradigms in the publications. Finally, it should be noted that multi-paradigm approach does not take any paradigm as better than the other or dismiss traditional, positivist approaches but embraces versatility (Gioia & Pitre, 1990).

3.3 Methods, data, and analysis techniques

Adoption of different paradigms in the publications is reflected in the choice of methods. Methods refer to the techniques and analytical tools that are utilized to acquire knowledge (Healy & Perry, 2000). They relate to the kind of data utilized and the ways the data is

gathered and analyzed. In this study, I employ qualitative methods in the empirical publications. Qualitative research is often focused on words rather than numbers, on subjectively constructed reality rather than independent or 'out-side' reality, and on interpretation rather than absolute truth (Bryman & Bell, 2007). Thus, researchers who apply qualitative methods are interested in people's views. People are seen as knowledgeable agents and informants who know what they are doing and are able to explain their thoughts and ideas. The unique contexts within which the people act have a central role in understanding the people's views but do not prevent understanding of the same phenomenon in other contexts. (Gioia et al., 2013) Qualitative research is often inductive which means that new concepts and theory are developed from the data out with no pre-existing hypotheses drawn from the existing theory (Bryman & Bell, 2007; Gioia et al., 2013). Qualitative studies often begin with a broader aim and research questions that are specified later on during the research process and proceed from gathering data to interpretation of the data, conceptual work (developing theory), and writing up the findings (Bryman & Bell, 2007; Eisenhardt, 1989). Yet, qualitative research includes a variety of approaches and methods (Bryman & Bell, 2007) which indicates that not all qualitative research should be seen as the same or evaluated through the same criteria.

When talking about qualitative research and choosing a qualitative research strategy, it is important to note that although qualitative research has been carried out for decades now it is still often misunderstood and/or evaluated through the ideas of quantitative research (e.g., deductive approach, aim of objectivity, for a summary see Bryman & Bell, 2007). The differences of the perspectives are not always clear or accepted by all scholars. Since the basic assumptions and aims of the perspectives are very different, seeing qualitative work through the lenses of quantitative strategy often leads into various misunderstanding and misinterpretations. In addition, high quality qualitative research is difficult and time consuming to conduct. While there has been a set of literature on qualitative research for a long time, scholars have suggested practically helpful and insightful advice for conducting and especially writing up rigorous qualitative research only relatively recently (e.g., Gioia et al., 2013; Pratt, 2009).

I chose qualitative methods because they are suitable for studying complex and ambiguous, contemporary phenomena the understanding of which requires an in-depth description (Eisenhardt, 1989; Flyvbjerg, 2006; Gioia et al., 2013; Halinen & Törnroos, 2005; Yin, 2014).

More specifically, I chose an inductive approach to qualitative research because I aim to elaborate theory on a relatively new topic area and to find new insights for the existing literature in which gaps of knowledge still exist (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). That is, I am not testing theory or building a totally new theory but elaborating new concepts in order to fill knowledge gaps in a field where theory already has been built but some important aspects might be missing (see Pratt, 2009). Applying a qualitative and inductive approach is important for understanding collectiveness within entrepreneurial teams because collectiveness is a complex phenomenon that has not been systematically and comprehensively examined in the context of entrepreneurial teams before and listening to the informants' accounts may help find new concepts relevant to the phenomenon. The qualitative approach also allows complexity and ambiguity of phenomena which might be relevant in understanding collectiveness within entrepreneurial teams. Thus, I chose the methods based on the phenomenon that I am interested in and considering the research questions that I aim to answer (developed along the research process).

Data of this doctoral dissertation includes two different data sets. The first data set utilized in the first publication includes texts that are produced in 12 semi-structured thematic interviews (Alvesson & Kärreman, 2000) with first year business school students. The same empirical material has been used for analysis in my Master's Thesis (Forsström, 2010). The empirical material represents the students' accounts and their meaning-making of entrepreneurship and their entrepreneurial futures (Weick, 1979). This material was chosen because business schools are major entrepreneurship educators and their students represent potential future entrepreneurs. Thus, the empirical material is relevant from the point of view of supporting and encouraging entrepreneurship. In addition, it enables to bring new insights in the existing macro discussions on entrepreneurship. Students who had just begun their Bachelor studies were chosen deliberately because listening to the students who were relatively new to the business school context (compared to, for example, doctoral students or professors) would bring in fresh perspectives in the existing discussions. Although the students are not simply objects of entrepreneurship education but take part in the construction of entrepreneurship at the university, we saw that the students' participation in the discussions accumulates over time. While the students were already involved in business studies and chosen business as their field of study, they had not yet taken part in advanced business or entrepreneurship courses. We saw that their accounts were as free as possible from the macro-level discussions on entrepreneurship while still providing relevant insights from the point of view of the field

of entrepreneurship. Hence, interviewing these students was a rich starting point for elaborating new insights and discussing why it might be important to understand alternative ideas of entrepreneurship, such as collectiveness at the macro-level of research (see Alvensson & Kärreman, 2000). Other possible data would have included interviewing students from other universities or universities of applied sciences, fields of studies, or even comprehensive or high schools but we wanted to make sure that the students' accounts were relevant from the point of view of the field of entrepreneurship while still bringing in fresh insights. This is also why we did not want to interview entrepreneurs at this point.

The second data set relates to the multiple-case study approach adopted (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014). A multiple-case study is an in-depth empirical description of particular instances of a contemporary phenomenon in its real-world contexts where two or more cases (e.g., enterprises, organizations) are included in the same study (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014). I and my co-authors chose the multiple-case study approach because it is especially suitable for elaborating new insights into theory in relatively new topic areas. We wanted to find real-life contexts that would help understand collectiveness of entrepreneurship further. We did not want to find a single case but multiple cases in order to enrich the data. (Eisenhardt, 1989; Eisenhardt & Graebner, 2007)

The data set related to the cases includes accounts of core team members of high-technology startup teams gathered in 14 individual and 4 group semi-structure thematic interviews. The entrepreneurial team members themselves decided who were included in the core members of the team but they turned out to be members who had taken part in the very first steps of developing and establishing the enterprises. The case startups were chosen through theoretical sampling which means that they were chosen deliberately in a way that they enable to answer the research questions and represent the phenomenon under study transparently (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Yin, 2014). Thus, the cases chosen represent ideal cases to build theory about collectiveness within entrepreneurial teams (see Pratt, 2009).

While we did not have a complete understanding of the phenomenon we were studying at the point of searching for the cases, we did have some specific criteria for the ventures that could be included in the study. The criteria relates to the definition of an entrepreneurial team (see the key concepts of this study) and the potential of finding some aspects of collectiveness

within them. First, the cases needed to be enterprises that were established by two or more individuals together. This criterion is based on the idea that without multiple individuals involved in the same venture, the ventures would not reflect the team form of entrepreneurship. Second, the group of individuals needed to be in development of a new product or service jointly as an entrepreneurial team so as to reflect entrepreneurial opportunity-related action and processes. Without joint pursuit of opportunities (new products, services, and/or means) the teams would not be entrepreneurial but some other kinds of teams (e.g., a group of friends). Third, the enterprises needed to have been in operation from a few months up to five years in order to reflect entrepreneurial opportunity processes and established entrepreneurial teams, with a history of working together. We wanted the ventures to be already in operation in order to find cases where collectiveness might have already developed. Still we saw that it would be good if the enterprises were in a dynamic phase because we might grasp development of collectiveness red-handed. Also, we saw that after five years as a nominal milestone the team processes might change in a way that affects the founding, entrepreneurial team and potentially collectiveness too. Fourth, the industries were chosen deliberately because high technology industries are characterized by intense interactions and complexity which may imply a propensity to find collectiveness in entrepreneurship. Also, the synergies and accesses to resources that relate to multiple individuals involved are especially important in high-technology environments which might also increase the probability to find collectiveness. Fifth, we did not specify the nationality of the case companies before hand but Finland is an appropriate country as it has a more collective value orientation than many other countries (Hofstede, 1991). The number of cases was chosen based mostly on saturation but also practical considerations (Eisenhardt, 1989). Table 2 presents the details of the cases and the interviewed team members.

Table 2. Details of the cases

	Case 1	Case 2	Case 3	Case 4
Industry	Machinery and process technology	Information and communication technology	Information and communication technology	Biotechnology
Time in operation	6 months	1 year	2 years 6 months	5 years
Number of core team members interviewed	4	3	3	3
Age of team members	43 – 50	28 – 38	33 – 45	38 – 39
Gender of team members	all male	all male	all male	2 males, 1 female
Education of team members	University degrees in Technology, Economy, or Industrial Arts	2 university degrees in Technology, 1 studying in a university in the field of Technology	University degrees in Technology	University degrees in Technology or Biology
Nationality of team members	3 Finns, 1Austrian	2 Finns, 1Pakistani	all Finns	all Finns
Connection of team members before the startup	Knew each other from work	2 knew each other from their university studies	Had worked with each other	2 knew each other from work and 1 was introduced through an acquaintance
Team members involved in the startup	all involved for 6 months	2 were co-founders of the venture and involved for 2 years, 1 for a year	All involved for 2,5 years	2 involved from the beginning, 1 a bit later
Working in the startup full-time/part-time	2 full-time, 2 part-time	1 full-time, 2 part-time	All full-time	All full-time, 1 was leaving to establish another startup
Changes in team membership	Yes	Yes	No	Yes
Researchers' connection to the enterprise	Did not know any members	Did not know any members	Did not know any members	Did not know any members

Case startup 1 operates in the industry of machinery and process technology. It had operated for a half a year at the time of conducting the interviews. The core entrepreneurial team that included the individuals who had taken part in the very first steps of the venture and who we interviewed involved four persons. Case 2 operates in the information and communication technology industry. It had operated for a year. The core team included three persons. Case 3 also operates in the information and communication technology. It had operated for two and a half years. The core team included three persons. Case startup 4 operates in bio technology. It had operated for five years. The core group interviewed consisted of four persons. Notably, I did not know any of the team members before hand or had not worked in the enterprises (see Pratt, 2009).

The individual data from the team startups was chosen because we wanted to give voice to entrepreneurs themselves in elaborating theory on a relatively new topic area that is concerned with a complex phenomenon. The individual data offers accounts that are somewhat

independent of the group setting, hence possibly offering insights that would not come out in the group data only. The group data was chosen because it was seen highly relevant in studying a group-level phenomenon and because it corroborates the individual data. As this study is about group-level phenomenon itself and not only about retrospective accounts, observing group interactions directly enrich the data as they may offer deeper and more direct insights into the dynamics of the group than the individual interviews only. We could see how the group interacted together and if our interpretation of the data fitted our experiences in the group interviews and spending time with the team. Thus, we could grasp the group phenomenon and the team contexts more in-depth. Also, the group data reflects team members' joint elaboration which may enrich the data through more deep and nuanced accounts co-constructed among the team members over and above the individuals. We could have chosen observation or longitudinal study instead of interviews and accounts but the choice of the data relates strongly to the fact that we set out with relatively little understanding of the phenomenon under study itself why it seemed important first to listen to the informants.

The startup related data set also includes secondary, documentary data collected mostly from public pages (i.e., home pages, Facebook, LinkedIn, Twitter, news, and blogs). The role of the secondary data is mainly to get a better feel of the context and the phenomenon but also to corroborate other data through utilizing multiple data sources (Eisenhardt, 1989; Gioia et al., 2013). Thus, the secondary data supports the primary data and enables to get an even better feel of the contexts of the startups as a researcher. The kind of secondary data utilized in this study was chosen because we saw that the team members might socially construct their venture or team in their writing, homepages, news etc. Hence, we believed we could gain accounts on collectiveness in this secondary data. Other kinds of secondary data could have included documents from within the entrepreneurial teams, such as memos, plans etc. but we thought they might be more focused on specific business-related tasks and strategies, for example, than on collectiveness.

The data was gathered in semi-structured thematic interviews, as reflected in the above presentation of the data (Alvesson & Kärreman, 2000; Bryman & Bell, 2007). Specific themes were covered in all of the interviews but the amount and range of questions varied from one interview to another. There was room for additional questions and asking specifications when needed to understand the interviewees' ideas more profoundly or from

another point of view. (Bryman & Bell, 2007) The questions we asked reflected the research questions but did not utilize concepts drawn from entrepreneurship or organizational theory literature (e.g., entrepreneurial opportunity, collectivity).

The first data set was produced with the first year business school students in one-on-one interviews. These kinds of interviews are abundant in interaction and familiar to many (Alvesson & Kärreman, 2000). Private interviews with the students enabled to grasp each student's accounts in-depth which may not have been possible in group interviews. We also saw that group interviews may have promoted accounts toward group action. As we wanted to be open to the students' insights we did not want to create a setting that might have influenced the students' accounts. The interview themes included the basic information of the interviewee, entrepreneurship as a concept, experiences and images related to entrepreneurship, positive and negative sides of entrepreneurship, future plans and the possibility to include entrepreneurship in them, reasons and objectives of becoming an entrepreneur, possible meaning and effects of entrepreneurship to the student, and possible barriers, means, and processes of becoming and being an entrepreneur.

The second data set was gathered in individual and group interviews with core team members of the entrepreneurial teams in the high-technology team startups. We first interviewed all of the team members of each startup individually and then together. By conducting the individual interviews before the group interview, we wanted to ensure that we get independent data first. We utilized different interview forms in the individual and group interviews but both included the same themes in a way that group interviews would provide further elaborated insights through the interactions among the team members. The themes included personal details of the interviewee, the enterprise and its development, the team and its development, values and courses of action of the team, work practices, communication, leadership and management, decision-making, knowledge sharing, ownership, efforts and inputs, and future goals and plans of the team. We also gave the agents a chance to add anything they felt was missing from the questions (i.e., what the interviewees felt is important in studying team entrepreneurship).

The analysis techniques that I and my co-authors use in this study include discourse analysis (Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell et al., 2001) and thematic analysis (Gioia et al., 2013). Discourse analysis is utilized in the Publication 1 and thematic

analysis in the Publications 2 – 4. From the point of view of the whole dissertation, the analysis techniques were chosen because they are especially suitable for identifying new insights compared to already existing knowledge and elaborating new concepts and ideas on a complex contemporary phenomenon (Gioia et al., 2013). I will explicate the details of the analysis techniques and justify their utilization below.

Discourse analysis was chosen because it enables the comparison of micro and macro-level discussions. Discourse analysis enabled us show the need for understanding collectiveness within entrepreneurship by comparing micro and macro-level discussions but we saw that a more systematic technique would serve better in understanding the phenomenon for which we had first claimed space through discourse analysis. Hence, discourse analysis was not used in the other publications because of the shift in the aim, the paradigm, and the actual phenomenon of interest. That is, while no analysis technique is seen better than the other as such, discourse analysis served better in the beginning of this study in providing alternative understandings and systematic thematic analysis in providing further insights into collectiveness of entrepreneurship. Further utilization of thematic analysis also relates to the inductive process where the analysis led into the division and formation of separate publications.

There are several different ways that discourse analysis can be and has been utilized which is why a researcher should be careful in defining what she/he means by discourse and discourse analysis. Discourse is used in this study to represent a set of statements of specific use of language coupled with meaning and produced in close-range contextual, micro situations (Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell et al., 2001). The relationship between text and its context and the degree to which text is linked to meaning are essential in deciding and presenting one's approach to discourse analysis (Alvesson & Kärreman, 2000; Barry, Carroll, & Hansen, 2006). In the first publication of this thesis, I and my colleagues utilize a close-range contextual and tightly-coupled with meaning perspective to discourse analysis (see Alvesson & Kärreman, 2000). Close-range contextuality refers to micro-level contexts. We study social texts that are produced in specific social situations (i.e., the interviews in the business school) (Potter & Wetherell, 1987; van Dijk, 1997; Wetherell et al., 2001). Tightly-coupled with meaning indicates that we perceive language to provide cues for grasping meaning, such as cognitions, feelings, and values (Alvesson & Kärreman, 2000). Further, discourse analysis enables to identify, describe, and understand discourses through

systematic study of texts (Grant & Hardy, 2004). Texts include sets of statements that are coupled with meaning and can be put together in the form of discourses through their integrative pattern and regularity in the use of language (Alvesson & Kärreman, 2000, 2011; Potter & Wetherell, 1987; Wetherell et al., 2001). Because discourses are connected to the choice of words and phrases, the analysis starts with a focus on vocabulary and content in order to identify congruencies in the texts (Potter & Wetherell, 1987; Wetherell et al., 2001). This stage of analysis forms an initial understanding of the discourses (i.e., the linguistic entities that carry specific meaning). Then, we studied the form, contradictions, differences, opposites, variations, and metaphors within and between the discourses more in-depth which enabled to understand the boundaries and the set of rules of each discourse (Potter & Wetherell, 1987). Based on the analysis, we identified separate (although related) discursive entities and made sure that they were firm when compared to one another (cf. Anderson, Drakopoulou Dodd, & Jack, 2009). The discourses were named by their defining linguistic constructs.

Thematic analysis by Gioia et al. (2013) was further chosen because it is especially suitable for elaborating new concepts and ideas in a rigorous way. It provides a systematic and credible technique to conduct an inductive analysis while maintaining the voice of informants (Gioia et al., 2013). We saw that the analysis technique is the most advanced and structured way for inductive analysis in a relatively new topic area. Compared to many other ways of conducting qualitative or thematic analysis, we saw that this technique provides a solid basis for the dissertation as a whole. We also saw that it was suitable for grasping the group data comprehensively and that it provides a versatile understanding that was not necessary to analyze with other techniques at this point of study. The decision to utilize thematic analysis in three publications (2 – 4) is based on the inductive process where the analysis led us in three topics and the division of the publications according to them.

Thematic analysis by Gioia et al. (2013) includes presentation of a 1st order and a 2nd order analysis (see Shapira, 2015; Smets, Jarzabkowski, Burke, & Spee, 2015 for examples of application). The 1st order analysis represents the informants' words while the 2nd order analysis moves into researcher-centric themes and aggregate dimensions. The different levels of analysis enable to make links between the data and new concepts visible. At the first level of the analysis, we listed in an Excel-file all the aspects that seemed relevant when it comes to our research questions. The data was coded so that it was possible to identify the case, the

type of the data (i.e., individual interview, group interview, home pages, Facebook, LinkedIn, Twitter, news, and blogs), and the interviewee (e.g., 123). Then, we revised the 1st order concepts in order to make sure that they were firm and did not overlap too much. At the second level of analysis, we identified similarities and differences among the 1st order concepts and put them into categories which represent the 2nd order themes. This moved the analysis into the theoretical part of it. We continued the analysis by distilling the themes further into 2nd order aggregate dimensions. That is, similar kinds of themes were put together in an aggregate dimension that speaks for both or all of the themes under the dimension. Then, we formed a data structure which provides a graphical presentation (a table) of how the analyses progressed from raw data to the themes and dimensions. We also elaborated figures that present maps of identified concepts and interrelations between them. (Gioia et al., 2013) In addition, we utilized organizational theory literature in our 2nd order analysis in order to enrich insights and support our analysis. I and my co-authors wanted to bring organizational theory concepts into entrepreneurship literature because they might help grasp concepts that are relevant for understanding collectiveness in the context of entrepreneurial teams. Bringing theories of other fields of sciences into new contexts requires carefulness especially towards the context in which the theories are applied (Zahra, 2007) which is why we formed our analysis around entrepreneurship as a phenomenon but applied the organizational theory literature within it.

In addition to empirical analyses, this dissertation includes a theoretical study. The decision to include conceptual work in the dissertation was based on the idea that another field of study that was focused on collective-level phenomena in other contexts might suggest insights into a field of study where collective-level ideas were not yet fully embraced or conceptualized. Thus, conceptual work includes examination of literatures from other fields than the phenomenon of interest and application of the literatures into gaining understanding of the phenomenon of interest (e.g., Katz, 1993; Zahra, 2007). We utilized organizational theory and social-psychology literatures especially on group formation and development (e.g., Gibson, 2001; Klimoski & Mohammed, 1994; Tajfel, 1982; Weick, 1995; Weick & Roberts, 1993) in elaborating a model of collective-level entrepreneurship. This means that we brought concepts from the organizational and social-psychology literature into the context of multi-individual entrepreneurship.

3.4 Assisting theoretical lenses

As presented above, I and my co-authors utilize organizational theory literature in deepening the thematic analyses on the team startups and elaborating a conceptual model. Assisting theoretical lenses refer to the concepts and theories (i.e., a set of concepts and their interrelationships that show why and/or how a phenomenon occurs: Corley & Gioia, 2001) that are relevant in forming a complete and useful analysis. It should be noted that they do not guide analyses deductively but are utilized in the analyses from the data out. I present the main ideas utilized in the publications below.

The analyses (and division of publications) apply ideas on collective phenomena in general (e.g., Morgeson & Hofmann, 1999; Berger & Luckmann, 1966; Giddens, 1984). Morgeson and Hofmann (1999) suggest that the development of any collective construct should begin by understanding the function (or outcome) of a given phenomenon. Hence, our analyses are guided by ideas of entrepreneurship and entrepreneurial processes (i.e., opportunity discovery or creation and realization). This can be seen in the analyses as they embrace entrepreneurial processes and in the division of publications where I and my co-authors start with the beginning of entrepreneurial processes in the Publication 2 and proceed to operating and managing of the team ventures in the Publications 3 and 4.

Morgeson and Hofmann (1999) go further to suggest that researchers should pay attention to interactions among individuals as any collective phenomenon bases on them. Giddens (1984) also suggests that collectives can be seen as systems of interpersonal interactions. The interactions then contribute to emergence of collective structures (i.e., patterns of joint action) in between individuals (Giddens, 1984; Morgeson & Hofmann, 1999). According to Giddens (1984) the structures reflect particular rules and resources (i.e., interpretative schemes, facilities, and norms) that are organized into the properties of social systems and created and used by the actors. Thus, the collective structures emerge in interactions of the individuals but also affect the interactions – called the duality of structure by Giddens (1984). Importantly, understanding the collective structures of a specific collective requires understanding the context within which the individuals involved act (such as entrepreneurship) because the context limits the range of possible interactions that create the structures (Morgeson & Hofmann, 1999; Peters & O'Connor, 1980). In addition, scholars suggest that researchers

should specify the particular structures of a given phenomenon because a number of different structures can result in the same function or outcome (Morgeson & Hofmann, 1999).

3.5 Chronological research process

In this subchapter I present the research process in a chronological order. Yet, it should be noted that this research process has not been linear with clear and separate stages that follow one another. It has been dynamic, overlapping, and accumulative in a way where the specific topics of the study and the understanding of the phenomenon under study have accumulated over time. Also, I do not go through the steps from data to findings here but they are presented in the above Subchapter 3.3 where I present the data and the analysis techniques utilized.

This study began in 2011 by writing the first drafts of the Publication 1. These drafts were presented in several conferences and further revised based on the comments got. The revised version of the paper was submitted to the journal by the end of 2012. Notably, the publication year of the first publication is 2015 although this was the first paper that I started working on. This is mainly because of the response and publication times of academic journals.

While writing the first paper and realizing that there was a need to grasp collectiveness in entrepreneurship in-depth, I planned the dissertation further with my supervisor in 2012. Data collection was begun with the help of a research assistant of that time in 2013. The research assistant conducted interviews in three enterprises and transcribed the data in summer 2013. I collected and transcribed the secondary data of the cases at the same time. I continued interview and secondary data collection and transcription in fall 2013. The transcribed data set from four case startups was complete by the end of the same year. Also in 2013, I wrote the first draft of the Publication 5 inspired by discussions that I had had with the two of my supervisors. The first version of the paper was presented in summer 2014 in a conference and further developed into a journal submission based on comments in 2015.

After data collection from the case startups, I began the actual data analysis from the beginning of 2014. Yet, I see that the analysis begun already in the data collection situations. The data analysis led into three publications for this dissertation. I first worked on one paper but due to the inductive process and the complexity of the phenomenon of interest we decided

with my supervisor that we should divide the topics according to the emerging streams of analyses. Thus, the analyses inductively formed into three publications. In addition, some specific, in-depth themes needed to be excluded at this point of study (i.e., team members' individual contributions to the collective, flexibility and agility of collective structures and collective entrepreneurial action, and the specific positive and negative influences of collectiveness on team performance). Publication 2 was submitted to a journal right away after the first version of it was written in 2015. Publications 3 and 4 were first presented in conferences in 2015 and then developed into journal submissions during the same year. The overview of the publications was written in summer and fall 2015.

3.6 Evaluation of quality and rigor of the study

Qualitative data and analysis should be evaluated differently than traditional, quantitative research (Bryman & Bell, 2007). As I am not using quantitative methods, it is not reasonable to evaluate this study on the same basis and through the same concepts that quantitative work (Pratt, 2009). More specifically, the concepts of reliability and validity are not always appropriate in assessing qualitative work. As reliability is concerned with consistency of measures of a concept when it comes to their stability over time, internal consistency among multiple indicators, and consistency across different observers (Bryman & Bell, 2007) it provides assurance of objectivity for a study but may not be relevant when it comes to an inductive, qualitative study that takes a different view on the conduction of the study, on the phenomenon under study itself, and the role of the researcher. Mainly, it should be acknowledged that the main aim of this study is not to generalize across contexts as such but to embrace contextuality³. Nor is the aim of this study to fade the role of the researcher. Also, as validity is concerned with whether or not an indicator really measures the concept it is supposed to measure (Bryman & Bell, 2007), it might not be a relevant concept to assess a study where the researcher sets out to examine a phenomenon the boundaries of which are unknown, ambiguous, or blurred. Hence, there are more suitable concepts and ideas than reliability and validity to assess the quality and rigor of this study. While there are no generally accepted guidelines through which to evaluate qualitative studies (Eisenhardt, 1989)

³ Publication 5 applies a positivist approach in suggesting hypotheses that can be tested in the future but at the level of the dissertation as a whole interpretation and social construction are embraced.

and although some scholars have suggested a variety of concepts that help assess qualitative research (e.g., Guba & Lincoln, 1994), I utilize two concepts, credibility and convincingness, because they embrace the distinctiveness and characteristics of qualitative study (e.g., inductiveness, interpretation, role of the researcher) and provide insights into the quality and rigor that are relevant for this study in particular. They focus more on the aspects that reflect this research process and help evaluate if the findings of this study come with relevant insights into understanding the phenomenon of interest.

Credibility refers to trustworthiness and feasibility of informants' accounts (Bryman & Bell, 2007) but also to the credibility of interpretation and procedures through which the study is conducted. In this study, we see informants as knowledgeable agents who know what they do and are able to elaborate and tell about their experiences (Gioia et al., 2013). In addition, we have followed recommendation of Gioia et al. (2013) in conducting systematic 1st order and 2nd order analyses that enable to show links between the data and the analysis. We provide data structures that show all 2nd order aggregate dimensions and themes and the 1st order concepts reflecting informants words from which the themes and dimensions are drawn (Gioia et al., 2013). Thus, the data structures present how we got from our data to the findings. We also show raw data in presenting our interpretation of it. We present several extracts as representative data that most effectively illustrate our data and points to the connections of the themes and dimensions to the informants' perceptions and expressions. This procedure also presents a chain of evidence of how we proceeded from the data to the findings. (see Pratt, 2009)

Qualitative studies should also provide rich descriptions of the contexts within which the informants are embedded (Bryman & Bell, 2007; Guba & Lincoln, 1994). Scholars have seen that this helps readers judge if the findings can be applied to other similar kinds of contexts (i.e., if they can be transferred: Guba & Lincoln, 1994). Also, as Flyvbjerg (2006) notes, generalizability depends on the cases and how they have been chosen. Carefully chosen cases through theoretical sampling might provide insights that are applicable in many other contexts (Flyvbjerg, 2006). The contexts of this study were chosen through theoretical sampling (Eisenhardt, 1989) which has been suggested to be appropriate for inductively elaborating theory because they enable rich data through a variety of cases (Pratt, 2009). Yet, it should be noted that generalizability has not been the major concern in this study and even one case or account may offer valuable insights into the world and phenomena. Also, as qualitative

studies are not as interested in generalizability as quantitative studies, I believe that the role of the specification of the context is more about understanding the phenomenon under study in-depth and taking into account that the context affects the form the phenomenon takes and in some other context the phenomenon may take some other specific form. In addition, I and my colleagues employ the secondary data because we wanted to get a good feel of the context through not only in-depth individual and group interviews but documentary data that represent public accounts.

Additionally, we paid attention to avoiding bias toward verification as “a tendency to confirm the researcher’s preconceived notions” (Flyvbjerg, 2006, p. 221). We analyzed the data through several times individually and as a group of two or three researchers and revised our interpretations. This helped us gain multiple perspectives and a rich understanding of the phenomenon. We also presented our interpretations in academic conferences which helped gain insights into the plausibility of our interpretations. Also, some readers could point to that the empirical and conceptual work overlapped in terms of time when the studies were conducted which might have affected our interpretation of the data. While every individual have their preconceived ideas of the world and specific phenomena, we strived for being as open as possible for the data and avoiding too in-depth knowing of the existing literature before the analyses (Gioia et al., 2013). Yet, we wanted to employ the organizational theory related concepts to our analysis of the empirical data so the knowing of that literature supported our analysis.

A major question related to the quality and rigor of qualitative research is the role of the researcher. Qualitative studies are often accused of being too subjective (Bryman & Bell, 2007). The role of the researcher is indeed different in qualitative studies than in quantitative research. Thus, I acknowledge my role as a researcher. My own assumptions especially on individual and collective entrepreneurship before and after this study affect the ways this research is conducted, the analysis, and the reporting of them. Yet, there should be an assumption that the researcher is trustworthy and sincere in one’s aspirations. The aim of this study has been to offer increased understanding of collectiveness within entrepreneurial teams and I and my co-authors suggest our interpretations of it.

Convincingness of the study relates more to the ways and depth that the research is reported and information provided (Eisenhardt, 1989). Qualitative research should provide detailed

descriptions of the methods utilized and the research process especially in terms of how the researcher proceeded from the data to the findings (Guba & Lincoln, 1994; Pratt, 2009). Hence, qualitative research should be transparent. A reader should be able to understand what the researcher did and how she/he came from the data to the findings (Pratt, 2009). In this study, I aim to present detailed and open information of the procedures and processes through which this study was conducted and took shape. I provide detailed information on the analysis techniques in the Subchapter 3.3 and outline the research process in chronological terms in the Subchapter 3.5.

Finally, Eisenhardt (1989) points out that a sign of a high quality case study is new insights and good (i.e., parsimonious, testable, and coherent) theory that emerges at the end of the study. This study suggests definitions and conceptualizations of collectiveness within entrepreneurial teams, and a model of collective entrepreneurship. These suggest new insights into understanding entrepreneurship at the collective level and further develop and test theory in the future.

4. SUMMARY OF THE PUBLICATIONS AND SYNTHESIS OF THE FINDINGS

This section summarizes the Part II of this study that includes the publications and synthesizes the overall findings of this dissertation. While the publications touch on entrepreneurial teams at the collective-level from different points of views and suggest detailed insights into specific questions independently, they help answer the research questions of this dissertation as a whole. I first outline the publications with their objectives and specific findings. Then, I synthesize the findings in answering the research questions of the dissertation.

4.1 Business school students' social construction of entrepreneurship: Claiming space for collective entrepreneurship discourses

4.1.1 Objective

The overall objective of the Publication 1 (Forsström-Tuominen, Jussila, & Kolhinen, 2015) is to map contents of entrepreneurship for entrepreneurship education purposes. Entrepreneurship is seen as a socially constructed phenomenon taking its forms in mobilized discourses (Berger & Luckmann, 1966; Bouchikhi, 1993; Steyaert & Katz, 2004) which is reflected in the research questions asked. The main research question of the article is: what kinds of discourses do the students mobilize in their accounts of their potential entrepreneurial futures? The sub-question is: how do the students construct the concept of entrepreneurship, reasons for entrepreneurship, potential barriers to entrepreneurship, and means of becoming an entrepreneur within each discourse? Answering the above questions makes it possible to discuss how the students' construction of entrepreneurship differs from or is similar with the views on entrepreneurship constructed by researchers and policy-makers at the macro-level (see Alvesson & Kärreman, 2000).

4.1.2 Main findings

I and my co-authors find that students construct entrepreneurship as a multidimensional, collective phenomenon. We identify both traditional and novel entrepreneurial constructs in business, innovation, and lifestyle discourses when constructing entrepreneurship as a phenomenon, the reasons for, and the barriers to entrepreneurship. The discourses are all

permeated by collectiveness as a means of becoming an entrepreneur. The students mobilize collectiveness straightforwardly when talking about their possible, practical entrepreneurial plans and paths. In other words, the students speak in singular form and about their personal motivations and barriers to entrepreneurship when mobilizing the discourses in the thematic settings of entrepreneurship as a concept, reasons for entrepreneurship, and barriers to entrepreneurship but when they turn their attention to the start of entrepreneurial praxis they begin to talk about groups, teams, associates, partners, and shared thinking and action as a basis for their entrepreneurial futures. More specifically, the students mobilize collectiveness as shared, mutual, and equal thinking and action in a group or team of two or more individuals. Hence, the individualized discourses are permeated by collective constructs of means of becoming an entrepreneur. (Forsström-Tuominen et al., 2015)

4.2 The start of team startups: Collective dynamics of initiation and formation of entrepreneurial teams

4.2.1 Objective

The Publication 2 (Forsström-Tuominen & Jussila, 2015) aims at describing and understanding the start of team startups because initiation of entrepreneurial teams, coming together of entrepreneurial team members, and new opportunity creation are seen crucial for team ventures to become viable in the first place and collectiveness to emerge. The publication answers why and how team entrepreneurship is initiated, how teams form, and what kinds of criteria are used in team building.

4.2.2 Main findings

The findings of the study indicate that team entrepreneurship begins with an impetus entailing conditions that may give an impulse or motivate individuals to team entrepreneurship and collectiveness in particular. Thus, the first aggregate dimension, impetus to collectiveness, answers why team entrepreneurship is initiated. More specifically, the impetus includes a collective desire for, collective value orientation to, collective demand for, and collective encouragement to team entrepreneurship. The impetus then concretizes in coming together of entrepreneurial team members. Hence, the second aggregate dimension answers how team entrepreneurship is initiated and what kinds of criteria are used in team building. It includes

the themes ‘initiative for entrepreneurial team and opportunity’, ‘search for team members’, and ‘criteria for team membership’. We find multiple routes to team entrepreneurship that emphasize an individual or a group in the initiation and idea creation but also suggest that the initiation is a versatile, ambiguous, and multi-layered phenomenon where the separation of individual and group focuses is not always possible or appropriate. Potential team members are mainly searched for from direct or indirect acquaintances in an iterative way. Criteria for team membership include not only professional know-how that complements other team members’ know-how and helps carry out business-related tasks but a certain kind of a spirit and attitude. The members need to have drive and persistence. They need to be self-governed and get things done and fixed. Also, they need to feel the business idea as their own. The findings suggest that the start of team entrepreneurship is a versatile and dynamic phenomenon where economic and social-psychological aspects and individual and group approaches intertwine.

4.3 Collective entrepreneurial teams: Structures within high-technology team startups

4.3.1 Objective

The Publication 3 (Forsström-Tuominen, Jussila, & Goel, 2015a) aims at offering an understanding and description of collectivity within the context of entrepreneurial teams. More specifically, the article answers what entrepreneurs’ collectivity comprises of. Generally, collectivity is seen as an interdependent and goal-directed social entity or unit of individuals (Alvesson & Kärreman, 2006; Klimoski & Mohammed, 1994; Morgeson & Hofmann, 1999) characterized by group membership and unity of the members (Tajfel, 1982). More specifically, it is a system of interpersonal interaction (Giddens, 1984) that is characterized by collective structures (i.e., jointly produced behavior patterns) that emerge in interaction between individuals (Giddens, 1984; Morgeson & Hofmann, 1999). Notably, different kinds of collective structures emerge in different contexts (Morgeson & Hofmann, 1999; Peters & O’Connor, 1980).

4.3.2 Main findings

We suggest that entrepreneurs’ collectivity is defined as an entity that reflects horizontal unity and vertical indivisibility of team members, and includes collective idea of business,

collective effort, collective attitudes and motivations, and collective feelings as structures of entrepreneurial teams. The first aggregate dimension is collective entity and it covers the themes ‘horizontal unity’ and ‘vertical indivisibility’. The second aggregate dimension, collective idea of business, includes themes of ‘collective purpose’, ‘shared goals’, and ‘joint strategy’. The third dimension focuses on the team’s work and outcomes. It is named as ‘collective effort’ and includes the themes of ‘collective at work’, ‘collective mind at work’, and ‘collective credit’. The fourth dimension, ‘collective attitudes and motivations’, represents mutual belief, trust, and support. The fifth dimension is ‘collective feelings’ that include the themes of ‘shared sense of being alive, interested, and positive’ and ‘shared sense of affection and happiness’. The above mentioned dimensions and themes form a map of relevant concepts that comprise the entrepreneurs’ collectivity. The components of collectivity within entrepreneurial teams are strongly interlinked and affect one another. The collective structures and the interconnections between them may create specific advantages related to pursuing new opportunities, learning, and collective efficacy.

4.4 Reinforcing collectivity in entrepreneurial actions within startup teams: A multiple-case study

4.4.1 Objective

The Publication 4 (Forsström-Tuominen, Jussila, & Goel, 2015b) aims at describing and understanding the reinforcement of collectivity in entrepreneurial actions and interactions embedded in them within entrepreneurial teams systematically and profoundly. The research questions are how entrepreneurial teams organize their actions in pursuit of entrepreneurial opportunities by multiple individuals together and what kinds of interactions embedded in entrepreneurial action contribute to the collectivity.

4.4.2 Main findings

The findings suggest that collectivity is reinforced through and during (a) joint analysis and planning of entrepreneurial opportunities and strategies, (b) decision-making and realization of the opportunities, and (c) evaluation, feedback, and sanctions of entrepreneurial action. Drawing from the ideas of Giddens’s (1984) on the duality of structure and agency, we see that the dimensions reflect three interrelated structural properties and agencies (signification –

communication, domination – power, legitimation – sanction) that are mediated by particular rules and resources (i.e., interpretative schemes, facilities, and norms) as structures organized into the properties of social systems and used by the actors. The dimension ‘joint analysis and planning of opportunities and strategies’ includes interactions of ‘joint signification of opportunities and strategies’, ‘sharing information, knowledge, and feelings’, and ‘continuous, direct, and open communication’. Decision-making and realization of opportunities and strategies includes interactions related to ‘joint decision-making’, ‘consensus elaboration’, ‘equal and democratic leadership’, and ‘joint effort, responsibility, and credit’. The third dimension, ‘evaluation, feedback, and sanctions’, is divided in themes of ‘informality and non-bureaucracy, and ‘feedback and helping’. The three aggregate dimensions and stages of reinforcement overlap and intertwine as the startups are constantly searching for their direction.

4.5 Collective entrepreneurship: Towards a process model

3.5.1 Objective

The objective of the Publication 5 (Tuominen, Goel, Jussila, & Rantanen, 2014) is to suggest a model of collective-level entrepreneurship. It answers what the collective in entrepreneurship stands for and how entrepreneurship emerges as or transforms into a collective phenomenon in a variety of multi-actor entrepreneurial contexts.

3.5.2 Main findings

We suggest that a collective entrepreneur is a team of multiple (two or more⁴) interdependent actors (e.g., individuals, groups, departments, organizations⁵) engaged in mutual interaction where they come to see themselves and to be seen by others as a social unit, socially construct

⁴ Sometimes a team is supposed to include three or more members but I and my co-authors believe that two is enough to represent a collective of multiple actors. Note that there are also differences whether the term group or team is utilized when deciding how many actors are included. (see Francis & Sandberg, 2000)

⁵ We believe that a collective entrepreneur might include other than individuals (persons) too although interactions always come down to the individual (Morgeson & Hofmann, 1999).

a collective opportunity in which they share goals and outcomes, and amongst whom a socially constructed joint understanding (cognitive and affective structure) emerges in collective (e.g., mutual, democratic) entrepreneurial action. Accordingly, we define that the term collective entrepreneurship should be used when the entrepreneurial process (aimed at economic and social psychological value) involves two or more entrepreneurs (who collectively recognize themselves as entrepreneurs' collective) who produce (amongst the collective entrepreneur) a joint understanding in collective entrepreneurial action. We see that collective entrepreneurship starts with a social connection of two or more actors moderated by the social environment and continues to and overlaps with team formation including construction of interdependence, collective identity, trust, and cohesion. The process includes creation of a collective opportunity moderated by the social environment, collective values, and number of actors involved. Collective opportunity exploitation includes a set of collective entrepreneurial action components that include shared recognition and pursuit of the opportunity, development of shared visions, goals, roles, and outcomes, democratic and equal ownership and control, mutual effort, and decentralized coordination. These action components contribute to the emergence of a joint understanding moderated by task, goal, feedback, and outcome interdependence. Notably, the phases may overlap and are interconnected.

4.6 Answers to the research questions

Drawing from the insights gained from the above summarized publications, I answer the research questions of this dissertation. Table 2 below presents an overview of the answers that are gained from the publications.

Table 3. Answers to the research questions

Research question	Answers	Publications
<p><i>What collectiveness within entrepreneurial teams stands for, what constitutes the basic elements of it, and who are included in it?</i></p>	<ul style="list-style-type: none"> • Interpersonal cognitive and affective structures including elements of collective entity, collective idea of business, collective effort, collective attitudes and motivations, and collective feelings • Entrepreneurial action components characterized by elements of joint signification of opportunities and strategies, sharing information, knowledge and feelings, continuous, direct and open communication, joint decision-making, consensus elaboration, equal and democratic leadership, joint effort, responsibility and credit, informality and non-bureaucracy, and feedback and helping • Includes entrepreneurs (individuals) forming an entrepreneur's collectivity but may also include other actors, such as intra- or inter-organizational teams • Versatility, multi-dimensionality, intertwinedness, dynamism, and malleability 	<p>3 & 4 (1, 2, & 5)</p>
<p><i>Why, how, and when collectiveness emerges or reinforces within entrepreneurial teams?</i></p>	<ul style="list-style-type: none"> • Collectiveness might emerge because it is a powerful tool for overcoming individualized barriers to entrepreneurship. • Collectiveness emerges because of collectively oriented desire for, value orientation to, demand for, and encouragement to team entrepreneurship • Collectiveness emerges and reinforces in processes of joint creation and realization of opportunities including joint analysis and planning of entrepreneurial opportunities and strategies, decision-making and realization of the opportunities, and evaluation, feedback, and sanctions of entrepreneurial action • In interactions of team building and entrepreneurial opportunity elaboration • In entrepreneurial action components specified above 	<p>2 & 4 (1 & 5)</p>
<p><i>Why collectiveness within entrepreneurial teams matters and how it could be developed or supported?</i></p>	<ul style="list-style-type: none"> • As potential future entrepreneurs see entrepreneurship as a collective phenomenon from the point of view of practice, collectiveness should be understood if entrepreneurship is to be supported in the future. Empowerment of students and embracement of group action in entrepreneurship education support collective aspirations of prospective entrepreneurs. • Collectiveness affects opportunity creation and entrepreneurial team building as some opportunities might require collectiveness to emerge or to be realized, and collectiveness might require distinctive criteria for team members. Supported through joint elaboration of ideas and team building activities. • Collectiveness entails specific structures that come with dynamics related to pursuit of opportunities. Supported by acknowledging and strengthening the role of the structures. • Entrepreneurial action is distinctive at the collective-level and contributes to the emergence of the collective structures. Developed and supported by the adoption and embracement of the action components. • Collectiveness might emerge in various organizational contexts. 	<p>1, 2, 3, 4, 5</p>

3.5.2 Answers to the first research question

The first research question is answered mainly in the Publications 3 and 4, and partly in the Publications 1, 2, and 5. The Publication 3 suggests that collectiveness within entrepreneurial teams stands for socially constructed **cognitive and affective structures in-between the team members**. The Publication 4 further suggests that a basic element of collectiveness is **the entrepreneurial action in which the structures are constructed (and continuously re-constructed)**. Hence, collectiveness stands for the structures of the entrepreneurial teams and the joint entrepreneurial action. The Publications 1 and 5 support these insights through finding cognitive and action-related components of collective-level entrepreneurship. Further, the Publication 3 suggests that **the structures of the entrepreneurial teams include** the basic elements of collective entity (horizontal unity and vertical indivisibility), collective idea of business (collective purpose, shared goals, and joint strategy), collective effort (collective at work, collective mind at work, and collective credit), collective attitudes and motivations (mutual belief, trust, and support), and collective feelings (shared sense of being alive, interested, and positive, and shared sense of affection and happiness). The elements of the structures are strongly interlinked (for illustration see Figure 1 in the Publication 3). The findings of the Publication 4 suggest that **the elements of collective entrepreneurial action include** joint signification of opportunities and strategies, sharing information, knowledge and feelings, continuous, direct and open communication, joint decision-making, consensus elaboration, equal and democratic leadership, joint effort, responsibility and credit, informality and non-bureaucracy, and feedback and helping. The Publications 2, 3, and 4 suggest that **the entrepreneurs' collectivity include** individuals who are entrepreneurial team members and have actively taken part in creation, development, and realization of the entrepreneurial opportunity. Yet, the Publication 5 broadens the notion and includes other organizational actors, such as intra- or inter-organizational team agents.

It should also be noted that collectiveness within entrepreneurial teams **does not stand for** individuals thinking alike in a sense that the individuals' perspectives would be lost (see Janis, 1982). Being a part of the entrepreneurs' collective does not mean that individuals would lose their ability or willingness to independent thinking and reasoning when it comes to entrepreneurial decision-making. For example, consensus does not mean that there would not be active exchange of ideas and perspectives (that some may regard as conflicts) but actually everybody is supposed to contribute to the discussions (see the Publications 3 and 4).

Collectiveness does not mean absolute uniformity and disagreement does not mean it is opposed to collectiveness. Thus, the team members do not necessarily think similarly but they share a big picture of business that they together (with their potentially differing perspectives) want to endeavor (see the Publication 3). Also, collectiveness within entrepreneurial teams does not mean that the entrepreneurs would lose themselves in terms of their individual identities, would not have anything else in their lives, or would work 24/7 all the time (see the Publications 3 and 4). Rather, collectiveness embraces, includes, and enables personal aspirations and may even control individual overreactions (e.g., working too long hours at the expense of oneself). In addition, collectiveness does not replace individuals' roles. Not every team member does the same thing in the venture but contributes differently to the joint effort. (see the Publications 3, 4, and 5)

In addition, the Publications 1, 2, and 5 help understand that collectiveness within entrepreneurial teams stands for **versatility, multidimensionality, and intertwinedness** which means that collectiveness is inclusive rather than exclusive when it comes to economic and social-psychological aspects of entrepreneurship and individual and group levels of analysis. Collectiveness may include both traditional and novel dimensions of entrepreneurship (e.g., economic and lifestyle, individual and collective) (see the Publication 1) and shifts in the levels of analysis (from individual to collective and vice versa) (see the Publications 2 and 5). For example, individuals may see entrepreneurship as economic and innovation-focused action for themselves which is traditionally seen individualistic but collectiveness does not exclude these aspects of entrepreneurship but may add to them and enable individual aspirations as long as they are in line with the collective understanding within the team (see the Publication 1). Also, some enterprises may begin highly individualistic but turn into more collective forms through development of the entrepreneurial opportunity, for example. Thus, collectiveness stands for dynamism and malleability ('both and'), rather than stability and dichotomy ('either or'). (see the Publications 2 and 5)

3.5.2 Answers to the second research question

The second question is answered primarily in the Publications 2 and 4, and partly in the Publications 1 and 5. The Publication 1 initially suggests that collectiveness might emerge because it is **a powerful tool for overcoming individualized barriers to entrepreneurship** (e.g., lack of faith in oneself or fear of loneliness). While prospective entrepreneurs recognize

and are aware of many obstacles that relate to the individualized view of the entrepreneur, they see collectiveness as a concrete means of becoming an entrepreneur (see the Publication 1). The Publication 2 further grasps the conditions that serve as reasons for or impulse to collective-level entrepreneurship. Collectiveness within entrepreneurial teams might emerge due to a **collective desire** for entrepreneurship which means that certain kinds of individual experiences in life that are somehow similar amongst the team members and relate to management of organizations in particular might contribute to an aspiration and a willingness to build a business mutually meaningful of their own. Collectiveness also emerges due to **collective value orientation** of the team members. The team members might be internally inclined toward group action and meaning. In addition, collectiveness emerges because teaming up creates **collective encouragement** in a way that anticipation of it motivates team building and actual encouragement contributes to the creation of the opportunity and the team.

Importantly, the findings of the Publication 2 put forward that collectiveness within entrepreneurial teams emerges because, in current highly complex and dynamic business environments, some entrepreneurial opportunities only emerge in interactions among people or some business ideas require further joint elaboration in order to concretize. This idea reflects a **collective demand** for entrepreneurship identified and described in the Publication 2 and supported by the insights of the Publication 5. In addition, the Publication 2 cautiously suggests that entrepreneurship in current high-technology environments might be seen fundamentally collective from the outset as some of the interviewed entrepreneurs saw that entrepreneurial action is done together, not alone. The findings of the Publication 1 also tentatively support this idea as the students oriented toward business see entrepreneurship as a collective phenomenon at the level of practice.

Further, the Publications 2 and 4 suggest that collectiveness emerges and is reinforced **through and during collective opportunity creation and realization processes**. The Publication 2 puts forward that collectiveness emerges in teaming up of people with not only complementing professional know-how but a shared spirit and attitude toward entrepreneurial action, and joint elaboration of business opportunities in particular. The very beginning of collective-level entrepreneurship is a multi-layered and complex process where **individual and group focuses fluctuate and overlap**. Social relationships and connections between people are in a central role in initiating collective-level entrepreneurship because they enable

teaming-up and further elaboration and realization of the opportunity. Findings of the Publication 5 support these suggestions.

The Publication 4 specifies that collectiveness emerges or reinforces in processes of **joint analysis and planning of entrepreneurial opportunities and strategies** (including joint signification of opportunities and strategies, sharing information, knowledge, and feelings, and continuous, direct, and open communication), **decision-making and realization of the opportunities** (including joint decision-making, consensus elaboration, equal and democratic leadership, and joint effort, responsibility, and credit), **and evaluation, feedback, and sanctions of entrepreneurial action** (including informality and non-bureaucracy, and feedback and helping). The Publication 5 also puts forward that collective elaboration and exploitation of the opportunity are crucial for collectiveness to emerge. The Publication 4 suggests that the stages of emergence overlap and intertwine which is supported by the insights of the Publication 5 that suggest that the process is highly dynamic and malleable as it relates to continuously evolving actions and interactions between people. The Publication 5 also sheds light on when collectiveness emerges in particular. **Critical events** include recognition of the collective opportunity by all of the group members together and the decisions made related to the consequent pursuit of the opportunity (e.g., decisions on strategy, team member composition).

3.5.2 Answers to the third research question

The third question is answered in all of the Publications 1 – 5. The Publication 1 points out that collectiveness of entrepreneurship matters because **potential future entrepreneurs perceive entrepreneurship as a collective phenomenon especially from the point of view of practice** which makes collectiveness relevant considering the willingness to support and encourage entrepreneurship at the level of the economy and society. The views of the students differ from the traditional, individualistic notions on entrepreneurship that exclude some individuals and aspects from entrepreneurship. The findings of the Publication 1 tentatively suggest that entrepreneurship might have changed fundamentally from the traditional notions. Yet, it is important to note that while the Publication 1 claims space for collectiveness, it also values the traditional aspects. Thus, collectiveness matters because it does not force entrepreneurship into a mold but leaves room for versatility and richness. This might indicate that embracing collectiveness encourages more people into entrepreneurship (whatever

entrepreneurship means for them). Also, collectiveness matters especially due to its strong linkages to the practice of becoming an entrepreneur. It enables and concretizes entrepreneurship and entrepreneurial aspirations. There is co-power in collectiveness that helps overcome barriers that occur at the individual-level, such as the individuals' doubts on themselves and loneliness (which might reflect the adoption of the individualized macro-discourses of entrepreneurship). Hence, collectiveness is relevant from the students' point of view and lowers the threshold of becoming an entrepreneur. The above insights of the Publication 1 indicate that collectiveness should be understood if entrepreneurship is to be encouraged and supported in the future. Collectiveness among the students and other prospective entrepreneurs can be supported through entrepreneurship education that **embraces the views of the students and empowers them bottom-up**. This could be done through group activities, for example. Mobilizing students leaves room for multiple interpretations of entrepreneurship and gives them the opportunity to create entrepreneurship of their own while valuing traditional aspects. Grouping-up might enable people to find each other and elaborating on opportunities together.

The Publication 2 suggests that collectiveness matters because **entrepreneurial opportunity and team emergence might be distinctive at the collective-level**. Some entrepreneurial opportunities might only come alive through collectiveness. Without joint elaboration and coming together of team members (and constructing a social identity, for example) some opportunities are never born or concretized. The Publication 2 also points out that collectiveness serves to encourage entrepreneurship (see also the Publication 1). In addition, if entrepreneurship is inherently collective or collective to an increasing degree due to the complex environments, understanding collectiveness should be at the top of priority lists for scholars and policy-makers who are interested in entrepreneurship. From a personal aspect of the entrepreneurs, collectiveness might matter because it might provide change and fulfillment for individuals who have had negative experiences in organizational life (desire for collective entrepreneurship). Disappointments in previous organizational work are replaced by meaningful action shared with the other team members. The Publication 2 also puts forward that collectiveness might matter because it is reflected in team formation and the criteria to team membership. While collectiveness at the level of entrepreneurship as a phenomenon is permissive, it seems that the collective form of entrepreneurship requires collective value orientation and orientation to action and outcomes, for example, from the team members. Thus, while the ideas on collectiveness of entrepreneurship leave room for

individuals to realize entrepreneurship as a phenomenon of their own (see also the Publication 1) and through the ways that fit them, joint opportunity creation and teaming up might not be something that everybody should do. Hence, collectiveness should not be regarded as a mantra or compulsion but collectiveness will take its own course through interactions and construction of the opportunity and the team. In order to support the process, connections and interactions between people should be enabled and encouraged.

Drawing from the insights of the Publication 3, collectiveness might matter to **team venture performance due to the collective structures and their interconnections** in particular because they may create advantages for pursuit of the opportunities. I will illustrate this through examining the connections between the structures identified in the Publication 3. First, the entrepreneurial unity and unanimity creates commitment and drive for the team – serving collective efficacy. Second, collective consciousness and understanding promote collective belief in achievement of goals, for example. Third, joint belief encourages achievement of goals and utilization of opportunities. Fourth, joint understanding reflects extended intellectual and memory capacity that enables making use of knowledge and information effectively. Entrepreneurs' collectives are able to utilize large bodies of knowledge in a flexible and efficient manner that is useful in dynamic environments. This can be seen to improve performance of the entrepreneurial teams that represent collectiveness. Fifth, emergence of collectivity creates a favorable context for learning. Sixth, trust reflects respect in a way that nobody takes advantage of one another and where open exchange of individuals' ideas is possible. Seventh, collective feelings serve collective action, shape cognitions, and enrich the lives of the team members. Thus, collectiveness might enable the members together grasp opportunities, learn new knowledge and means through both ration and aesthetics, and achieve high goals and dreams which would not be possible in the case of individual-based ventures (including team ventures with low collectiveness). Also, collectiveness reflects long-term orientation due to joint elaboration of business ideas, for example, that creates enthusiasm and positive feelings among team members toward the team effort and the other team members. Highly individualistic entrepreneurship might not entail such a long-term orientation because individuals are already looking forward to sharing the gains and exiting the enterprise if they see any problems emerging in the business or interpersonal relationships. The collective structures can be created or supported through acknowledging their role and enabling them through the action components presented in the Publication 4.

Importantly, collectiveness matters because **no one can create the collective outcome by oneself** but the outcome is born out of everyone's joint effort, over and above the individual team members. This might mean that collective outcomes are far developed (through the interactions), unique, and difficult to copy which might come with competitive advantages to collective entrepreneurial teams.

Drawing from the findings of the Publication 4, collectiveness matters as it **requires actions related to operation and management that support the structures**. These actions might be different from what is used to in many organizations. Applying the ideas on collectiveness might require a fundamental change in thinking about teams, leadership and management. The above collective structures are developed or supported through collective entrepreneurial action that embraces equality and democracy, joint responsibility and credit, open sharing of information, knowledge, and feelings, informality and non-bureaucracy, and supporting and helping one another. Thus, collectiveness takes a totally different view of individuals and action, and challenges the culture of control and individualism in terms of people thinking and acting only for the good of themselves (see also the Publication 1). Collectiveness takes people as capable and willing to take responsibility and to make an effort. Hence, collectiveness can be supported or developed by applying the collective entrepreneurial action components but it requires a change in thinking about individuals, management and leadership in organizations.

The Publication 5 highlights in particular that collectiveness matters because it is **relevant to various organizational contexts**. Thus, collectiveness within entrepreneurial teams matters because it is an institution-neutral phenomenon (cf. Harper, 2008) the ideas of which can be applied in several contexts that include a team and an entrepreneurial opportunity. The Publication 5 supports the insights of the empirical studies on the importance of social contacts, team formation and joint creation and realization of an entrepreneurial opportunity. It also highlights the role of a joint understanding as a structure defining the entrepreneurs' collectivity. In addition, collectiveness matters because it is a dynamic and malleable phenomenon, not a deterministic one, which enables and concretizes the idea that collectiveness can even be created or supported in the first place. This can be done through coming together of a group that elaborates an opportunity and realizes it in shared, mutual, and decentralized action that contributes to the shared understanding, or in an existing group through applying collective entrepreneurial action.

5. DISCUSSION AND CONCLUSIONS

This final chapter of the dissertation discusses the above presented findings in relation to the existing knowledge of entrepreneurial team literature through elaborating on theoretical and methodological contributions of this study. The chapter also suggests educational, managerial, and policy implications, and concludes by identifying the limitations of this study and making a call for future research.

5.1 Theoretical contributions

Theoretical contributions (or scientific utility) relate to conceptual advancement or specificity of an idea and/or increasing the phenomenon's potential to be operationalized and tested in the future (Corley & Gioia, 2011). This study suggests incremental theoretical insights for the existing entrepreneurial team literature and also some shifts in thinking about entrepreneurial teams at the collective-level of analysis (see Corley & Gioia, 2011).

The main contribution of this study is to move focus clearly to the collective-level in examination of entrepreneurial teams. Attention to collective-level issues is yet relatively uncommon in entrepreneurship and entrepreneurial team literatures (West, 2007). While several scholars have examined entrepreneurial teams and suggested valuable insights into their definitions, formation, composition, and functioning (e.g., Kamm et al., 1990; Kamm & Nurick, 1993; Ruef et al., 2003) the characteristic properties of collective phenomena within the entrepreneurial contexts may have remained unclear (see Morgeson & Hofmann, 1999). This dissertation departs from the individual entrepreneur-focused tradition (see Davidsson & Wiklund, 2001; Sarasvathy, 2001) and goes beyond the social composition of entrepreneurial team members (e.g., Khan et al., 2014, 2015; Ruef et al., 2003; Ucbasaran et al., 2003) and the team initiated or led by an individual entrepreneur (e.g., Carland et al., 2000; Clarysse & Moray, 2004). In doing so, this study suggests that entrepreneurial teams' prominence might relate to the collective-level dynamics. While previous studies have noted that entrepreneurial teams are an omnipresent phenomenon and affect venture performance often positively (Chowdhury, 2005; Francis & Sandberg, 2000; Harper, 2008; Kamm et al., 1990; Watson et al., 1995), this study offers further understanding of the suggestion of Chowdhury (2005) that the examination of individual team members might not offer a versatile enough understanding of entrepreneurial teams' collective capacity. More specifically, this study identifies and

specifies the concepts that relate to the collective capacity of the entrepreneurial teams. In grasping collectiveness, this study opens up perspectives to entrepreneurship that allow versatility and inclusiveness, rather than being exclusive or deterministic (Anderson & Warren, 2011; Calás et al., 2009) in terms of actors, organizations, or entrepreneurial dimensions included (cf. Harper, 2008). These contributions are further presented below.

First, this study serves as an umbrella for the relevant concepts when looking at the entrepreneurial teams from the collective perspective. While scholars have previously offered in-depth insights into various collective constructs within entrepreneurial teams that account for more than the sum of individuals, such as social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009), commitment and cohesion (Watson et al., 1995), and collective cognition (Ensley & Pearce, 2001; Shepherd & Krueger, 2002; West, 2007), the findings of this study specify a map of structures that help grasp collectiveness within entrepreneurial teams (i.e., collective entity including horizontal unity and vertical indivisibility, collective idea of business including collective purpose, shared goals, and joint strategy, collective effort including collective at work, collective mind at work, and collective credit, collective attitudes and motivations including mutual belief, trust, and support, and collective feelings including shared sense of being alive, interested, and positive, and shared sense of affection and happiness). Looking at the identified concepts, it seems that this study suggests a broader perspective on collectiveness within entrepreneurial teams than the existing literature that often focuses on examination of the collective cognition or other collective constructs separately (e.g., Shepherd & Krueger, 2002; West, 2007).

Also, versatility and inclusiveness of collective-level entrepreneurship is reflected in that the structures of entrepreneurs' collectivity go beyond economic aspects while valuing them at the same time. The findings of this dissertation highlight entrepreneurial opportunity and strategy related structures (e.g., West, 2007) but add emphasis on social-psychological dimensions, such as feelings (e.g., Ensley & Pearce, 2001). The understanding of the structures embraces interconnections of the business-related and social-psychological collective structures that may come with positive dynamics as anticipated by Chowdhury (2005). In addition, the findings of this study bring further depth into some of the constructs identified and examined in the existing literature. For example, this study specifies the notion on social unit or entity of entrepreneurial teams (Cohen & Bailey, 1997; Schjoedt & Kraus,

2009) through constructs of horizontal unity and vertical indivisibility – enhancing the role of equality and democracy as root concepts of collectiveness within entrepreneurial teams.

Second, this study highlights the salience of collective entrepreneurial actions in which the structures are constructed, and identifies the kinds of actions that contribute to the team as a whole. Seizing the calls of Lechler (2001), this study offers more knowledge of the kinds of interactions that operate at the level of the entrepreneurial team. While previous studies have understood the relevance of interpersonal interactions for entrepreneurial teams (e.g., Chowdhury, 2005; Lechler, 2001) and examined several interactions and management practices within the teams (e.g., Carland & Carland, 2012; Ensley et al., 2006; Lechler, 2001; Reich, 1987; Schjoedt & Kraus, 2009), this study gathers together the action components that contribute to the collective structures of the entrepreneurial teams. Notably, this study suggests that collective entrepreneurial actions reflect equality and democracy in particular, and thus depart from the lead entrepreneur or entrepreneurial champion ideas on entrepreneurial team functioning (e.g., Carland et al., 2000; Clarysse & Moray, 2004). While the existing literature has recognized shared leadership including flat hierarchy and shared control relevant for entrepreneurial teams (e.g., Ensley et al., 2003; Ensley et al., 2006; Harper, 2008; Reich, 1987; Stewart, 1989), the findings of this study suggest that the dimension forms a cornerstone of entrepreneurial teams that operate at the level of the collective. The findings also offer a more comprehensive picture by including all action components that contribute to the team as a whole, such as sharing information, knowledge and feelings, continuous, direct and open communication, informality and non-bureaucracy, and feedback and helping.

Third, this study examines the collective structures and actions within entrepreneurial teams together (in the same study). The simultaneous examination suggests a more comprehensive picture of entrepreneurial teams than examining them separately and embraces the duality of structures and agency (Giddens, 1984). It might be that the connections between and the duality of the structures and the actions might not have been obvious in the existing literature. For example, West (2007) sees that new venture decisions and actions are preceded by collective cognition (i.e., collective knowledge structure) (see also Ensley & Pearce, 2001; Ensley et al., 2003; Shepherd & Krueger, 2002; Watson et al., 1995). This study suggests a more dynamic and overlapping relationship between the collective structures (such as the shared mental model on business) and collective entrepreneurial actions. This means that they

co-evolve and affect one another the idea of which discourages a linear model (see Giddens, 1984). Yet, the findings of this study also suggest that there is no collective structure without the actions of the individuals which highlights the role of the actions in defining the structures and in creating them.

Fourth, entrepreneurial team literature has given relatively little attention to the primers of team-level entrepreneurship although understanding the factors that are conducive to entrepreneurial teams might be highly valuable in understanding, supporting, and encouraging entrepreneurship. This study is in line with the idea of Harper (2008) that formation of an entrepreneurial team bases on the perception of individuals that together they are concretely able to achieve something that cannot be achieved alone or are able to achieve more than alone which is reflected in this study in the theme named as the collective demand for entrepreneurial team. This study adds that some opportunities may only be created and/or realized by an entrepreneurial team collectively. For example, some opportunities would never emerge without a specific group of individuals who join together as a social unit and co-develop an opportunity in a way that the opportunity reflects the group (e.g., its collective identity). In addition, the findings of this study add that entrepreneurial teams might find their impetus in social-psychological aspects of collective encouragement, desire built from previous social experiences (especially on organizations and leadership), and collective value orientation. Hence, social-psychology has a central role in triggering and initiating entrepreneurship at the team-level in a way that adds to the meaningfulness of the venture to the team members.

Fifth, this study offers insights into entrepreneurial team and opportunity processes and dynamics at the level of the collective. Most importantly, this dissertation suggests taking the entrepreneurial context into account carefully in elaboration of collective-level ideas (see Zahra, 2007). Collectiveness should be understood in the opportunity creation and realization processes from the initiation of the business idea and the team, to elaboration of the opportunity and realization and evaluation of it. This context creates the boundaries of the possible interactions that may contribute to the entrepreneurial teams' collective structures in the processes (see Morgeson & Hofmann, 1999).

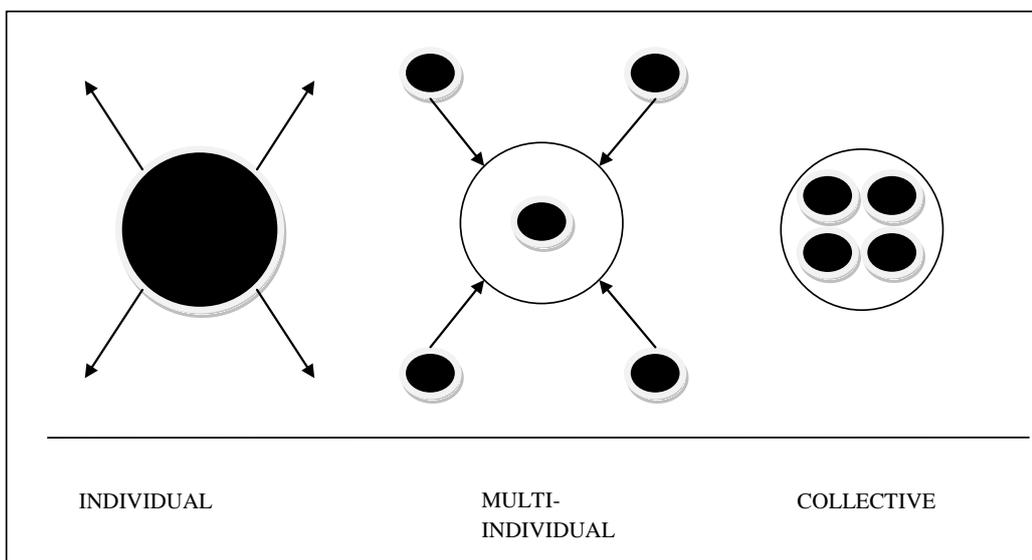
Compared to the existing knowledge that highlights lead entrepreneur and/or group approaches to opportunity creation and team formation (Kamm & Nurick, 1993), this study

suggests a more nuanced view. Based on insiders' interpretations we believe that the emergence of a group and an opportunity might be interrelated and overlap in a way that the two emerge interactively, as anticipated by Kamm et al. (1990). Thus, the findings of this dissertation direct attention to the interactions and interrelations between the opportunity and the team. This intertwinedness might affect the distinctiveness (originality) of the opportunity that emerges which again could serve as a source of advantage for team endeavors. It might not be possible to clearly separate the group and the opportunity in a way that the group and the opportunity reflect one another. Also, the emergence of team entrepreneurship might entail both individual and group situations or phases. For example, an individual's idea may only become an opportunity through joint elaboration by a group. Thus, too strict lines between individual and group-focused perspectives to team initiation and formation (Kamm & Nurick, 1993) should not be drawn but shifts between the levels should be allowed.

In addition, when looking at the entrepreneurial teams from a collective perspective, the findings of this study put forward that the resource and the interpersonal approaches to team composition overlap and intertwine as suggested by Forbes et al. (2006). They both have a central role but their importance might depend on the specific opportunity. Some opportunities might require more focus on the resource-approach (e.g., an opportunity the realization of which requires rare know-how of a specific industry) while other opportunities may encourage a more interpersonal approach (e.g., opportunities that reflect a certain kind of an organizational culture, such as in the mobile game industry). When it comes to the more specific criteria for team membership (e.g., Forbes et al., 2006; Ruef et al., 2003), social-psychological aspects, such as attitudes and action-oriented spirit, are important when it comes to entrepreneurial teams at the collective-level. While existing literature considers interpersonal attraction as one possible basis for team composition (e.g., Kamm & Nurick, 1993), this study adds that members are chosen based on their attitudinal inclinations. This might relate to the idea that everyone should make an effort and contribute to the joint effort which requires a lot from the individuals. Indeed, demands towards potential new team members are high as the members need not only be skillful within a specific field of expertise but have the right attitude and orientation toward action. Notably, the criteria for the team members may be seen to reflect the action components in which the structures of the entrepreneurial teams are built.

Sixth, the findings of this study modestly suggest paying careful attention to the level of analysis chosen in definitions and conceptualizations of entrepreneurial teams and entrepreneurship (see Davidsson & Wiklund, 2001; Morgeson & Hofmann, 1999). It seems that previous studies may have assumed away the differences of collective entrepreneurial teams from solo or individual-focused team ventures (cf. Kamm et al., 1990). Related to the calls of Kamm et al. (1990) and Harper (2008) to understand different kinds of entrepreneurial teams, a major contribution of this study is to suggest that not all entrepreneurial teams may be or should be collective. While the empirical parts of this study have included entrepreneurial teams that reflect collectiveness (the Publications 2, 3, and 4), elaboration of the findings and the conceptual study conducted (the Publication 5) suggest that there may be many kinds of entrepreneurial teams some of which reflect more the individual(s) while others reflect more the collective and that the collectiveness fluctuates from the individual to the collective level. Thus, entrepreneurial teams might differ in the degree to which they reflect collectiveness and the degree of collectiveness might vary along the pathway of a venture. Figure 3 illustrates the distinctions between individual, multi-individual, and collective entrepreneurial teams that are cautiously anticipated based on the findings of this study.

Figure 3. Individual, multi-individual, and collective entrepreneurial teams



The black spots in the Figure 3 represent individuals. Individual-focused entrepreneurship (including entrepreneurial teams that form around the individual and a solo entrepreneur who interacts with one's environment) takes the individual with her/his characteristics, skills, and actions as the center of attention. Entrepreneurial actions, such as elaboration of the entrepreneurial opportunity, are directed from the individual out (towards possible others in the team or the environment). Multi-individual entrepreneurship might entail multiple entrepreneurs but the venture might reflect an individual or the team reflects more the sum of individuals than accounts for over and above them. That is, all individuals contribute to a common goal and are interdependent but they may not come together as a collectivity or might not carry out entrepreneurial actions together (cf. hybrid and nested entrepreneurial teams presented by Harper, 2008). Collective entrepreneurial teams reflect synergies and dynamics of multiple individuals in a way that the collectivity is more than the sum of individuals (cf. emergent entrepreneurial teams by Harper, 2008). Entrepreneurs have developed their entrepreneurs' unit and are equally entrepreneurial, for example. Yet, the individuals are not merged with each other but maintain their individuality although united at the level of in-between individuals in the entrepreneurs' collectivity.

It must be noted that the differences presented above should not be seen as deterministic. Neither is any kind of an entrepreneurial team seen to be better than the other. As previous studies have suggested, entrepreneurial teams are evolving and dynamic, rather than static (e.g., Vanaelst et al., 2006). In the existing literature, the dynamics are often related to team members' entry or exit or the different stages of the venture processes (e.g, Kamm et al., 1990; Kamm & Nurick, 1993; Vanaelst et al., 2006). This study embraces dynamisms not only when it comes to the interactional basis of the whole phenomenon but in terms of shifts in the levels of analysis. Collectiveness does not exclude individuals or indicate that collective entrepreneurship is better than individual entrepreneurship. Rather, this study puts forward that entrepreneurship as a phenomenon varies and fluctuates from the individual to the collective level. While entrepreneurship is many times seen as either individualistic or collective (see Cooney, 2005), the findings of this research suggest that there might emerge different levels of collectiveness within entrepreneurial teams and the degree of collectiveness might vary depending on the phases of entrepreneurial opportunity processes or carrying out a specific task, for example. The multiple levels of analysis and versatility of collective entrepreneurship relate to interesting intersections and complexities (that have a positive tone due to their possible positive effects on venture performance). For example, there emerges a

fascinating intersection related to independence (e.g., self-government and action-orientation toward solving problems by oneself) and interdependence (e.g., collective understanding and effort). While team members are supposed to and empowered to decide and act by themselves in specific situations, there is an underlying joint understanding and effort toward achieving joint outcomes. Hence, individual and collective-level actions intertwine and affect one another.

Researchers have a special role in elaborating collective entrepreneurship through the perspectives they employ to phenomena and the choices they make in regard to definitions and conceptualizations. The insights of this study should affect how entrepreneurial teams are defined, which questions are asked, and which concepts are linked to the phenomenon. In particular, the insights of this study should affect the depth and nuances through which multi-individual entrepreneurship is defined and studied. This study encourages Harper's (2008) idea of agent and institution-neutrality. Moreover, this study suggests that scholars should pay attention to and define clearly the levels of analysis of their research. As collectiveness seems to be an amendable phenomenon there should not be too strict divisions into individual and collective-level entrepreneurship but awareness of the levels of analysis is required. Researchers should be aware of their definitions and approaches to entrepreneurship in general and especially to collective-level entrepreneurship. If researchers study entrepreneurial teams at the collective-level, they could include the collective structures and collective entrepreneurial action components (and their dynamics), in their definitions. This study suggests that entrepreneurial teams at the collective-level should be defined as two or more actors who jointly engage in collective entrepreneurial action in order to pursue an entrepreneurial opportunity that can only be achieved by the actors together and among whom collective entrepreneurial structures emerge.

The findings of this study suggest further grist to develop models that are generalizable across contexts and are predictive as well as diagnostic relative to a variety of outcome variables (e.g., team venture performance). There is no study that would have developed and validated a research instrument for the measurement of collectiveness within entrepreneurial teams in particular. Hence, there is a need to develop such an instrument. This study has described and understood collectiveness, its related concepts (the aggregate dimensions) and the dimensions of the concepts (the themes) that could be used as a basis. In order to operationalize collectiveness within entrepreneurial teams and test its effects on the outcomes, attention

should be paid to the concepts and their contents identified (i.e., the structures and the action components). Measures including multiple indicators are needed to be built based on the concepts. The contents of the concepts help in defining the indicators. Existing literature on group phenomena within organizational concepts could be utilized. Caution should be paid to the exhaustiveness and complexity of the measures due to the substantial aspects included in this study.

5.2 Methodological contributions

Methodological contributions can be seen to relate to the choices and utilization of methods that reflect what matters from the point of view of the phenomenon of interest, not only in terms of methodological rigor but practical relevance (Corley & Gioia, 2011).

Utilizing in-depth qualitative methods contributes to gaining a comprehensive and versatile understanding of a complex and contemporary phenomenon, such as collectiveness within entrepreneurial teams. Moreover, a major methodological contribution of this study is to give voice to the people who experience the phenomenon of interest themselves – in this case the prospective and practicing entrepreneurs – because it helps bring experience-based understanding and evidence of the phenomenon of interest. Giving voice to informants seems central in order to keep the phenomenon that we as researchers study close to the realities of the people who create and live the phenomenon. This is especially important in developing understanding of novel phenomena but also along time as environments might change in a way that may affect the very essence of a phenomenon. For example, entrepreneurship seems to be a different kind of a phenomenon today than in the 20th century or even in the beginning the 21st century. Listening to the informants help gain understandings that are relevant at the time being.

Also, findings of this study are based on careful attention to and specification of the qualitative techniques utilized. The Publication 1 offers clarity to discourse analysis. It specifies the kind of discourse analysis utilized carefully and explains the process from empirical material to the analysis outcomes in detail. Discourse analysis as a rigorous technique gains from such specification because it has been used in a variety of ways in many previous studies which has made the technique seem ambiguous and reduced the credibility of it. The Publications 2 – 4 adopt a systematic way of carrying out and reporting inductive,

qualitative analysis. They show links between the informants' accounts and the analysis made by us researchers. Such technique offers credibility for qualitative studies and is encouraged to be utilized in research of contemporary entrepreneurial phenomena. In such qualitative work, the context of a phenomenon should be carried along carefully (cf. Zahra, 2007). The analyses in this study are formed around the entrepreneurial opportunities and processes related to them in order to offer knowledge relevant to entrepreneurial teams in particular.

In addition, this study brings organizational theory literature into understanding collectiveness within entrepreneurial teams. While other scholars have done the same in examining entrepreneurship and organizational emergence (e.g., Katz, 1993), the literature seems especially relevant in describing and understanding collectiveness in entrepreneurship. I and my co-authors find several relevant concepts from the literature that help in understanding collectiveness within entrepreneurial teams.

When it comes to the paradigms, majority of entrepreneurial team studies has approached the phenomenon through the positivist paradigm (and applied quantitative methods). This might hinder theory development (Gioia & Pitre, 1990) and understanding novel phenomena. This study suggests that existing literatures might gain from multiple paradigms, such as social constructionist and critical realist perspectives along with the positivist perspective. The multi-paradigm approach might be especially relevant, again, considering the need for knowledge that is relevant in the current environments.

Interestingly, this study encourages applying ideas on collectiveness within entrepreneurial teams also into organizing collective work among researchers in carrying out studies through collective efforts. Researchers many times act in ways that can be seen parallel to entrepreneurship, especially in the current environment where universities and business become closer to each other through identifying research opportunities that might lead into research-based spin-offs. Teams of researchers could develop similar kinds of structures between them through collective action that entrepreneurial teams.

5.3 Educational, managerial, and policy implications

Practical utility refers to the theory's potential to be applied into solving problems that managers and other practitioners face (Corley & Gioia, 2011). Giving voice to potential and

practicing entrepreneurs themselves offers a strong connection of the research findings to the practice. As this study supports the idea of Harper (2008) that entrepreneurial teams are and their definitions and conceptualizations should be agent and institution-neutral, this study comes with managerial and policy implications for multiple contexts including educators, entrepreneurs, investors, established organizations and their managers, and policy-makers.

First, as scholars now widely agree that entrepreneurship can be taught (Fayolle, 2008; Kuratko, 2005) and entrepreneurship education should be based on comprehensive theory of entrepreneurship (Fiet, 2001, Katz, 2003; Kuratko, 2005; Mwasalwiba. 2010), this study has implications for entrepreneurship education and educators. The traditional individualistic assumptions on entrepreneurship do not seem to fit entrepreneurship education only by themselves. Framings of entrepreneurship education should gain from the students' accounts. Importantly, collectiveness might serve as a way to overcome barriers to entrepreneurship due to the momentum of collectiveness. Collectiveness seems to be strongly linked to the practice of starting a new venture. Prospective entrepreneurs should be emancipated and there should be room for versatility in entrepreneurial aspirations as entrepreneurship might be different for different people. Entrepreneurship might not include the same dimensions or phases every time. Learning, rather than education, should allow versatility and creativity. I encourage emergent group action in learning situations and empowerment of students themselves.

Second, this study comes with essential implications for management and leadership of new team enterprises and also entrepreneurial teams within established organizations due to the anticipated, several positive dynamics of the collective structures on team and firm performance. Although team performance has not been included in this study as such, collectiveness might explain why some new team ventures excel while others fail (Amason et al., 2006). Thus, collectiveness might shape venture formation and strategy but also venture performance which makes it important to understand if successful collective ventures are to be built and encouraged. The interactions and actions that make an entrepreneurial team collective might make the teams flexible and agile in grasping new entrepreneurial opportunities and reacting to changes in the business environments. In order to build the collective structures that affect firm performance positively, entrepreneurial teams should build a system of interaction that includes individuals' contributions and collective effort. This study brings focus especially on knowledge distribution, power relations, and norms within entrepreneurial teams. Traditional, individualistic and economic ideas on leadership do

not seem to fit collective enterprises or teams. This study encourages active and open communication and knowledge sharing, democracy and equality in entrepreneurial action, and elaboration of a joint understanding. Understanding of collectiveness encourages letting go of the idea of a strong individual leader and embraces empowerment and responsibility of all team members. This of course sets high demands for individuals involved or later recruited in the venture. Also, this study highlights the role of building interpersonal identity and trust among entrepreneurial team members.

Notably, stages of firm development affect emergence of collectiveness. Based on the ideas of organizational theory, the growth of the size of the company might increase hierarchy, for example (e.g., Burns & Stalker, 1961). Thus, one could anticipate that the level of collectiveness decreases when a company grows in terms of people involved. Yet, this might not be the case. Some companies might be able to support collectiveness even when they have grown from an enterprise of three to over hundred or so. These companies might also be highly successful in terms of their performance and profit but also the well-being of their employees. Thus, team members should take care of emergence of collectivity also when the venture is growing if the positive dynamics are to be exploited.

Third, this study suggests insights for venture capitalists and business angels in assessing and taking part in creating successful team ventures. Highly collective ventures often may wish the investor to be involved in the entrepreneurial action also through other than money related efforts. Investors could even become a part of the entrepreneurs' collective. In addition, collectiveness may point to the importance of crowd funding opportunities.

Fourth, startups could lead the way for bigger, established organizations and even public sector. The findings of this study might be especially relevant from the point of view of established organizations since startups might adopt collectiveness naturally from the outset but established organizations might need to reorganize in order to create and innovate in the dynamic environments. As Stewart and Barrick (2000) note, teams have become a building block of organizations. Collective-level entrepreneurship fits the world of continuous change and dynamism, and networked society. Learning the ways of thinking and acting of the startups may help bigger organizations in achieving competitive advantage. There are many dimensions of collectiveness and collective action that could be applied in the contexts of established organizations. A cultural and behavioural change is encouraged. Old structures,

practices, and processes might need to be redesigned. Organization of work could be based on team work. The teams could be operated and managed without structural hierarchy or a solo leader. Team members could be equal and leadership could be democratic. Every individual should contribute, take responsibility and take part in interactions which demands a lot from the individuals and joint management. Open and non-bureaucratic communication is in a key position. Both knowledge and feelings are shared actively. This way, a joint understanding emerges among the team members. Every member is able to react to changes and grasp new opportunities. Thus, the key words for the change in action are participation, democracy and equality, accountability and responsibility, communication and dialogue, consensus, and informality and non-bureaucracy. These ways of action may also promote sustainability and social responsibility through mutual accountability and innovations although they are not the same thing as collectiveness. These ideas are especially relevant for companies in dynamic business environments (e.g., technology, trade) and can be applied to top management and board teams too.

Fourth, this study also has implications for technology professionals. Information and communication technology should be developed in a way that would enable interactions as close to face-to-face situations as possible. Perhaps the informal work rules and development of “technology campuses” in large technology companies such as Google, which allow for seamless changeover of work and play and increased face-to-face interactions, lead to a faster emergence of collectivity within entrepreneurial teams. On the other hand, the insights of this study discourage excessive “telecommuting” practices as counter-productive to development of collectiveness.

Fifth, elaborating ideas to a higher level of analysis, there seems to emerge a collective, positive and encouraging sphere of encouragement and innovative work within the entrepreneurial teams that could be useful in the level of an entire economy. Perhaps, a society could be seen as a big collective endeavour where everyone needs to contribute to the joint effort but also the society and policy need to encourage the contributions, for example. Considering the challenges that many economies are experiencing currently (e.g., unemployment, decreases in international demand), policy-makers could see the startups as a positive example of collective value creation. Also, there might be a demand for new forms of organizations and legislation and policy for them. Policy-makers should embrace versatility and create policies that support collectiveness in entrepreneurship. This would lead into more

creativity and innovation in societies. In addition, while there has been a notion in the general discussion that societies and people are becoming even more individualistic, collectiveness within entrepreneurial teams points to the importance of collective values and action. There might also be seen a value orientation of collective individualism where individual goals are achieved mutually through collective effort (cf. positive goal interdependence: Deutsch, 1949). Hence, once again, collectiveness does not exclude individuals and their aspirations but works for the good of not only the collective but the individuals.

5.4 Limitations and remaining research questions

Just like any other study, this study is not without limitations. From the point of view of the reader, the limitations relate especially to the data and methods utilized. Scholars have varying perceptions of what kind of data is seen valid for analysis and what kind of analysis is seen credible. For example, many pay attention to the amount of the interviews and the quantity of data in this study might be seen limited. Yet, this is a qualitative, inductive study that should not be evaluated through the same criteria as quantitative research. Recurring of certain discursive patterns and themes is seen as a sign of saturated data in this study. Also, the data of this study was internally consistent. In addition, I believe that even a single account of an informant in the context related to the phenomenon of interest might offer insightful and “true” ideas of the phenomenon. Credibility of the study also depends on the interpretation that the reader makes based on the information given by the researcher. I present as detailed information as possible on the research process and procedures, and on the cases. It should also be noted that this study does not seek to offer a final truth about the phenomenon of interest but to take part in the emergence of theory of collectiveness within entrepreneurial teams. The role of the researcher is also essential in this kind of a qualitative study. Many see that qualitative studies rely too much on the interpretation that the researcher makes. This study reflects some of my and my co-authors’ perceptions of the reality, for example, but we analyzed the data through several times both individually and as a group to gain as in-depth and versatile understanding as possible.

A central limitation of this study relates to the cases chosen in terms of diversity between them. The cases seem to represent entrepreneurial teams with relatively high levels of collectiveness and success although also including individuals’ perspectives and roles, for example. Future studies could choose contradictory cases in addition to ideal cases. This

could deepen understanding of collectiveness even further. Another central limitation relates to the industries chosen in this study. The industries represent dynamic and complex environments where collectiveness might be more likely to emerge than in some other industries. Future studies should study collectiveness across several different industries. Research could also be focused more clearly on specific industries. For example, bio industry has specific regulations that may affect how the enterprises are born and developed. In addition, collectiveness within entrepreneurial teams should be studied in other entrepreneurial contexts, such as established organizations and inter-organizational relationships (e.g., alliances and networks). I also encourage interviewing students in different fields of education and in different stages of their studies.

Related to the contexts of the case enterprises, the cases of this study are based in Finland where there is a more collective value orientation than for example in the US. Cultural (and geographical) issues could be grasped more in-depth in future studies. It would be interesting to examine cases from more individualistic cultures like the US or from even more collective cultures than Finland. For example, the interviewees in this study refer to the Swedish culture. I suppose there are differences between collective enterprises in the Scandinavia and the US, for example.

Also, this study focuses on intra-team issues only. Extending the idea on collectiveness to inter-subjective relations with stakeholders (cf. Sarasvathy & Venkataraman, 2011) would be an important and interesting future research avenue. Drawing from the insights of the data, some out-group members, such as investors, might be included in the collective. These groups could be included in the study of collectiveness within entrepreneurial teams in the future.

Importantly, this study offers a cross-sectional understanding. The data from the case startups is gathered within a relatively short period of time. More in-depth understanding of the processes and dynamics of collectiveness is needed. The passing of time should be included in the study of collective entrepreneurship through longitudinal studies. Also, as the collective structures may affect future interactions, research should aim to describe and understand how the collective structures influence interaction over time (see Giddens, 1984; Morgeson & Hofmann, 1999).

In addition, studies could focus on the dimensions and themes found in this study more closely in order to draw an even more in-depth picture of the specific aspects of collectiveness within entrepreneurial teams. All themes and aggregate dimensions could be the focus of a more specific and detailed study. For example, collective feelings deserve more attention in the future. Finally, researchers should study the concepts drawn from organizational theory literature in team entrepreneurship contexts, such as the role of social capital, trust and collective value orientation in the start of entrepreneurial teams.

This study also suggests some more specific research questions to be answered in the future. As collectiveness of entrepreneurship bases on an aim or a goal related to business that cannot be achieved alone, I and my co-authors anticipate that individual and collective entrepreneurial opportunities differ from each other. Future research should distinguish the emergence of individual and collective-level opportunities more clearly. In addition, I encourage studies that would examine the positive and negative effects of the structures and interactions within entrepreneurial teams more specifically. I and my co-authors anticipate that there are several positive consequences of the collective actions and organization but negative effects might also occur. In addition, I suggest that individual contributions (e.g., roles) to the collective effort should be examined particularly. Also, the dynamics and flexibility of collective entrepreneurial action deserves more attention. For example, socially constructed norms and informality suggest a flexible and adaptive way to react to changes in the environments and grasping new opportunities. Future studies could suggest a fine-grained understanding of these dynamics.

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PART II: THE PUBLICATIONS

Publication 1

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**Business school students' social construction of entrepreneurship: Claiming space for
collective entrepreneurship discourses**

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Business school students' social construction of entrepreneurship: Claiming space for collective entrepreneurship discourses



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KEYWORDS

Entrepreneurship education;
Entrepreneurship;
Collective entrepreneurship;
Discourse;
Discourse analysis;
Business school

Abstract Entrepreneurship education (EE) should be based on entrepreneurship theory and implemented in student-focused learning activities. However, entrepreneurship research has an individualized tradition elaborated by scholars and policy-makers. Even if otherwise highly valuable, this framework of entrepreneurship may become a problem for student-oriented learning if the students' construction of entrepreneurship differs from the frames. In this paper, we give voice to business school students in order to map the framings for EE. As we discern business, innovation, and lifestyle discourses that are permeated by collectiveness, we claim space for collective entrepreneurship discourses while respecting the traditional ones. This enrichment might be effective in encouragement of entrepreneurship among students while also being a source of new theoretical insight.

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Introduction

In recent decades, entrepreneurs' contribution to innovations, technological change, productivity growth, effective competition, wealth, and job creation has brought about a growing interest in entrepreneurship education (EE) (Kuratko, 2005; Matlay, 2005; Plaschka & Welsch, 1990). Scholars now agree that people can be trained and encouraged to become entrepreneurs or that entrepreneurship can be fostered and taught (Fayolle, 2008; Kuratko, 2005; Ronstadt,

1987). Yet, just like any other field, the field of EE is not without problems (Béchar & Grégoire, 2005; Fiet, 2001a; Katz, 2003; Kuratko, 2005). Researchers have suggested that effective EE should be based on coherent entrepreneurship theory (Fiet, 2001a; Katz, 2003; Kuratko, 2005; Mwasalwiba, 2010) and put into practice in student-focused learning activities (Fiet, 2001b; Vesper & Gartner, 1997). However, entrepreneurship studies have an individualized tradition mostly elaborated by scholars and policy-makers. Although EE is carried out in many forms (Fiet, 2001a; Jones & Matlay, 2011) and educational activities of various kinds can be considered of high quality (Vesper & Gartner, 1997), the adoption of the underlying presumptions of individualized entrepreneurship may become a problem if it maintains restricted and simplified frameworks for student-oriented encouragement and learning (Fayolle, 2008; Kirby, 2004; Laukkanen, 2000; Sarasvathy & Venkataraman, 2011). Thus, we believe that EE could gain from listening to students'

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accounts of entrepreneurship in constructing the framework for EE.

This study began during an EE research project (see *YVI-project brochure*, 2013) from an inductively gained insight, which we discovered is supported by *Edelman, Manolova, and Brush (2008)*, that we need to enable students to learn the most important knowledge and skills for future entrepreneurs considering the notion of relevance for the students. As relevance is based on people's experiences and backgrounds (*Wilson & Sperber, 2004*) and affects the acceptance of social realities and the perceptions of legitimacy of courses and programs among the students (*Edelman et al., 2008*), we came to understand that there is a growing need for a student-focused interpretation of entrepreneurship in EE. We decided to take a content perspective and to aim at providing comparative analytical frames (cf. *Edelman et al., 2008; Steyaert & Katz, 2004*) through giving voice to students who had begun Bachelor level business school studies and are regarded as potential future entrepreneurs.

In this paper, we view entrepreneurship as a socially constructed phenomenon taking its forms in mobilized discourses (*Berger & Luckmann, 1966; Bouchikhi, 1993; Steyaert & Katz, 2004*). Our main question is: *what kinds of discourses do the students mobilize in their accounts of their potential entrepreneurial futures?* By discourses here we mean organizing frames found in sets of statements of specific use of language coupled with meaning and produced in close-range contextual (i.e., micro) situations (*Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell, Taylor, & Yates, 2001*). We do not move forward without any kind of a structure however. Instead, our analysis focuses around the following sub question: *how do the students construct the concept of entrepreneurship, reasons for entrepreneurship, potential barriers to entrepreneurship, and the means of becoming an entrepreneur within each discourse?* In prior research, reasons for entrepreneurship have been defined as goal-directed factors that motivate individuals to become and remain as entrepreneurs (*Kuratko, Hornsby, & Naffziger, 1997; Naffziger, Hornsby, & Kuratko, 1994*). Barriers have meant factors that could hinder or block entrepreneurship (*Kouriloff, 2000; Sarasvathy, 2004*), while the means of becoming an entrepreneur have been seen as the practice-related decisions and actions that a potential entrepreneur carries out in becoming an entrepreneur (*Gartner, 2008*). Answering the above questions allows us to discuss how the students' construction of entrepreneurship differs from or is similar with the traditional and more recent views of entrepreneurship constructed at the macro-level context of research (see *Alvesson & Kärreman, 2000*).

We utilize discourse analysis as a methodological technique to systematically search for micro-level sets of statements that are found in specific use of language coupled with meaning and can be put together in the form of discourses (*Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell et al., 2001*). Our empirical material consists of texts that are produced in semi-structured thematic interviews (*Alvesson & Kärreman, 2000*) and represent the students' meaning-making of entrepreneurship (*Weick, 1979*).

We believe that the student-focused, discursive perspective is still an underutilized approach in EE but helps

understand the complexities of entrepreneurship (*Nicholson & Anderson, 2005*) in a way that contributes to the relevance of educational content and practice to the students (*Edelman et al., 2008; Fiet, 2001b; Greene, Katz, & Johannisson, 2004*). Analyzing the micro-level educational actors' discursive meaning-making of entrepreneurship serves as a rich approach that differs from conventional perspectives by leaving room for multiple interpretations. The permissiveness of the discussions will not only help enrich the field but may have practical implications as well in the form of students' more readily acceptance of educators' concerns as they are enabled by discourses mobilized bottom-up (cf. *Rojo & van Dijk, 1997*). This serves to democratize not only entrepreneurship but the intellectual framings of it.

In the search for the enrichment of the discussion, we start by examining previous entrepreneurship research that we see as the comparative macro-level discursive framework to our analysis. The examination of the theoretical frame before the analysis might not reflect our inductive approach but is perhaps more common to the readers. Within this review we also discover some recent perspectives of entrepreneurship. Next, we discuss our methodological choices, research process, empirical material, and analysis technique. We also reflect on our own views on entrepreneurship. Then, we analyze the students' accounts and conclude by a call for an embrace of collective entrepreneurship while valuing the traditional individual-level perspectives in EE.

The discursive framework of entrepreneurship education

Many scholars state that the attempts to settle on a precise and single definition of entrepreneurship have resulted in infinite number of arguments and contradictory views (*Gartner, 2001; Howorth, Tempest, & Coupland, 2005; Low, 2001; Shane & Venkataraman, 2000*). However, the abundance of studies does not necessarily indicate diversity in the discussions or mobilized discourses (*Grant & Perren, 2002*). As *Berglund and Johansson (2007: 78)* state, "the ambiguity and vagueness surrounding the meaning of entrepreneurship can in fact be viewed as a challenge to us to throw some light on the taken-for-granted assumptions" (see also *Cooney, 2005; Gartner, 2001; Zahra, 2007*).

The individualistic presumption of entrepreneurship

Entrepreneurship is often defined by asking who the entrepreneur is and what does this person do (*Shane & Venkataraman, 2000*). From the point of view of EE, it is important to examine who and what are included to reflect who and what might be left out (*Calás, Smircich, & Bourne, 2009*).

Probably the most persistent endeavor of entrepreneurship research consists of efforts to understand the entrepreneurial individual (*Sarasvathy, 2004*). This perspective entails that entrepreneurship is predetermined by the individual (*Johannisson, Landström, & Rosenberg, 1998; Low & MacMillan, 1988*) who is guided by one's entrepreneurial nature (*Kets de Vries, 1985*). The research tradition supports a dichotomy (*Gibb, 2002*) where entrepreneurs are treated as a species or a natural kind all members of which are

essentially identical but different in regard to non-entrepreneurs (Berglund & Johansson, 2007; Gartner, 1985; Sarasvathy, 2004).

Numerous studies explicitly or implicitly examine the individual's entrepreneurial characteristics together with the person's attitudes, value orientations, and capabilities that motivate the entrepreneur to act in given ways that the others do not (Calás et al., 2009). Demographical analyses consider gender, age, social status, and education (Amit, Glosten, & Muller, 1993; Carland, Hoy, Boulton, & Carland, 1984; Hessels, van Gelderen, & Thurik, 2008; Naffziger et al., 1994; Shane, Locke, & Collins, 2003; Thornton, 1999). Most dominant are, however, analyses on the psychological personality including traits such as need for achievement, locus of control, belief in one's abilities, willingness to take risks, ability to tolerate uncertainty, independence, activity, attentiveness, initiative, commitment, self-esteem, values, and innovativeness (Amit et al., 1993; Carland et al., 1984; Hessels et al., 2008; Kets de Vries, 1985; Learned, 1992; Low & MacMillan, 1988; Naffziger et al., 1994; Shane et al., 2003; Thornton, 1999). As the profiling has produced the entrepreneurial ideal type, caricature, or stereotype (Anderson & Warren, 2011), educators are expected to identify entrepreneurial characteristics and foster them among the entrepreneurial students (Dutta, Li, & Merenda, 2011). The perspective also supports the instilling of the entrepreneurial attributes and behaviors (Gibb, 2002) or an optimal mindset in the students (Fiet, 2001a). However, a minimal number of people probably identify themselves with all or some of the traits. As Cooney (2005: 227) notices, "there is a generally held perception that becoming an entrepreneur is beyond the capability of most people, since many believe that they do not possess the characteristics of those entrepreneurs". Absence of confidence (Robertson, Collins, Medeira, & Slater, 2003; Roper & Scott, 2009), powerlessness (Goss, 2005; Shane et al., 2003), and insecurity (McMullen & Shepherd, 2006; Shane & Venkataraman, 2000) may inhibit entrepreneurial action in those students who do not find the characteristics in themselves or do not see the characteristics to be a relevant part of entrepreneurship.

The individual-focused research extends to studies where entrepreneurship is seen as a function or an action of the solo entrepreneur (Berglund & Johansson, 2007; Cope, 2005; Gartner, 1985; Howorth et al., 2005; McMullen & Shepherd, 2006). Entrepreneurial action is nowadays mostly linked to new business opportunities (i.e., potential states of value creation Cha & Bae, 2010) (e.g., McMullen & Shepherd, 2006; Shane & Venkataraman, 2000). Other activities may include new venture creation, organizing, and wealth creation. Sub functions of new business formation and operation typically include collecting resources and producing products or services (Gartner, 1985; Katz & Gartner, 1988; Shane & Venkataraman, 2000), taking risks and responsibility (Baumol, 1968; Carland et al., 1984; Gartner, 1985; Hébert & Link, 1989), constructing a strategy and a vision (Learned, 1992), and managing the organization according to profit and growth objectives (Baumol, 1968; Brockhaus, 1980; Hébert & Link, 1989; Hornaday, 1992). Also, venturing is often linked to innovations as new ways of doing things that are mostly seen to be driven by and assessed through economic value (Brockhaus, 1980;

Carland et al., 1984; Hébert & Link, 1989; McMullen & Shepherd, 2006; Schumpeter, 1934).

Cope, Jack, and Rose (2007: 215) point out that "economics is often seen as highly individualistic"—as a tendency to certain kind of characteristic, attitude, or value-related activity of an individual (Tiessen, 1997). The entrepreneurial activities are linked to utility maximization (Douglas & Shepherd, 2002), economic and monetary goals (Amit, MacCrimmon, Zietsma, & Oesch, 2001), ambition (Shane et al., 2003), and social status (Cardon, Wincent, Singh, & Drnovsek, 2009; Carter, Gartner, Shaver, & Gatewood, 2003). The focus on the functions also relies on the notion that the entrepreneur should have knowledge, skills, and capabilities that help to achieve resources, capital, collaborators, and clients (Gartner, 1985; Naffziger et al., 1994), manage risks (Roper & Scott, 2009), and create innovations (Robertson et al., 2003). However, Ogbor (2000) notes that the entrepreneur is supposed to have (according to Schumpeter, 1934: 82) "super-normal qualities of intellect and will" which may not serve to encourage entrepreneurship among students.

Recent views on collectiveness of entrepreneurship

Some scholars have recently acknowledged that entrepreneurship entails efforts of many interrelated actors (Johannisson, 2004; Davidsson & Honig, 2003; Gartner, Shaver, Gatewood, & Katz, 1994; Ruef, Aldrich, & Carter, 2003; Weik, 2011; Yan & Sorenson, 2003) and not only economic but social settings and value dimensions (Chouinard, Desjardins, & Forgues, 2002; Connell, 1999; Cope et al., 2007; Etkowitz & Klofsten, 2005; Johannisson, 2004; Panagiota & Nastis, 2011). The studies have awoken collectiveness in entrepreneurship and manifested it in a variety of ways.

First, entrepreneurship can be considered fundamentally collective as the entrepreneur is embedded in a social and institutional scene of market and industry actors and relations (Auerswald & Branscomb, 2008; Etkowitz & Klofsten, 2005; Johannisson, 2004). Second, for some, collectiveness is about social skills and the role of the entrepreneur as the mobilizer of actors or resources in network or collaborative processes (e.g., Etkowitz, 2003; Johannisson, 2004; Weik, 2011). Third, others link collective entrepreneurship to joint action guided by social values and aiming at collective outcomes, especially to those of co-operatives (e.g., Chouinard et al., 2002; Connell, 1999; Dana & Dana, 2007; Panagiota & Nastis, 2011). Fourth, collective entrepreneurship has been used to refer to a specific mode of governance of co-operatives that is based on joint ownership and control (e.g., Bataille-Chedotel & Huntzinger, 2004). Fifth, others regard collective entrepreneurship as market-driven and contractual collaboration in the form or the structure of multiparty alliances, networks, or vertical integration (e.g., Burress, Cook, & Klein, 2008; Cook & Plunkett, 2006). Collective entrepreneurship has also been examined as collaboration between employees in different organizations highlighting occupational identity in advocating a common cause (Lounsbury, 1998). Sixth, many have taken note of collective entrepreneurship as work and collaboration among employees and teams in established organizations (e.g., Comeche & Loras,

2010; Ribeiro-Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2009; Ribeiro-Soriano & Urbano, 2010; Reich, 1987; dos Santos & Spann, 2011; Stewart, 1989; Toledano, Urbano, & Bernadich, 2010; Yan & Sorenson, 2003).

Finally, scholars have addressed the significance of teams in establishing and managing new business ventures as collective efforts (e.g., Davidsson & Wiklund, 2001; Francis & Sandberg, 2000; Harper, 2008; Kamm, Shuman, Seeger, & Nurick, 1990; Ruef et al., 2003). A team might be formed prior to or after the recognition of an opportunity or the establishment of a business enterprise (Francis & Sandberg, 2000) and it may consist of individuals having hierarchical (Ensley, Carland, & Carland, 2000) or equal ownership (interest) of the same venture (Watson, Ponthieu, & Critelli, 1995). Team-based entrepreneurship has been seen to develop out of shared interests (Harper, 2008; Ruef et al., 2003), thoughts and behavior (Kamm et al., 1990), characteristics, values and beliefs (Ruef et al., 2003), or friendship (De Carolis, Litzky, & Eddleston, 2009). These connections between individuals may enable the individuals to achieve more together than they would achieve alone (Cope et al., 2007). For example, collectiveness may define entrepreneurship positively by overcoming barriers and achieving benefits (De Carolis et al., 2009; Harper, 2008; Kamm et al., 1990), such as creativity and innovativeness (Clarysse & Moray, 2004; De Carolis et al., 2009), information, resources, and networks (De Carolis et al., 2009; Goss, 2005; Shane & Venkataraman, 2000), knowledge and skills (Amit et al., 1993; De Carolis et al., 2009), and professional experience and maturity (Clarysse & Moray, 2004; Kamm et al., 1990; Ruef et al., 2003).

Empirical material and methodology

In this section, we provide an account of the research process and present our discursive approach, empirical material, and analysis technique as well as our own assumptions and ideas about entrepreneurship that in part shape this study.

Research process

The research process originated from following a discussion in years 2008 and 2009 that indicated a willingness of students of Finnish universities and universities of applied sciences to become entrepreneurs together with other students as groups or teams. Such willingness has been later reported for example by Köppä (2010). The discussion made us wonder if the students' viewpoints could be a source of new insights into the academic discourse constructing entrepreneurship in business schools. Also, this study relates to the YVI-project which was funded by the European Social Fund, the Development Centre Opinkirjo, Turku Region Development Centre, the Ministry of Employment and the Economy, and the Foundation for Economic Development. In the project, a virtual learning environment for EE was created and we saw that interpreting students' accounts of entrepreneurship would help us construct an open-minded and flexible framework. (See [YVI-project brochure](#), 2013).

We decided to focus on business school students as business schools are major entrepreneurship educators and their

students represent would-be entrepreneurs. We searched for students who had just begun their Bachelor studies because we wanted to interpret accounts of students who were relatively fresh to the business school context compared to, for example, graduate or doctoral students. Although we believe that the students are not simply objects of EE but participate in the co-construction of entrepreneurship discourses throughout their studies and are capable of reflecting on entrepreneurship by themselves, we also saw that the students' participation in the business related discussions accumulates along time. While the novice students were already involved in business school studies and EE, they had not yet taken part in advanced business or entrepreneurship courses in the business school which we saw as a rich starting point for listening to the students' accounts and later discuss how they relate to the underlying perspectives in business schools.

We chose one-on-one semi-structured thematic interviews for gathering the empirical material because these kinds of interviews are abundant in interaction and familiar to many (Alvesson & Kärreman, 2000). Private interviews seemed to us as a workable method to grasp each student's speech in-depth in a way that may have not been possible in group interviews. In addition, we saw that group interviews could have created a setting biased to group-related accounts. We sent interview requests by email to fifteen novice business school students in a Finnish university reached with the help of a student advisor of the business school in October 2009. By November we had twelve volunteers. We did not search for additional interviewees as our analysis begun to saturate at the point where we had analyzed 10 interviews.

Prior to the interviews, we formed the interview themes. Our main research question is what kinds of discourses the students mobilize in their accounts of their potential entrepreneurial futures. Our sub question is how the students account for entrepreneurship as a concept, reasons for entrepreneurship, barriers to entrepreneurship, and means of becoming an entrepreneur. Thus, our focus in forming the interview themes was on the students' potential entrepreneurial futures within which we wanted to cover the themes that we saw important from the point of view of encouraging and learning of entrepreneurship among students. We divided the themes in 10 entities of questions so that some questions included the same theme. The first entity included the basic information of the interviewee. The other entities covered the themes through asking about entrepreneurship as a concept, experiences and images related to entrepreneurship, positive and negative sides of entrepreneurship, future plans and the possibility to include entrepreneurship in them, reasons and objectives of becoming an entrepreneur, possible meaning and effects of entrepreneurship to the student, and possible barriers, means, and processes of becoming and being an entrepreneur. We asked, for example: what do you think entrepreneurship is, could you tell about your possible future career, do you think you could become an entrepreneur and why, how would entrepreneurship differ from other career options, what would entrepreneurship mean to you, what would be positive about entrepreneurship, what would be negative about entrepreneurship, what kinds of barriers do you think could relate to becoming and being an entrepreneur, and let's imagine you will become an

entrepreneur, would you tell your story. We arranged a pilot interview with a business school student not otherwise related to the study because we wanted to see if the questions would inspire accounts related to the themes. The interview resulted in no changes in the themes or the questions. Noteworthy, semi-structured thematic interviews allow adjustment of the questions and further questions depending on the course of each interview. All of the themes are covered in all of the interviews but sometimes in other words or in several ways. Also, the themes intertwine in the students' accounts and our analysis includes accounts of all of the themes. In addition, we asked explicitly about the phenomena that we were interested in. Some scholars may see that explicit questions bias interaction but we believe that we can understand the phenomena of interest only by asking about the phenomena. We also believe that the interviewees are capable of making their voice heard while reflecting on and being critical toward the questions and the phenomena under question.

The interviews were carried out in November 2009. Day-wise, all of the interviews were conducted within common office hours. The language of the interviews was Finnish (mother tongue of the interviewer and the interviewees). The interviewer (the first author) was a 23 years old female graduate student in the business school. She did not know any of the interviewees beforehand. The interviewees were of age 18 to 23 years. All of them had begun their business studies in fall 2009. Out of 12 interviewees, seven were men and five were women. All but one of them were secondary school graduates and two of them had studied business in universities of applied sciences. The men had finished army (compulsory for men in Finland) before beginning their business school studies. None of the interviewees considered themselves as entrepreneurs but all but one of them had one or more entrepreneurs in their family or friends. Some of the students had worked in the enterprises of their family members and seen entrepreneurship closely.

We recorded and transcribed the interviews. The transcriptions were made within a week after each interview in detail including pauses and emphasis, sounds, interruptions, changes of topic, and blur in speech. We present the conventions in [Appendix A](#). The transcriptions were made in Finnish first and translated into English after the analysis. We began the analysis in December 2009 and continued intensively till February 2010. Then, we also began to pay attention to the macro-constructs of entrepreneurship literature. However, our analysis continued to take shape along the writing process where we continually returned to our empirical material and the extant studies, and reflected on the effects of our methodological approach on our analysis.

Our discursive approach, empirical material, and analysis

When it comes to our empirical material and analysis, we see discourses as organizing frames based in sets of statements of close-range contextual use of language coupled with meaning (Alvesson & Kärreman, 2000; Potter & Wetherell, 1987; Wetherell et al., 2001). The relationship between the text and its context is essential in defining one's discursive approach

(Alvesson & Kärreman, 2000; Barry, Carroll, & Hansen, 2006). We take a micro-level contextual perspective on discourses which indicates that we study social text (i.e., speech) in a specific social situation (Potter & Wetherell, 1987; van Dijk, 1997; Wetherell et al., 2001)—our context being the interviews in the business school. We acknowledge that the interviews were not only conducted physically in the business school but the participants in the interaction were members and students of the school. They were most probably interested in business related issues and had taken part in business related discussions with their teachers and fellow students. We also see that our material was produced in interaction between the interviewer and the interviewee but we do not include the one-on-one interaction systematically in our analysis because we wanted to focus on the students' meaning-making. We take a tightly coupled meaning-focus to the concept of discourse (Alvesson & Kärreman, 2000) and believe that the language used by the students provides clues for understanding meanings such as cognitions, feelings, values, beliefs, or practices. Thus, we connect discourses to sense-making (Weick, 1979) where discourses mediate the phenomenon in question (Seymour-Smith, Wetherell, & Phoenix, 2002).

Our empirical material represents the students' accounts of their possible entrepreneurial futures. We utilize discourse analysis as a methodological technique that enables the identification, description, and understanding of discursive entities through systematic study of the text (Grant & Hardy, 2004). We see that the text includes sets of statements coupled with meaning that form an infinite number of descriptions but can be identified in the form of discourses through their integrative pattern and regularity in specific use of language (Alvesson & Kärreman, 2000; Alvesson & Kärreman, 2011; Potter & Wetherell, 1987; Wetherell et al., 2001). We began the analysis by focusing on the vocabulary and the content as discourses order the selection of words and phrases (Potter & Wetherell, 1987; Wetherell et al., 2001). We discerned congruencies in language forming a preliminary understanding of discursive dimensions by classification. Then, we examined the form, differences, opposites, variations, contradictions, and metaphors in the accounts and the possible discourses. (cf. Anderson, Drakopoulou Dodd, & Jack, 2009) Thus, we formed an understanding of the code and the set of rules of each discourse (Potter & Wetherell, 1987). Basing on our analysis, we identified separable discursive entities and revised that they were firm when compared to one another (cf. Anderson et al., 2009). This revision resulted in deleting one of the original four discourses (i.e., employment discourse) because of the lack of support when examined from the different thematic angles. Three discourses, however, were strongly identifiable and named according to their defining linguistic constructs. Also, we believe that it is possible to find connections from the micro-level analysis to more general patterns where some generalizations between similar contexts can be made (moving us toward a meso-level perspective Alvesson & Kärreman, 2000). However, although we move from the details of the text to broader entities we strive to keep balance between the linguistic details and the muscularity of the discourses (Alvesson & Kärreman, 2011) through acknowledging the micro-level context and the scope of interpretation.

In addition to the micro-context, we believe that the micro-level accounts need to be discussed within macro-level discourses (Hardy & Grant, 2012) because the micro-level approach does not eliminate the potential influence of macro-discourses to micro-discourses and the other way around. Macro-level context refers to system-related, universal situations (Alvesson & Kärreman, 2000; see also Foucault, 1972; Fairclough, 2003). This is partly why the micro-level empirical material analyzed in the empirical parts of this paper is situated dialogically to the macro-level discourse of entrepreneurship research in the discussion section (cf. Nyberg & Mueller, 2009). Thus, we take the macro-level discourses as a comparative frame to our micro-level empirical analysis in discussing our analysis outcomes.

Our assumptions and ideas about entrepreneurship

Our approach to discourses entails reflexivity on our own assumptions and ideas about individual and collective entrepreneurship before and after this study. At a more general level, our paradigmatic frame represents symbolic-interpretivism that highlights different understandings, interpretations, and meanings of reality (Hatch, 1997; Mead, 1934; Calás et al., 2009). The perspective influenced our motivation to begin this study and the setting we chose. We thought that entrepreneurship and EE literature could gain from discursive views and study of extant literature through critical, although cautious, lenses because functional positivist paradigms of researchers and policy-makers seemed to us to dominate the fields. More specifically, we wanted to give voice to students' accounts. Our approach is connected to the micro-perspective to discourses that affected how we understood the empirical material and the analysis we have made (see Barry et al., 2006).

Before this particular study, we had gained an insight that people's conceptions of entrepreneurship and entrepreneurial aspirations might be collective more broadly than the predominant assumptions lead to expect. This insight was based on our own experiences and interpretations of students' and teachers' conceptions, entrepreneurs' and managers' action, and our reading of previous research before

Extract from interview 9

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|-------------------|---|
| 1. Interviewer: | What do <u>you</u> think (.) entrepreneurship is |
| 2. Interviewee 9: | (2) What it <u>is</u> (2) |
| 3. Interviewer: | how could you define it |
| 4. Interviewee 9: | Well it's may maybe like (2) seeking for wealth for oneself (.) erm by doing like |
| 5. | Business |
-

this study. The first author has only got into researching entrepreneurship and co-operatives in-depth during and after this particular study but had already taken part in discussions about collective entrepreneurship with the second author. The second author had been involved with research on co-operatives and thereby got interested by the discussions going on around youngsters' desire for collective

entrepreneurship. The third author had studied social construction of entrepreneurship in university settings and EE especially from teacher's point of view which encouraged our methodological point of view. This study has encouraged us to promote collective conceptualizations of entrepreneurship while also understanding the value of traditional, individualistic views more profoundly.

Dimensions of collective entrepreneurship

We discern both traditional and novel entrepreneurial constructs in business, innovation, and lifestyle discourses that are all permeated by collectiveness as a means of becoming an entrepreneur. The discourses emerge simultaneously and are overlapping without one excluding the other which signals compatibility and consistency of the constructs and points to flexibility of entrepreneurship. Interestingly, however, the students mobilize collectiveness straightforwardly when talking about their possible, practical entrepreneurial plans and paths. The students speak in singular form and about their personal motivations and barriers to entrepreneurship when mobilizing the discourses in the thematic settings of entrepreneurship as a concept, reasons for entrepreneurship, and barriers to entrepreneurship but when they turn their attention to the start of entrepreneurial praxis they begin to talk about groups, teams, associates, partners, and shared thinking and action as a basis for their entrepreneurial futures. Next, we will present the discursive dimensions and consider the themes of entrepreneurship itself, reasons, and barriers within them. Only then, we will examine the collectiveness in the means-related accounts.

Business discourse

Business discourse bases on vocabulary and notions of money, financial success, and new enterprises. The students construct the concept of entrepreneurship as doing business which is seen equal to what is achieved through it in personal, economic terms. The below extract illustrates our analysis.

The interviewee defines entrepreneurship as seeking for personal financial gains through business activity. This instrumentality of entrepreneurship moves the analysis toward the reasons for entrepreneurship. The students construct externally rewarding reasons which represent financial benefits and prosperity, and social status and recognition greater compared to paid job.

Extract from interview 9

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|--------------------|--|
| 1. Interviewer: | Right (.) so (.) are there any <u>objectives</u> related to entrepreneurship (.) or is it just |
| 2. | About that (<i>business development</i>) work |
| 3. Interviewer 9: | (2) Well it depends (.) probably a little on which industry you're in that if you go (1) |
| 4. | And want to save the world then maybe there is a bigger objective |
| 5. Interviewer: | right |
| 6. Interviewer 9: | But if you strive for getting oneself (.) Mercedes-Benzenes (laughs) |
| 7. Interviewer: | {(Laughs) then the objective is the Mercedes or |
| 8. Interviewee 9: | {Can be a bit different this |
| 9. | Well maybe there can be many reasons but (.) |
| 10. Interviewer: | Right |
| 11. Interviewee 9: | I'd rather say that I'd go after money but (laughter) someone could have a humane |
| 12. | Objective |
-

The interviewee would strive after money and refers to it simply and straightforwardly but also constructs success and symbolic recognition through external symbols, such as cars. Interestingly, the student constructs financial reasons in relation to humane objectives. Although business discourse is characterized by cold and rough expressions, it leaves room for multiple, even humane goals. Further, the students construct reasons for entrepreneurship to relate to an organizational status and role.

Extract from interview 8

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- | | |
|--------------------|--|
| 1. Interviewer: | Could you tell your <u>own</u> story as an entrepreneur |
| 2. Interviewee 8: | Own story as an entrepreneur |
| 3. Interviewer: | mm |
| 4. Interviewee 8: | Well if I would endeavor then maybe it would be this kind of (.) taking control over |
| 5. | My <u>dad's</u> firm |
| 6. Interviewer: | mm |
| 7. Interviewee 8: | Like a succession and I'd straight ahead start to employ more people in that firm that |
| 8. | I don't really now especially that I study business and |
| 9. Interviewer: | mm |
| 10. Interviewee 8: | Most probably finance so accounting so I myself could more probably act in a |
| 11. | <u>Managing</u> position than in the field |
-

The interviewee links the position of the entrepreneur to a possibility to avoid traditional hierarchy and slow career promotion. She or he constructs a story from one's dad's small firm to a growing enterprise through employing people and acting in a managing position. The interviewee utilizes the words "in the field" here and "grass root level" in other parts of the interview. The expressions refer to working-class, practical work that is not included in the action of the entrepreneur. Rather, the student would act in a managing position that is linked to studying business (finance, accounting). Besides great opportunities for financial gains and status, the students account for downsides reflecting insecurity related to considerable financial risks and practical issues in starting a business enterprise.

Extract from interview 10

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|---------------------|---|
| 1. Interviewer: | What about what could be <u>negative</u> about it (<i>entrepreneurship</i>) |
| 2. | {Compared to other (<i>options</i>) |
| 3. Interviewee 10: | {Well maybe |
| 4. | Well maybe probably just those risks |
| 5. Interviewer: | Right |
| 6. Interviewee 10: | Especially in the beginning when you start an enterprise and like money must be |
| 7. | Invested in it and like |
| 8. Interviewer: | Right |
| 9. Interviewee 10: | Then if it isn't profitable |
| 10. Interviewer: | mm |
| 11. Interviewee 10: | Then assets are like (.) lost in it |
-

The interviewee constructs the financial success of the enterprise as a win or lose situation through uncertainty and insecurity related to financial risks that are linked to the early phases of endeavoring. Establishing an enterprise requires investments of money and the assets can be lost if the enterprise is not profitable. In addition, the availability of capital in the first place is constructed as a major barrier in venturing. The students do not identify any reliable sources of funding. The next extract illustrates the funding related barriers thoroughly from the point of view of a student who had seen entrepreneurship closely in the family.

Extract from interview 6:

1. Interviewer:	What about (.) the (.) difficulties related to entrepreneurship (.) have you
2.	Faced any or have you heard that somebody has faced barriers or
3.	Difficulties related to entrepreneurship
4. Interviewee 6:	(1) Do you mean difficulties in becoming an entrepreneur or in the situation when
5.	You are an entrepreneur
6. Interviewer:	Right (.) barriers of (.) becoming an entrepreneur and then difficulties (.) in the
7.	Process
8. Interviewee 6:	Well it's at least (.) what comes to my mind
9. Interviewer:	mm
10. Interviewee 6:	These basic investment calculations things
11. Interviewer:	Right
12. Interviewee 6:	There is the beginning of course when you have to get (.) for example if you are
13.	Going to produce something (.) you have to purchase the machinery and else and
14.	Have to go to the bank with your cap in hand to ask loan for the thing
15. Interviewer:	mm right
16. Interviewee 6:	And especially at that point where people don't really have any equity to put in (1)
17. Interviewer:	mm
18. Interviewee 6:	So it's a (.) big threshold or big or very big influence of the opinion of the bank
19.	Manager on how (.) the bank (.) gets involved or some other investor and (1)
20. Interviewer:	mm
21. Interviewee 6:	(1) Then what
22.	(2) Well this of course that (2) just that (.) you have to have guarantees and
23.	Something like that everything else that
24. Interviewer:	Right
25. Interviewee 6:	Collaterals and others come into my mind first

The interviewee constructs even a bit humiliated picture of the entrepreneur who has to go with a cap in her or his hand to speak with a bank manager whose opinion has a big influence on whether a new enterprise is being funded or not. The barrier also includes other funding related issues, such as guarantees and collaterals that the entrepreneur should have when applying for funding. In addition to the financial barriers, the students construct the obstacles as even more practical issues related to the establishment of a new firm.

Extract from interview 2

1. Interviewer:	Well if (.) you think that you would become an entrepreneur (.) if you think about the
2.	Situation (.) what kinds of barriers could you <u>believe</u> that there would be right before
3.	And in the very beginning
4. Interviewee 2:	Well (.) personally what I've been thinking about and just this basic stuff that is
5.	How you establish that enterprise what includes in it
6. Interviewer:	mm
7. Interviewee 2:	Creating the establishment papers and all of these and how then (.) the tax
8.	Responsibilities (sigh) and how the bookkeeping so could I myself take care and
9.	These like practical issues
10. Interviewer:	Right
11. Interviewee 2:	– But (.) in principle (how) everything else around it (<i>an idea</i>) constructs
12.	How does it go according to all of the regulations norms
13. Interviewer:	Right
14. Interviewee 2:	So it is probably the biggest threshold like establish the enterprise itself

In the cut section in line 11, the interviewee mobilizes innovation discourse and then constructs the practical issues of establishing an enterprise as the greatest obstacle of entrepreneurship. The interviewee constructs the practical issues as a continuing list of different rules and norms where insecurity is found on the probability that the student can handle all of them by oneself.

Innovation discourse

Innovation discourse bases on vocabulary and notions of ideas and creation. The students point out innovation as unequivocally defining entrepreneurship. In addition, the innovation discourse is linked to the business discourse through speaking about ideas through which to gain wealth. However, we perceive that the innovation discourse represents a dimension of its own because the students construct innovational creation and novel ideas as such defining and motivating for entrepreneurship although the ideas might be implemented through business-oriented action and spur financial success.

Extract from interview 8

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|-------------------|---|
| 1. Interviewer: | Now let's begin from what do <u>you</u> think entrepreneurship is |
| 2. Interviewee 8: | Well entrepreneurship in my opinion is (2) how I could put it in summary (1) well |
| 3. | Maybe like creating new |
| 4. Interviewer: | mm |
| 5. | Doing something that others haven't done or in which there's room in the market |
| 6. Interviewer: | Right |
| 7. Interviewee 8: | Doing something potential |
-

The interviewee defines entrepreneurship as creating something new in terms of novelty, market, and potential related to them. However, the weight is more in creation than business. Further, the innovation discourse is most seemingly mobilized when the students speak about the reasons for entrepreneurship. The interviewees base the starting point of entrepreneurship on new ideas that lead to entrepreneurship automatically.

Extract from interview 7:

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- | | |
|-------------------|--|
| 1. Interviewer: | Well what (.) what kinds of things would affect your decision (.) of becoming an |
| 2. | Entrepreneur |
| 3. Interviewee 7: | – And then if (.) a lamp would light up in my head and I'll get that super idea that I |
| 4. | Want to carry out – |
-

In line 3, the interviewee speaks about reasons related to unemployment. In line 4, the student goes on to the business discourse ("and thinking that one could get rich through it"). Innovation is constructed as a great idea that appears suddenly out of a moment of a brainwave constructing innovation as rare, unique, abstract, or scientific. The students also use words like "magnificent intelligent idea" and "perpetual motion machine". Also, the decision to become an entrepreneur is constructed to relate to willingness of carrying the idea out, not for example necessity. This kind of activity is somewhat connected to the personality of the entrepreneur as in the next extract.

Extract from interview 3

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- | | |
|--------------------|---|
| 1. Interviewer: | So you feel that marketing is the field of your own |
| 2. Interviewee 3: | I have always felt like that |
| 3. Interviewer: | Right |
| 4. Interviewee 3: | I'm like outgoing and inn innovative and creative so I have quite a lot of ideas that I |
| 5. | Feel that I need to use somewhere (laughs) |
| 6. | – |
| 7. Interviewer: | Are there some other (.) personal features that you think (.) would benefit you |
| 8. Interviewee 3: | Personality that I don't go along with the dominant route |
| 9. Interviewer: | mm |
| 10. Interviewee 3: | But try to break the constructs and develop like that new mixed soup and would get |
| 11. | The best out of that |
-

In the cut section in line 6, the interviewer and the interviewee talk about innovation and creativeness as characteristics of the entrepreneur. The possibility to utilize creativeness usefully through entrepreneurship implies a connection of entrepreneurship to personality characteristics, skills, or inclinations and to the unconventional route of entrepreneurs. However, innovation itself is not constructed as self-evident. The students speak about barriers of becoming an entrepreneur seemingly simply through the lack of innovation and its market potential.

Extract from interview 9

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- | | |
|-------------------|--|
| 1. Interviewer: | Well if <u>you</u> would become an entrepreneur (.) <u>what kinds</u> of barriers do you think |
| 2. | Could occur (.) in the beginning and maybe (.) maybe later on |
| 3. Interviewee 9: | – Maybe then this kind (.) another (2) mm in which industries there would be room |
| 4. | And would you invent anything new (.) new anymore (.) to the market over there |
-

In the cut part, the interviewee mobilizes business discourse. The interviewee reflects on innovation in relation to the distant and saturated market. Creating something new is constructed as uncertain and unlikely in regard to the ideas that already exist somewhere out there. Doubt is strong in most of the accounts and the existing market leaves the potential entrepreneur with insecurity.

Lifestyle discourse

When the students mobilize lifestyle discourse, freedom and self fulfillment construct entrepreneurship to reflect an important and unique way of life that is meaningful in itself. Entrepreneurship represents a way of thinking, being, and acting in accordance to what is felt meaningful personally by the entrepreneur. The life and behavior of entrepreneurs are separated from the conventional routes where, however, entrepreneurship entails differing potential for everyone in accordance to their interests and aspirations.

Extract from interview 3

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- | | |
|-------------------|---|
| 1. Interviewer: | First I would ask what you think entrepreneurship is |
| 2. Interviewee 3: | (2) In my opinion entrepreneurship is that when one starts doing something that |
| 3. | Feels like a good thing |
| 5. Interviewer: | Right |
| 6. Interviewee 3: | And with which one feels that one can get along in life |
-

Entrepreneurship is defined through feelings and getting along in life. Being meaningful behavior in itself, getting along – rather than getting rich – is constructed to be satisfying. However, the thing that feels good may be different for different people.

Extract from interview 3

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- | | |
|-------------------|--|
| 1. Interviewer: | If you think further to the future how would it proceed (1) in ten twenty or even |
| 2. | Thirty years |
| 3. | – So that it wouldn't just be that you establish it and then walk away quickly |
| 4. Interviewer: | Right |
| 5. Interviewee 3: | But I would be there all the time and develop and be part of it so that it would be like |
| 6: | A work of life or well I think that entrepreneurship is a way of life after all |
-

In the line 3, the cut text includes business discourse after which the interviewee constructs business as a lifestyle. The student explains that the business that she or he would create would be a long range project of which the entrepreneur would be a central part. In the last line, the interviewee defines entrepreneurship as a way of life that is linked to spending time and putting effort in entrepreneurship. The students also speak about, for example, being the master of one's own work and life that are based on the skills and the interests of the individual. Because this behavior is defined as something that the entrepreneur feels good about, the personality of the individual can be seen in the background of entrepreneurship. In addition, lifestyle discourse includes accounts of the around the clock characteristics of entrepreneurship and especially on the work related to entrepreneurship.

Extract from interview 9

1. Interviewer:	Would it (<i>entrepreneurship</i>) have any (.) <u>con</u> crete impacts on your life and on every
2.	(.) Every <u>day</u> for example
3. Interviewee 9:	Well I think that I could be stressed quite easily (laughs)
4. Interviewer:	(Laughs) right (.) is there anything else then
5. Interviewee 9:	Life would probably (.) roll around it quite much (.)
6. Interviewer:	Right
7. Interviewee 9:	So that (.) it's quite different from being in an eight to four job (.)
8. Interviewer:	mm
9. Interviewer 9:	Going home than (.) if you have an own enterprise then (.) you have to think about it
10.	A little after the working hours then

Differentiating entrepreneurship from paid job, the students reflect on entrepreneurship as the center of the entrepreneur's life without conventional working hours. The interviewee above utilizes a comparison to eight to four job. There is no going home from entrepreneurship but it is carried along all the time.

As the definitional accounts indicate, the students speak about internal reasons for entrepreneurship. They reflect interests and visions, routes of life, and self-fulfillment highlighting satisfaction and enjoyment that entrepreneurship enables.

Extract from interview 3

1. Interviewer:	What would be the reasons for you (<i>for becoming an entrepreneur</i>)
2. Interviewee 3:	Probably that I could <u>myself</u> do something that I feel <u>good</u> about and I could fulfill
3.	Myself in that
4. Interviewer:	mm
5. Interviewee 3:	And it would be like (.) because when I do it myself I know what I get
6. Interviewer:	mm
7. Interviewee 3:	And I would be responsible for myself then I could find the guilty one from there
8.	(Laughter) and then
9. Interviewer:	(Laughter) that would be easy
10. Interviewee 3:	Yeah and then that's like (2) in a way it's the own doing that is made possible in it
11.	That may be the most important

The interviewee forms reasons through doing something that one feels good about and that is enabled by entrepreneurship as a meaningful entity of the entrepreneur's life. Entrepreneurship is based on feelings and action that make it possible to go along the route that the entrepreneur has chosen. Interestingly, due to the strong reasons, the students do not mobilize discourses on barriers of entrepreneurship when they mobilize the lifestyle discourse specifically. The students do speak about thoughts and feelings related to insecurity, courage, and stressing but they are not truly connected to the lifestyle discourse. Thus, the strong motivation intertwined in lifestyle defines the emergence of entrepreneurship strongly when compared to the other discourses.

Collectiveness of entrepreneurship

Although we have so far seen that the students utilize the singular form and speak about individual aspirations and barriers, it is highly interesting to realize that when turning their attention to their possible practical entrepreneurial plans and paths – especially in the beginning of their potential entrepreneurial futures – the students mobilize collectiveness as a shared, mutual, and equal thinking and action in a group or team of two or more persons. This forms the basis of our main message. The individualized discourses are permeated by the collective constructs of means of becoming an entrepreneur.

Extract from interview 12

1. Interviewer:	You said that it would help if you had entrepreneurs (.) in the family but would there
2.	Be anything else that could help in the endeavoring phase
3. Interviewee 12:	Well I would not probably establish (<i>a firm</i>) all <u>alone</u> so that someone like (2)
4.	Someone else too (.) so kind of if you alone go and establish so if the weak point
5.	Surprises you and nobody understands what you're talking about if you want to like
6.	Open up to someone like

-
7. {Aaargh this too is like this (with an empathizing tone) (laughter)
 8. Interviewer: {Right (laughter)
 9. Interviewee 12: Then (1) usually I've noticed that if a person doesn't know about that thing that if
 10. You have it hard
 11. Interviewer: Mm
 12. Interviewee 12: Then they're like yeah yeah yeah yeah but they don't like really think about it more
 13. Than that
 14. Interviewer: Right
 15. Interviewee 12: So it would have to be that I would establish it with someone so
 16. Then there would be someone to whom (.) there would be like little support
-

Collective entrepreneurship unites two (or more) persons who understand the same entrepreneurial entity in similar ways and support each other in ways that make entrepreneurship not only achievable but mutually shared. Thus, collectiveness draws boundaries around an in-group of entrepreneurs who understand the endeavor (and the world) in ways that the outsiders do not. Hence, collectiveness might not be so much about formal or explicit agreements but a sense of us and a shared mindset.

Extract from interview 12

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1. Interviewer: Right (.) if you would then become an entrepreneur and you had this (.) person with
 2. You then who would (.) the person be (1) you thought that it would be one person or
 3. Interviewee 12: Right
 4. Interviewer: Who would that be
 5. Interviewee 12: I'd like a friend that there would be someone same spirited it would have to be
 6. Interviewer: Right
 7. Interviewee 12: I would not take just anybody
-

Collectiveness is constructed around friendship that is specified through the shared spirit that just anybody would not have. In the next extract, the interviewer and the interviewee had talked about the barriers of becoming an entrepreneur and the interviewee had spontaneously said that it would be a barrier if there would not be other willing persons to become entrepreneurs with the interviewee because the interviewee would not want to endeavor alone (moving the account from barriers to means).

Extract from interview 11

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1. Interviewer: You said that you would not want to endeavor alone
 2. {So
 3. Interviewee 11: {Yes
 4. Interviewer: If you would become an entrepreneur do you think that you would
 5. More likely become an entrepreneur with somebody
 6. Interviewee 11: Yes I would like to share the responsibility so that I wouldn't be all alone attached
 7. To that
 8. Interviewer: {Right
 9. Interviewee 11: {To that little thing
 10. Interviewer: Right
 11. Interviewee 11: (1) Or not so little thing but like that (laughter)
 12. Interviewer: Right (laughter) so that the group
 14. {Would help
 15. Interviewee 11: {It would help
 16. Because there would be like support from them so that would be a great thing
 17. Interviewer: So who would they be (.) do you think that the persons would be friends or same
 18. Aged or
 19. Interviewee 11: Well I don't think that age matters but they would have the same thoughts same
 20. Vision on that which I'd have too that would be the most important thing
 21. Interviewer: Right okay
 22. Interviewee 11: It doesn't matter if they're friends or not well maybe it would be easier with friends
 23. To (.) get along but like that
-

The interviewee constructs shared thoughts and visions defining and uniting the group of entrepreneurs. Thoughts refer to the abstract parts of entrepreneurship but visions reflect more concrete objectives related to the entrepreneurial activity. In addition, the students mobilize other reasoning in collectiveness. Although collectiveness is not so much formal or explicit, it does have implications for practice. In the next extract, the interviewee had talked about taking over one's father's enterprise and how it would quickly proceed and expand when the interviewer had asked the interviewee to tell one's potential story of becoming an entrepreneur.

Extract from interview 8

1. Interviewer:	But would you need any help (<i>in becoming an entrepreneur</i>)
2. Interviewee 8:	Well I don't know maybe (rapidly spoken) (.) I would need in the beginning maybe
3.	In a way that (.) I've been however working so long with these (1) bigger (<i>business</i>)
4.	Persons
5. Interviewer:	mm
6. Interviewee 8:	I'd have the <u>contacts</u> already actually
7. Interviewer:	Right
8. Interviewee 8:	But I'd in principle <u>most willingly</u> take someone (.) like in a <u>group</u> as a partner to do
9. Interviewer:	Right
10. Interviewee 8:	Than endeavoring alone (rapidly spoken) taking all the responsibility (.) that does not
11. Interviewer:	Right
12.	That (.) doesn't sound good (laughter)
13. Interviewer:	Right (laughter) so would there be too much responsibility for one person
14. Interviewee 8:	Yeah and also it would always be good to have someone as support like someone
15.	Who <u>understands</u> things

The interviewee accounts that she or he would already have the needed contacts (networks) for endeavoring. However, the student describes partners to share responsibility and support each other through understanding. Other students also account for partners to bring in security and reducing risks. In the below extract, significant benefits are constructed to the probability of innovation where a group is even constructed as a necessary prerequisite for innovation.

Extract from interview 4

1. Interviewer:	Would you tell your <u>own</u> story as an entrepreneur how would it begin and
2.	How would it proceed
3. Interviewee 4:	If I like here just this kind
4.	{Like a story (laughter)
5. Interviewer:	{Yes (laughter)
6. Interviewee 4:	Okay (.) erm now that I'd studied and I'd graduated and I'd been working for a while
7. Interviewer:	mm
8. Interviewee 4:	I hope that I'd meet brilliant <u>partners</u> that would have the same (.) like the idea in
9.	Principle and then (.) or actually we would develop the idea together

The interviewee constructs entrepreneurship as dependent on meeting partners, first constructing the partners to have the same idea but then specifying that the idea would be developed together as an equally involving activity. In the next extract, the interviewee had spontaneously talked about finding a partner to work with as an entrepreneur and the related benefits.

Extract from interview 4

1. Interviewer:	Are there any other benefits than sharing the responsibility (2)
2.	{Or some other thoughts
3. Interviewee	{Well
4. Interviewee 4:	Well there are the points of views of the others that someone else gives (.) like it is
5.	Not only the vision of yourself because then (1) then it's in principle much more (2)
6.	Or you get much more <u>out</u> of it if there is like two persons who suggest
7. Interviewer:	Right
8. Interviewee 4:	And then it can become a common influence that can be much better than the idea (.)
9.	Of a single person

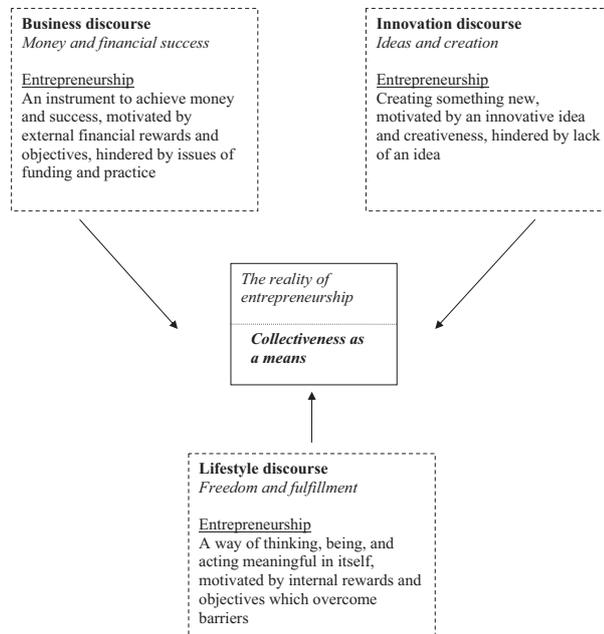


Fig. 1 Summary of the analysis outcomes.

Working together is formed by the student as having a better outcome than working alone when it comes to points of views and ideas. Thus, in addition to enabling entrepreneurship in the first place, the accounts of the students support the construction of inter-principal connections that are based on the possibility to achieve more than if one acts alone.

Summarizing the analysis outcomes

Fig. 1 draws the constructs of collective entrepreneurship in business, innovation, and lifestyle entrepreneurship. The discourses are based on different elements that guide the forming of the concept as well as the mobilized factors that are put in use as a help to consider the reasons for and the obstacles to entrepreneurship. All of the discourses are connected by collectiveness when talking about potential entrepreneurial praxis.

Discussion and conclusions

Compared to the macro-level discursive framework of EE, the business and innovation discourses reflect the traditional, individualized notions of entrepreneurship. When mobilizing the business discourse, the students construct entrepreneurship through the framings of individualized economic action (Berglund & Johansson, 2007; Cope, 2005; Steyaert & Katz, 2004). They account for personal or enterprise-related externally rewarding reasons, such as financial benefits and

prosperity (Amit et al., 2001), and social status and recognition greater compared to paid job (Cardon et al., 2009; Carter et al., 2003). The students construct barriers reflecting insecurity with considerable financial and practical issues in starting a business enterprise (Gartner, 1985; Hessels et al., 2008; Naffziger et al., 1994; Roper & Scott, 2009). When mobilizing the innovation discourse, the students construct entrepreneurship through innovation determining the phenomenon (Brockhaus, 1980; Carland et al., 1984; Hébert & Link, 1989; McMullen & Shepherd, 2006; Robertson et al., 2003). Entrepreneurship is based on creating brilliant new ideas (Amit et al., 2001) and utilizing the entrepreneur's creativity usefully (Cope, 2005; Gartner, 1985).

The lifestyle discourse departs somewhat from the above traditional perspectives although it relies on individualized notions. In the students' accounts, lifestyle relates to the personality of the entrepreneur but even more to the person's interests and hobbies that would encourage entrepreneurship (Gibb, 2002). It reflects interests and visions, routes of life (Kamm et al., 1990), and self-fulfillment (Cassar, 2007; Hessels et al., 2008; Rindova, Barry, & Ketchen, 2009; van Gelderen & Jansen, 2006). Thus, lifestyle can be seen to emancipate the individual to decide on her or his work and life (Rindova et al., 2009) in a way where business or innovation dimensions may or may not be essential.

Notably, the individualized notions do not exclude collectiveness of entrepreneurship. Rather, collectiveness may enable entrepreneurship in practice. There is momentum in collectiveness that moves entrepreneurial aspirations a step further toward the means of realizing them. More

specifically, our understanding on the individualized versus collective-level construction of entrepreneurship among young business school students may reflect collectiveness as a way to overcome individualized barriers of becoming an entrepreneur, such as risks, responsibility, and loneliness. This may relate to the findings of studies on young people's attitudes toward entrepreneurship. On the one hand, young people see entrepreneurship as a heroic economic and societal activity of, for example, job creation (Sowmya, Majumdar, & Gallant, 2010). On the other hand, they often perceive themselves as lacking entrepreneurial competence and self-confidence probably because they do not have (encouraging) past experiences in entrepreneurship (Harris & Gibson, 2008). For example, young people often see that they might not be capable of taking risks (Ahn, 2010), creating innovations, acquiring funding, or knowing the techniques to endeavor (Sowmya et al., 2010). In our study, the students account for the same heroic reasons for entrepreneurship and the same competence and confidence related barriers as in the attitudes-related studies. Collectiveness might be a way to realize individual entrepreneurial aspirations that would not be put into practice otherwise due to the barriers. The interviewees talk about mutuality that determines entrepreneurship positively through achieving benefits and overcoming barriers (De Carolis et al., 2009; Harper, 2008; Kamm et al., 1990). They account for groups that are based on like-mindedness (De Carolis et al., 2009; Ruef et al., 2003) and shared values, interests, ideas, thoughts, and visions of the group members (Harper, 2008; Ruef et al., 2003). It seems to us that collectiveness is not just about the summation of individuals but a shared understanding. In addition, collectiveness might serve as a possibility to achieve more collectively than alone (Cope et al., 2007). Thus, collective entrepreneurship comes down to the individual in the first place but the outcomes of collective action might extend beyond individual entrepreneurship (see Morgeson & Hofmann, 1999).

The individual versus collective-level constructs may also illustrate generally accepted, formal speech and practically wanted, informal speech. The individual-level discourses link to the widely acknowledged macro-discourses while the collective-level means related accounts are more in touch with concretes. Thus, the meaning included in the individualized versus collective notions might be different when it comes to the level of relevance for the students. In addition, cultural discourses may be reflected in the individual versus collective discourse mobilization. Although we strive to be context-specific the discourses that the students mobilize are affected by macro-level, cultural discourses beyond the business school context. Entrepreneurship is often constructed as heroic and economic action of a lonesome entrepreneur. Increasingly we find that entrepreneurship is also constructed as a team-based endeavor although the enthusiasm around team start-ups (especially in Mobile Game Industry) has seemingly grown in Finland since the time of conducting the interviews. We see that the discourses discerned in this study reflect these cultural discourses. Indeed, the discourses might reflect the struggles that are going on in the cultural discourses on individual versus collective entrepreneurship.

We conclude that the framings of EE in business school contexts could gain from the students' view. In our material,

individualized entrepreneurship discourses are intertwined with the recent, collective perspectives. More specifically, we bring forth that the business school students mobilize collectivity when speaking about the means of becoming an entrepreneur although they utilize individual-level notions when reflecting on entrepreneurship as a concept, reasons for, and barriers to entrepreneurship. Thus, there are considerable discursive intersections and tension related to the different discursive dimensions and collectiveness. Due to the intertwinedness of the traditional and novel discourses, we consider that entrepreneurship as a phenomenon should be constructed as something that embraces a variety of dimensions or combinations of them that may represent entrepreneurship by themselves, simultaneously, and with different kinds of accentuations.

The discursive intersections and tensions inspire us to reflect especially on collective entrepreneurship. It might be constructed as a highly dynamic and malleable phenomenon that embraces individual and collective level constructs. Thus, a variety of entrepreneurial phenomena could reflect collective entrepreneurship which leaves room for individualistic notions even in the collective entrepreneurship construct by embracing complexity and multi-layeredness.

Scholarly and policy implications

The enrichment of thinking and approach puts forward an exciting endeavor for scholars, educators, and policy makers (Sarasvathy & Venkataraman, 2011). First, researchers have a role in elaborating collective entrepreneurship. We see that the development continues from the ways we (researchers) approach the phenomenon, the choices we make in definitions, conceptualizations, and methodology, and the language we use. By entering bold discussions we not only create a spacious environment that supports students' varying entrepreneurial potential but advance the progress of EE (Low, 2001).

Second, as effective and high-quality EE should be relevant to students' perceptions (Edelman et al., 2008; Fiet, 2001b; Hytti, Stenholm, Heinonen, & Seikkula-Leino, 2010; Vesper & Gartner, 1997), EE could be characterized by entrepreneurial empowerment that values student-based contents. In addition, educational practice could reflect emergent learning (Rae, 2010) and challenge the culture of control (Gibb, 2002). As Fiet (2001b) argues, students should acquire entrepreneurial competency through practice with theory-based activities that engage the students through interesting theoretical contents. Educators could act as coaches or mentors rather than lecturers or evaluators (Fiet, 2001b). Importantly, we believe that the student-based and emergent learning should embrace the complexity and collectiveness of entrepreneurship. We see that it is highly valuable for students to learn the traditional theoretical structures of entrepreneurship including the individualized notions. For example, as the students construct the establishment of an enterprise and the related practical issues as a central component of entrepreneurship, traditional learning activities, such as business plans, could serve as a way for learning (Honig, 2004). However, we also argue that the entrepreneurial lifestyle could lead the way to empowerment and collective behavior could affect

educational outcomes positively (cf. Hytti et al., 2010). Indeed, entrepreneurial praxis seems to reflect collectiveness for the students which should be taken into account in the learning activities. Further, we believe that the quality of EE should be assessed through in-depth measures, such as students' entrepreneurial capabilities, course design, and educational experience of the students (Vesper & Gartner, 1997).

Third, we think that entrepreneurial learning policies can become a remarkable tool for shaping societies and promoting social change (cf. Calás et al., 2009). Entrepreneurial empowerment should guide policies to support entrepreneurial versatility and could even be considered as a basis for tackling social exclusion, although beyond the scope of this paper. However, appropriate institutions, models, curriculum design, and modes of governance can stimulate and encourage entrepreneurial potential and behavior which also helps to direct resources more effectively (Gibb, 2000).

Credibility and limitations

The credibility and limitations of our study relate especially to our empirical material and methodological view and techniques (see Bluhm, Harman, Lee, & Mitchell, 2011). First, it varies greatly what kind of empirical material is seen as valid for analysis. Each discursively oriented method has different approaches to contextuality, locality, and rhetoric that lead to distinct empirical forms of study (see Silverman, 2001). For example, the macro-perspective to discourses is more often used by scholars than the micro-perspective (Hardy & Grant, 2012). Our empirical material consists of 12 in-depth interviews which is likely to be considered limited by many scholars. However, we take a close-range contextual approach to discourses in our analysis. When assessing the quality of our empirical material, we see that the strong recurring of certain language practices and meaning making processes can be seen as a sign of sufficient empirical material in this kind of a mapping study. Also, we acknowledge that the empirical material is produced in interaction where we have been involved with the interviewees and our analysis is affected by our own assumptions and ideas on which we reflect in the methodology section of this paper.

Second, the credibility of our study relates to the interpretation of the reader who is to decide whether to use it on the basis of the documentation given about the study and argumentation (Webster & Mertova, 2007). At the same time, we note that the purpose of the interpretation produced throughout this study is not to reach some final picture about entrepreneurship (discourses). Quite the contrary, we see that the definition of discourses used here represents the ever-molding and contextual emergence of social constructs.

Future research

Because entrepreneurship should be open for alternative discursive interpretations and the identified discourses depend on the analysis made by researchers (Steyaert & Katz, 2004), it would be fruitful to complete similar kinds of studies by different researchers in the future. Also, as this study concerns only a certain, small group of students, it would be interesting to study social construction among

different groups of students or among educators—and across a variety of contexts. In this study, some interesting discourses may be omitted due to the research setting. For example, one of such discourses could be a social entrepreneurship discourse (Spear, 2006; Tracey & Phillips, 2007). It would also be interesting to examine the social construction of entrepreneurship in group interviews especially to grasp the collective facet. Furthermore, the variety of textual, discourse, and conversation analysis methods is great and each of them has a special way of orientation in reading of texts that could be utilized in the future.

This study also posits more specific questions to be answered in the future. It is worth examining what is the origin and political context of the individual discourse as language mediates the working of power and power structure (Ogbor, 2000). The conventional discourse on entrepreneurship reinforces and reifies a mode of knowledge production that serves as an ordering force in societies but it is not usually scrutinized what lies beyond the social texts and functions (Alvesson & Kärreman, 2000). Critical inquiry of mobilized social discourses will enable us to be skeptical about beliefs concerning universal truth and knowledge including the language that is taken for granted and serves legitimation for contemporary societies (Ogbor, 2000).

Importantly, inspiring research possibilities remain in mapping collective entrepreneurship. We identify collectiveness as a construct of means of becoming an entrepreneur and see that collective entrepreneurship may include an economic entity but also interpersonal meanings and relationships. We also see that individualized notions are included in the collective entrepreneurship construct. To take a step further, future research should grasp the construct of collective entrepreneurship in more depth and detail. It should also specify the distinctions between collective and other entrepreneurship. This examination of collective entrepreneurship will add to our understanding of the construction of entrepreneurship as a phenomenon and of entrepreneurial learning.

Appendix A. Conventions

(.)	Short pause
(1)	Pause in seconds
{	Overlapping accounts
<u>Text</u>	Emphasis
(Text)	Spelling, pronunciation, or other sounds (e.g., laughter, fast speech)
(Text)	A missing word (e.g., in connection to accounts not presented in the extract)
—	Text cut for presentation purposes (i.e., text related to other discourses)

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The start of team startups: Collective dynamics of initiation and formation of entrepreneurial teams

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The Start of Team Startups: Collective Dynamics of Initiation and Formation of Entrepreneurial Teams

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ABSTRACT

This study aims to describe and understand the start of team startups through answering why and how team entrepreneurship (TE) is initiated, how teams form, and what kinds of criteria are used in team building. While the above topics have been examined by many scholars before, we are especially interested in the collective-level aspects of the start and aim to elaborate new insights into understanding the very first steps of initiating entrepreneurship at the collective level. In order to reach these aims, we employ a qualitative multiple-case study approach and analyze individual and group interview data from four high-technology team startups through inductive thematic analysis. We find that TE starts with an impetus including a collective desire, collective value orientation, collective demand, and collective encouragement to TE. The impetus concretizes in coming together of team members where one or some need to take initiative to form the team, and search for members with specific criteria for membership that include not only formal but social-psychological dimensions. At the collective-level, the start is a versatile and dynamic phenomenon where individual and group levels of analysis and economic and social-psychological aspects intertwine. The study contributes to researchers, prospective entrepreneurs, investors, policy-makers, and educators' understanding of TE as a multilayered phenomenon that involves social-psychological dimensions. It suggests that emergence of entrepreneurial opportunities at the collective-level might be distinctive from the individual-level.

Keywords: team entrepreneurship, entrepreneurial team, multiple-case study, thematic analysis

INTRODUCTION

Most scholars now agree that entrepreneurial teams are a relevant phenomenon and matter to firm performance (e.g., Gartner, Shaver, Gatewood, & Katz, 1994; Harper, 2008; Kamm & Nurick, 1993; Kamm, Shuman, Seeger, & Nurick, 1990; Ruef, Aldrich, & Carter, 2003). An entrepreneurial team is defined as two or more individuals who jointly develop and establish a business in which they have an equity ownership (Carland, Hoy, Boulton, & Carland, 1984; Cooney, 2005; Kamm et al., 1990), build engagement and commitment to common goals and outcomes, and come to see themselves as a social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009). Several scholars have been especially interested in the initiation and formation of the entrepreneurial teams (e.g., Aldrich & Kim, 2007; Clarysse & Moray, 2004; Kamm & Nurick, 1993). Existing studies provide answers to the questions of what conditions are conducive to the collective discovery or creation of entrepreneurial opportunities and the emergence of the teams (e.g., Harper, 2008), what is the relationship between the opportunity and team formation (Harper, 2008; Kamm & Nurick, 1993; Kamm et al., 1990), and why and how certain kinds of individuals come together to form an entrepreneurial team (e.g., Clarysse & Moray, 2004; Ensley, Carland, & Carland, 2000). Many scholars focus on characteristics, skills, and know-how of entrepreneurial team members in explaining team formation (e.g., Ensley et al., 2000; Ruef et al., 2003; Visintin & Pittino, 2014) while others apply social network theory to explain entrepreneurial team emergence (e.g., Aldrich & Kim, 2007). Some investigate more specifically the stages of team venture formation when it comes to the relationship of the business idea and coming together of team members (e.g., Clarysse & Moray, 2004; Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006; Kamm & Nurick, 1993).

While several scholars have examined the emergence of TE and taken a variety of perspectives, the literature on the start of TE is yet fragmented. Considering that initiation of the teams and coming together of team members are crucial for the team ventures to become viable in the first place and lay ground for further development and success of the business, it would be important to elaborate an integrative picture that grasps the many facets of entrepreneurial team initiation and formation. This would help understand and study entrepreneurial teams even further. In addition, the focus of existing studies has often been on the individual team members. For example, the characteristics and skills of the individuals in regard to their heterogeneity or homogeneity have been seen central to team composition (e.g., Ruef et al., 2003). Taking into account that TE represents a collective phenomenon that

bases on group membership interactions (see Morgeson & Hofmann, 1999) a more profound understanding on the collective-level aspects of the start of TE might be missing. Also, according to a recent study (Forsström-Tuominen, Jussila, & Kolhinen, 2015), potential future entrepreneurs would prefer to team up to begin entrepreneurship. Thereby, research on the very first steps of contemporary entrepreneurial teams is needed in order to encourage and support entrepreneurship also in the future.

In this paper, we join the abundant discussion on the start of TE but give voice to current entrepreneurs themselves and take a more collective perspective into forming a comprehensive understanding of the start of TE. Our study initially began with an inductive approach to theory elaboration and an aim of understanding collectiveness within entrepreneurial teams better. Along the study, we saw that collectiveness might affect the start of team enterprises. Thus, the aim of this study is to describe and understand the start of team startups and the dimensions of it especially from the point of view of collective aspects of TE. Our research questions were formed based on our inductive analysis, not before the analysis. The research questions are: why and how TE is initiated, how teams form, and what kinds of criteria are used in team building? These questions all reflect the first stages of new team venture emergence.

Thus, we employ an inductive, qualitative multiple-case study (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014) because our aim is to elaborate new insights into theory (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). That is, our research process proceeded from data to interpretation and to theory. We did not study the existing TE literature before the analysis but only after our analysis was formed. The cases of this study include four team startups in high-technology industries. Our main data is generated in individual and group semi-structure thematic interviews with core team members of each startup. Our secondary data includes homepages, Facebook, LinkedIn and Twitter pages, blogs, additional comments sent by an interviewee by email, and news about the startups. The secondary data is utilized mainly because we wanted to get a good feel of the contexts of the startups ourselves as researchers. We analyze the data through systematic thematic analysis introduced by Gioia, Corley, and Hamilton (2013). The analysis technique includes presentation of analysis in informant-centric terms and codes (1st order analysis) as well as analysis in researcher-centric themes and dimensions (2nd order analysis). Based on a data structure that reflects the links between the data and the emerging concepts, we elaborate on

the dynamic relationships among the emerging concepts, themes, and aggregate dimensions. (Gioia et al., 2013)

Our paper is structured as follows. We start by summarizing existing knowledge of the start of TE in order to set the stage for our contributions. Although the section on the existing knowledge is placed before our analysis, we did not study the literature before conducting our analysis or set hypotheses to test in our analysis. Before presenting our findings, we outline our research process and choices of methods. Towards the end of the paper we specify how our findings extend existing knowledge of TE. Finally, we conclude with a statement on how the most essential new knowledge generated in this paper can be used in research and practice.

EXISTING KNOWLEDGE OF THE START OF TEAM ENTREPRENEURSHIP

A number of important dimensions that compose the existing knowledge of the start of entrepreneurship as a multi-individual phenomenon can be identified. Key streams of the literature include the primers of TE, the stages of TE emergence in terms of the relationship of team formation and an entrepreneurial opportunity, and team formation in terms of composition when it comes to individual team members characteristic, skills, and know-how.

Primers of team entrepreneurship

The primers of TE have received relatively little attention in the existing TE literature. Harper (2008) is among the few that outline the conditions that encourage the formation of entrepreneurial teams in particular (facets that affect emergence of TE before actual team formation). The scholar sees that the conditions are identified best by examining the dimensions of the entrepreneurial opportunity situations that require TE. First, such situations are characterized and strained by structural uncertainty which refers to individuals' partial ignorance of possible alternatives and their outcomes (Shackle, 1955). Second, team formation is affected by interpersonal decision situations to cooperate with one another. The situations refer to how balanced (i.e., harmonious or conflicting) the interests of the individuals are with each other. Third, TE bases on common interests of the individuals. TE is encouraged if the individuals can bring about a specific common interest jointly through combinations of the individuals' actions. Thus, the common target can be realized only

together which reflects perceived strong interdependence between the individuals. Interdependence refers to co-power of two or more individuals being able to carry out common outcomes only through joint action and not being able to achieve the same outcomes alone. (Harper, 2008)

Stages of team venture formation

Existing TE studies consider more closely the stages of team venture formation. The investigation relates especially to how an entrepreneurial opportunity and coming together of individuals as an entrepreneurial team are related. On the one hand, an individual entrepreneur may already have a business idea for the product or service before starting the new venture and searching for team members. On the other hand, the group may be formed prior to the actual emergence of a common business-related purpose. The relationship may also be interactive in a way that the emergence of the idea and the team overlap and affect one another. (Kamm et al., 1990; Kamm & Nurick, 1993)

According to the first alternative, an individual may get an idea for a new venture by recognizing a market need and enlist others to carry out the effort jointly. Kamm and Nurick (1993) name this perspective as the lead entrepreneur approach. For example, Clarysse and Moray (2004) suggest that there might be an individual in the team who “started it all” with her/his idea (p. 67). Lim et al. (2013) see that a solo individual may conceive an idea or invention initially but usually a team works to commercialize a new venture. Thus, the lead entrepreneur approach assumes that there is an entrepreneurial opportunity before the team is formed and that the lead entrepreneur sees that she/he cannot carry out the opportunity alone (Ensley et al., 2000).

According to the second alternative, two or more individuals may recognize an opportunity to work entrepreneurially together regardless of whether or not any of them has the business idea first (Francis & Sandberg, 2000; Kamm et al., 1990). Thus, the group might emerge before any entrepreneurial opportunity (Francis & Sandberg, 2000) based on, for example, shared experiences or friendship (Timmons, 1990). This perspective has been named as the group approach by Kamm and Nurick (1993). The approach reflects benefits of relationships and the importance of social networks that influence the desirability to work together (Aldrich &

Kim, 2007; Kamm & Nurick, 1993). The group approach posits that there might be an assembly of individuals before any opportunity is recognized or created.

Additionally, Kamm et al. (1990) anticipate that there might be “an interactive relationship over time between the concept and the team” (p. 10). Considering the dynamic nature of both the group and the opportunity, they might be connected to each other, interlinked and co-developed. For example, getting more information may cause the nature of the business concept or the relationships between the individuals change (Kamm & Nurick, 1993).

Team formation in terms of team composition

As the start of TE reflects coming together of individuals to pursue common goals together as a social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009; Tiessen, 1997), the emergence of a new venture essentially includes a decision of who will participate and with which contributions (Ruef et al., 2003). Researchers have been interested in the basis on which individuals come together as an entrepreneurial team (e.g., Aldrich & Kim, 2007). More specifically, scholars have studied appropriate combinations of individual team members’ characteristics and focused especially on heterogeneity or homogeneity among the team members (Schjoedt & Kraus, 2009). These group compositional aspects can also be seen to reflect the lead and group approach to entrepreneurial group formation specified above.

The first perspective seems to reflect the lead entrepreneur approach where an individual has a business idea and gathers together people who could help carry out the idea through the skills and know-how they could offer to the venture. The perspective represents a resource approach that is rational, functional, and linear (Aldrich & Kim, 2007; Forbes et al., 2006; Ruef et al., 2003; Ucbasaran, Lockett, Wright, & Westhead, 2003). Entrepreneurial teams are most often seen to be composed based on changing resource or competence needs of the ventures (Forbes et al., 2006; Kamm & Nurick, 1993; Ruef et al., 2003). The teams are considered to need diversity when it comes to complementary skills and abilities (Gartner, 1985) and each team member is seen to add to the diversity of views and skills that enable to carry out complex tasks (Ucbasaran et al., 2003). All members should have the capacity to generate returns or procure resources for the team (Forbes et al., 2006). Thus, the members are chosen based on their functional human and social capital. Human capital refers to individuals’ knowledge and skills that can be used for producing valuable economic outputs.

Social capital on the other hand refers to access to social resources embedded in a social context. (Aldrich & Kim, 2007; Forbes et al., 2006; Ucbasaran et al., 2003) Based on the above insights, the rational approach to team formation and composition assumes that individuals will form heterogeneous entrepreneurial teams (Ruef et al., 2003).

The second approach can be seen to reflect the group approach where a group is formed prior to any entrepreneurial opportunity identification or creation by the individuals. It is an interpersonal relations approach to team formation and composition (Aldrich & Kim, 2007; Ruef et al., 2003). Teams have been seen to be formed on the basis of social-psychological needs of interpersonal attraction and in the presence of pre-existing networks of strong (i.e., family members) and weak (i.e., friends, colleagues etc.) ties that constrain the formation of the teams (Forbes et al., 2006; Ruef et al., 2003). These studies focus on the heterogeneity or homogeneity of the team members in terms of demographic characteristics, such as age, gender, education, and work background (Chowdhury, 2005). For example, Ruef et al. (2003) find that homophily and network constraints based on strong ties affect group composition the most. Homophily constraints refer to the selection of group members based on the similarity of characteristics, such as gender, age, and nationality but also perceived and desired high status (Ruef et al., 2003). Clarysse and Moray (2004) suggest that members are chosen based on the same educational background. Notably, members with similar kind of a background may be more likely to be in contact due to their shared social context and structural opportunity for social contact, and spatial proximity and environmental distribution of potential group members (Forbes et al., 2006; Ruef et al., 2003). For example, co-membership in an existing social group may make entrepreneurs identify with each other and form a group (Harper, 2008). The interpersonal approach assumes that individuals form homogeneous groups (Ruef et al., 2003).

Finally, the resource and interpersonal relations perspectives to entrepreneurial team composition are not mutually exclusive. For example, interpersonal relationships may be used to find appropriate resources in a strategic way (Larson & Starr, 1993) as social networks provide sources of information about available resources (Forbes et al., 2006). Also, rational processes may include interpersonal dimensions, such as chemistry (Kamm & Nurick, 1993). Rational and interpersonal approaches have also been seen interrelated. Although a team would be formed based on rational and conscious ideas, the formation may be affected by relationships, networks, and individuals' characteristics that make the individuals similar to

the other team members (Forbes et al., 2006). Yet, the interrelated approach has not been as widely examined as the rational and interpersonal perspectives.

Summary of the existing knowledge

Table 1 presents a summary of the existing knowledge of the start of TE. It includes the streams identified in the literature, their main questions, findings, and representative studies.

TABLE 1
SUMMARY OF EXISTING KNOWLEDGE OF THE START OF TEAM
ENTREPRENEURSHIP

Stream	Primers of TE	Stages of team venture formation	Team formation in terms of team composition
Main questions	What conditions are conducive to joint entrepreneurial action and formation of entrepreneurial teams?	How entrepreneurial teams are formed and what is the relationship between entrepreneurial opportunities and entrepreneurial teams?	Who will participate in the joint venture and with which contributions?
Main findings	<p>Entrepreneurial opportunity situations are characterized and strained by structural uncertainty.</p> <p>Team formation is affected by interpersonal decision situations to cooperate with one another in order to achieve a common interest.</p> <p>Strong interdependence of individuals in carrying out a common interest encourages TE.</p>	<p>Lead entrepreneur approach: An entrepreneur has a business idea before starting the new venture and searching for team members.</p> <p>Group approach: A group is formed prior to the emergence of a common business-related purpose.</p> <p>Interactive approach: There is an interactive relationship between the opportunity and the team.</p>	<p>Resource (rational) approach: Entrepreneurial teams are composed based on changing resource or competence needs of the teams.</p> <p>Interpersonal approach: Teams are composed based on social-psychological needs of interpersonal attraction and in the presence of pre-existing networks of strong and weak ties.</p> <p>Interrelated approach: Resource and interpersonal aspects affect one another and occur simultaneously.</p>
Representative studies	Harper, 2008	Kamm and Nurick, 1993 Kamm et al., 1990 Ensley et al., 2000	Aldrich & Kim, 2007 Forbes et al., 2006 Ruef et al., 2003 Ucbasaran et al., 2003

The existing knowledge can be grasped through three dimensions that include primers of TE, stages of team formation especially in relation to the relationship between entrepreneurial

opportunities and team formation, and team formation in terms of team composition. Primers answer what conditions are conducive to joint entrepreneurial action and formation of entrepreneurial teams. These conditions include structural uncertainty, common interests, and interdependence. Stages of team formation answer how entrepreneurial teams are formed especially in terms of what is the relationship between opportunities and formation of entrepreneurial teams. Two main approaches are identified: the lead entrepreneur and the group approach. The third approach sees the opportunity and the team interrelated. Team formation in terms of team composition answers the question of who will participate in the joint entrepreneurial endeavor and with which contributions. Once again there are two main approaches: the resource and the interpersonal approach. The third approach sees the two above views interrelated.

While the existing studies have grasped several central components of the start of TE, it seems that the literature is yet fragmented. Studies have focused on certain aspects of a complex phenomenon. For example, few studies take into account the primers of TE although the primers might have a crucial role in determining if TE is started in the first place. Considering that the start of TE is a complex collective-level phenomenon, the existing knowledge might not provide a versatile and yet integrative picture of the start of TE that would help understand and study the start of TE even further. Also, few studies include the interrelations between the business idea and the group although there has been a call for the study of them (e.g., Kamm et al., 1990). It also seems that the individual approach still dominates understanding when thinking about TE. Many see that TE bases on an individual leader's business idea (e.g., Carland et al., 2000) and emphasize each individual team member's skills and competencies in team composition (e.g., Ucbasaran et al., 2003). In addition, understanding the start of TE would gain from experience-based information from practicing entrepreneurs themselves because it would allow open examination of the complexities and may provide new insights into understanding TE.

METHODS

The study process follows the recommendations of Eisenhardt (1989; see also Ravenswood, 2011). We first defined our initial aims and research questions (which we specified after the analysis) and concepts central to our study (see the keywords). We initially wanted to understand TE more profoundly as a collective-level phenomenon (see Morgeson &

Hofmann, 1999). Next we decided to use a qualitative multiple-case study approach (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014), since it offers a strong basis for theory elaboration (Eisenhardt & Graebner, 2007; Yin, 2014). Using theoretical sampling (Eisenhardt, 1989), we searched for suitable cases in the Internet, newspapers (e.g., lists of most potential startups), and through our contacts. The aim was to include such 'real world' cases that would enable us to answer our initial research questions and represent the phenomenon under study transparently (Eisenhardt & Graebner, 2007; Yin, 2014). All of the cases are suitable for examining the start of team startups as they represent relatively young team enterprises in which the team members were jointly developing a new product or service that did not exist at the domestic or international market before and strived for growth in regard to the product or the service. Thus, the startups were currently involved in the recognition and creation of entrepreneurial opportunities by a team of individuals together. They had operated for a long enough time to initiate entrepreneurship and the entrepreneurial team. Four cases were eventually selected. The number of cases was finally defined by saturation and pragmatic considerations (Eisenhardt, 1989). We specify the essential details of each of the startup below.

All of the case startups were based in Finland. Case startup 1 operates in the industry of machinery and process technology. It had operated for a half a year at the time of conducting the interviews. The core entrepreneurial team that included the individuals who had taken part in the very first steps of the venture and who we interviewed involved four persons. Case 2 operates in the information and communication technology industry. It had operated for a year at the time of the interviews. The core team included three persons. Case 3 also operates in the information and communication technology. It had operated for two and a half years. The core team included three persons. Case startup 4 operates in bio technology. It had operated for five years. The core group consisted of four persons.

Data collection

We chose to employ multiple data sources especially in order to get a better feel of the context and the phenomenon ourselves (see Eisenhardt, 1989; Gioia et al., 2013). Our main data from which quotations are shown in the analysis consists of individual and group semi-structured thematic interviews. In all of the case firms, we interviewed all of the core team members separately and then together as a team. In two of the cases, not all team members could be

interviewed due to their timetables and travel. Semi-structured thematic interviews were chosen for data collection as each team member was expected to have unique experiences of and around the phenomenon of interest (Stake, 1995). We chose to give voice to the knowledgeable agents since it helps to capture concepts relevant to human experience, actions, and thoughts and to offer multiple views on the cases (Gioia et al., 2013; Stake, 1995). Anonymity was promised to the participants.

Before data collection, we designed the interview forms for the individual and group interviews. The questions were focused on the initial research questions and key concepts in a way that would inspire the agents to talk openly about their experiences. The interview themes included personal details of the interviewee, the enterprise and its development, the team and its development, values and courses of action of the team, work practices, communication, leadership and management, decision-making, knowledge sharing, ownership, efforts and inputs, and future goals and plans of the team. We also gave the agents a chance to add anything they felt was missing from the questions, but is important in studying TE. We avoided leading-the-witness questions but did ask about the phenomena that we were interested in because we believe that doing so is the only way to gain focused enough understanding. We asked, for example, how was your enterprise born and developed, and how was your team formed and developed. We modified the interview questions and added new ones when it seemed appropriate to gain a deeper understanding. We also made field notes that initially begun the analysis process.

We conducted a total of 18 interviews out of which 14 were individual interviews and four group interviews in summer and fall 2013. The individual interviews took 26 – 90 minutes (only one of the interviews remained shorter than the others). The group interviews took 32 – 65 minutes. We conducted the group interviews after the individual interviews. That is, we first interviewed all team members of each startup individually and then together. By choosing to interview the team members also as a group, we wanted to give the interviewees an opportunity to reflect on their experiences jointly. Group interactions enrich the data as they may offer deeper and more ground insights into the dynamics of a collective phenomenon than the individual interviews only. We could also see how the group worked and communicated together and if this fitted our interpretations of the data. All of the interviews were tape-recorded with permission from the interviewees and transcribed from word to word by a research assistant and the first author. All except two of the interviews

were conducted in Finnish (most of the interviewees' native language) and then translated into English.

The secondary data includes homepages, Facebook, LinkedIn, and Twitter pages, blogs, and news about the startups. We gathered the data mainly in the Internet. This data helped us get an in-depth understanding of the contexts of the startups and reflect our findings with public statements that included notions on how the companies had been established, for example. Thus, the role of the secondary data is supportive for our analysis. Notably, extracts from the public pages are not included in the report because this data is available for everyone and, thereby, the enterprises might be identified quite easily.

Data analysis

We analyzed the data mainly in fall-winter 2014 – 2015. However, there was overlap between the analysis, data collection, and writing the report. After familiarization with the enterprises and the data, we began a within and cross-case pattern search analysis which enables the identification of similarities and contradictions. (Eisenhardt, 1989) The specific analysis technique used in this study is the inductive thematic analysis introduced by Gioia et al. (2013). The analysis method was chosen because it is especially suitable for elaborating new concepts and ideas (Gioia et al., 2013). It also offers a systematic technique that provides rigor to an inductive study (Eisenhardt, 1989). The analysis includes presentation of a 1st order and a 2nd order analysis which enables to make the links between the data and concepts visible (Gioia et al., 2013).

At the first level of the analysis, we listed in an Excel-file all the aspects that seemed relevant in regard to our research questions (i.e., words and phrases). The data was coded so that it was possible to identify the case, the type of the data (i.e., individual interview, group interview, home pages, Facebook, LinkedIn, Twitter, news, and blogs), and the interviewee. First, the number of codes was substantial as we strived to stay true to the informant-centric terms and codes. Then, we revised the 1st order concepts in order to make sure that they were firm and did not overlap too much. We established columns in the Excel-file for all of the concepts.

At the second level of analysis, we sought for similarities and differences among the 1st order terms and gave labels to different categories which reduced the number of themes and moved

the analysis to the theoretical realm with the help of researcher-centric 2nd order themes. Thus, we formed data-to-theory connections. In practice, we established broader columns above the 1st order concepts that would fall into the same theme. The analysis continued by searching for 2nd order aggregate dimensions where the 2nd order themes were distilled further (Gioia et al., 2013). At the same time, following our interpretation of the data we studied organizational literature outside entrepreneurship research and applied it to our analysis in order to enrich the analysis and the existing literature (Eisenhardt, 1989). After the 1st and 2nd order analyses, we formed a data structure which provides a graphical presentation of how the analysis progressed from raw data to the themes (Gioia et al., 2013; see the data structure in the analysis).

Finally, we continued by examining the dynamic relationships among the major emergent concepts, themes, and dimensions (Gioia et al., 2013). Also, we examined the existing literature on the start of TE in more depth in order to uncover what is currently known and how our work might serve to increase knowledge or even change thinking of TE in both academic and practitioner domains. This stage of our research process is visible in the discussion section of this paper. It should be acknowledged that we were not uninformed of the existing literature (in and outside entrepreneurship research) when conducting the analysis but aimed to avoid too in-depth knowing of or thinking of prior research (Gioia et al., 2013) and particularly its potential guiding effect as a resource of interpretation. In fact, this process of theory elaboration was strongly iterative and recursive among the data, the emerging theory, and the existing literature (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). We actually studied the data through several times and continually returned to both the data and the existing literature when writing the research report. Thus, the inductive process has been overlapping and accumulative in a way where understanding has increased and refined over time.

FINDINGS

In our analysis of the start of team startups, we find two aggregate dimensions that we divide into seven 2nd order themes and 40 1st order concepts. Table 2 presents the data structure of our study.

TABLE 2
DATA STRUCTURE

Aggregate dimensions, 2nd order themes, and the related 1st order concepts

IMPETUS TO TEAM ENTREPRENEURSHIP

Collective desire for team entrepreneurship
 We had a desire for change
 Disappointments in previous work-organizations made us build our firm
 Previously we just worked ‘there’ but now this is ‘a thing of our own’
 Previous experiences made us want build our own work community that goes to a joint direction and is lead appropriately

Collective value orientation to team entrepreneurship
 We enjoy challenging each other’s ideas and giving different opinions rather than doing things alone
 It’s hard to imagine what startup entrepreneurship alone would be for us as we are not lonely wolves
 We would be pissed off alone
 We were not willing to start entrepreneurship alone as we are gregarious people

Collective demand for team entrepreneurship
 One cannot do this alone
 One person couldn’t do this alone
 This kind of an enterprise would not have been founded alone
 This firm would never work if there wasn’t for the team and it would have looked totally different
 If you want to travel far in entrepreneurship you should do so together
 Entrepreneurial action is not done alone but together

Collective encouragement to team entrepreneurship
 Teaming up of people made us build belief in our thing
 We had enormous enthusiasm, will, and belief in ourselves compared to others

COMING TOGETHER OF ENTREPRENEURIAL TEAM MEMBERS

Initiative is for entrepreneurial team and opportunity
 One of us had a business idea and he/she asked people to join and then we founded this firm
 One of us contacted the others as we had similar kinds of business ideas
 One of us took initiative in order to form a group where we could do things the way we wanted
 The firm was initiated from us knowing each other before
 A momentum was found in us working together before
 This firm was born out of the three of us and the momentum found in that
 Our firm was born from one saying a word in some place and the other seizing it

Search for potential team members through networks
 One person was the common factor who knew the other team members from his/her career
 I asked around for interested people I knew
 A common acquaintance suggested that we would become a firm
 I messaged a team member after the member had met my husband
 We met people who we wished would come work with us every once in a while and there wasn’t a sudden boom

Criteria for team entrepreneurship
 We gathered together experts from different fields
 One of us gathered people from different fields together in order to complete a puzzle of know-how
 We were three skilled persons who complemented each other and joined together
 One of us asked me with them due to my experience that was useful for the combination of know-how
 We had little overlap in know-how, roles, and tasks
 Members have to be work spirited
 Members have to have drive and persistence
 We searched for people who are self-governed
 Members must to be able to get things done themselves
 Members have to be active and fix things by themselves as startups don’t afford any bureaucrats
 Members need to get things done and act constructively
 Members need to feel the idea as their own

First, TE is initiated by and through an impetus to collective entrepreneurial action. The impetus dimension includes themes 1 – 4 that represent a collective desire for, collective

value orientation to, collective demand for, and collective encouragement to TE. Second, the start of TE materializes in coming together of team members. This dimension includes themes 5 – 7 and involves initiative for TE, search for team members, and criteria for membership. It is to be noted that we draw boundaries in our analysis between the impetus to and coming together of individuals as a team for analytic purposes although we see that they are interlinked and overlapping. The same concerns the themes. Next, we will examine the dimensions, themes, and concepts in more detail.

Impetus to team entrepreneurship

The first aggregate dimension of our analysis is the impetus to TE. It includes conditions that may give an impulse or motivate individuals to TE in particular. Notably, the impetus might not be a sudden, specific event but develop through time and social interactions. Also, the impetus may take shape through different kinds of paths, rather than through the same path every time. Next, we will first answer why TE might be initiated.

TABLE 3
COLLECTIVE DESIRE FOR TEAM ENTREPRENEURSHIP

1st order concepts and the selected representative data
<p>We had a desire for change</p> <p>It was this kind of a desire for change - - 311</p>
<p>Disappointments in previous work-organizations made us build our firm</p> <p>Yes and the background, we all had some kind of a disappointment, being fed up or something with the previous employers so ... with action or working there. 323</p>
<p>Previously we just worked ‘there’ but now this is ‘a thing of our own’</p> <p>- - I was not at all interested previously... 322 Well in some rare cases. Usually when people go... If I left from my previous employer to drive (to a meeting, home etc.) so ... 321 You didn’t go as the representative of the company X (the previous employer). 322 Of course within the job description of course when you are somewhere, you represent this kind of a history, but not, not at all like I would have been ... any kind of a business card or promotion (representative) for the firm, erm, you just work there so that. 321 It has changed from you just work there to that this is our thing. 322</p>
<p>Previous experiences made us want build our own work community that goes to a joint direction and is lead appropriately</p> <p>It signifies meaningful work above all. I mean this kind of a meaningful work community, to put it that way. So that if like. Well, it isn’t nice at the office if there are assholes among people, that’s clear so. We have ... quite a lot of people who have experience of that kind of a work community where for example, er, leadership is inappropriate and um, the group is not moreover necessarily going like... going to the same direction in a way.</p>
<p>313</p>

Table 3 presents the theme 1. The underlying idea in this theme is that there is a desire for TE amongst the individuals composing the team and that the desire is activated in part due to certain individual experiences in life that are somehow similar amongst the team members and relate to a desire to build something mutually meaningful. For instance, experiences in work-organizations (e.g., bad bosses, bad work climate, and dysfunctional work groups) motivate individuals to seek for a more independent way of life (for ‘something of their own’) and they see entrepreneurship as a viable – even if not self-evident – route to it. Based on the team members’ experiences and preferences the members have an initial aspiration to form a mutual and democratic enterprise that may be experienced as meaningful by them all. The above interpretations lead us to organizational behavior literature and to the ideas of Pierce and Jussila (2010, 2011) on the psychology of possession. According to these authors the individual motives for efficacy and effectance and self-identity as well as the need for ‘home’ (a secure and comforting space in which to realize one’s dreams) when coupled with the need for social identity (see below) can motivate individuals to seek for collective possessions such as the joint business and to create them. Consistently with the interviewees’ anticipations, literature on collective psychological ownership in team contexts (Pierce & Jussila, 2010, 2011) associates experienced meaningfulness with a team’s collective sense of ownership for the business.

TABLE 4
COLLECTIVE VALUE ORIENTATION TO TEAM ENTREPRENEURSHIP

1st order concepts and the selected representative data
<p>We enjoy challenging each other’s ideas and giving different opinions rather than doing things alone Personally I feel that I don’t enjoy doing things alone. But it’s not like ... There are so many things to do stuff alone, your ideas are challenged, different people giving little bit different opinions. 222</p>
<p>It’s hard to imagine what startup entrepreneurship alone would be for us as we are not lonely wolves - - but indeed startup entrepreneurship alone individually well it would be hard to imagine what it ... certainly there are these kinds of lonely wolves too but maybe our group members are not like that. 113</p>
<p style="text-align: center;">We would be pissed off alone</p> <p>There is by the way one thing in common that everybody has. Or I wouldn’t anyway, I would be pissed off alone. 321</p>
<p style="text-align: center;">We were not willing to start entrepreneurship alone as we are gregarious people</p> <p>When it comes to the team... everybody thought that, one shouldn’t begin or isn’t even willing to begin endeavor alone. 322 People are gregarious species after all ... not everybody of course. 323</p>

Table 4 presents the theme 2 that reflects a value orientation towards endeavoring together with other people rather than alone. The interviewees state that they have an internal inclination toward endeavoring together and reflect it with endeavoring alone. They describe

that they are not lonely wolves (although some other people might be) but gregarious. Some see that they want to share responsibilities and work, for example. Hence, this theme puts forward that the team members are not forced into TE but do it out of their own will and inclination. The idea leads us suggest that team entrepreneurs might have a collective value orientation. Organizational scholars have seen that the collective value orientation emphasizes an individual's membership of a group, a strong identification of an individual with an in-group, interdependence of the group members, and shared goals and efforts (Triandis, 1993; Wagner & Moch, 1986). The data also leads us to Abela (2001) who states that one purpose of a firm is the formation of a community (not only a collection of individuals but a social unit), which in these cases may reflect a need for social identity. Social identity theory (Tajfel & Turner, 1979) defines social identity as "that part of an individual's self-concept which derives from his (or her) knowledge of his (or her) membership in a social group together with the value and emotional significance attached to that membership" (Tajfel, 1978: 65 [parenthesis added]). Thus, social identity represents a perception of oneness of the group members (Ashforth & Mael, 1989) and refers to cognitive awareness of interdependence while incorporating a sense of emotional involvement (Ellemers, de Gilder, & Haslam, 2004). Also, it seems that there is some kind of an interactive relationship between 'out there' experiences (see the theme above on the desire for TE based on previous experiences) and the need for social identity.

TABLE 5
COLLECTIVE DEMAND FOR TEAM ENTREPRENEURSHIP

1st order concepts and the selected representative data
We would never do the same alone
You would probably never do the same when you are alone. Or at least I will not. 223
One cannot do this alone
You cannot do this alone. 322
One person couldn't do this alone
One person her/himself couldn't do this. 221
This kind of an enterprise would not have been founded alone
Well, I doubt that someone would have founded this kind of an enterprise alone, hardly any one of us, I don't think so. Well maybe someone. 311
This firm would never work if there wasn't for the team and it would have looked totally different
It is like, this would not, this firm would not work if there wasn't for the team. Never. You couldn't, you couldn't have started at all. The enterprise would have looked totally different. 312
If you want to travel far in entrepreneurship you should do so together
And I just heard a brilliant African proverb about this or a saying that if you want to travel fast then travel alone but if you want to travel far then travel together 423 oh that's very well said 422 I think it describes this entrepreneurship very well so that if you would do this kind of stuff alone you would of course move on very quickly especially in the beginning when you don't have to discuss anything with anybody just press ahead only but it can be very exhaustive in the long run and then the road comes to an end a lot easier when you have to do everything, certainly have to make bad decisions because you don't have enough time and expertise you cannot learn enough to do everything. 423
Entrepreneurial action is not done alone but together
Well, there are these people who want to try (alone), they try and bang their heads against brick walls. Then there is entrepreneurial action. We do that entrepreneurial action. Entrepreneurial action is not done alone. It is not done alone even as work (as an employee). 323

Table 5 summarizes the theme 3. The theme represents the collective demand for TE. Central to this theme is the idea that TE may find its impetus in part by individuals' anticipation that for instrumental (both practical and motivational) reasons it is better to join forces rather than to endeavor alone. First, the team members see that their business-related aims or goals are unattainable for an individual by oneself. The outcome of individual entrepreneurship would look totally different. More precisely, TE is elicited by the possibility that individuals together are capable of producing entrepreneurial outcomes they could not produce alone. The aims seem to be ambitious and complex in a way that multiple individuals are needed to achieve them. Thus, the impetus to TE reflects an aim of effectance that requires group action. This reflects Deutsch's (1949) ideas on effectance (or effectiveness) as the accomplishment of a social, common purpose. Also, TE might reflect collective individualism where collective action enables individuals to achieve their individual goals if only the goals of the individuals are in line with each other. Deutsch (1949) sees that this kind of a positive goal interdependence where one person's probability of goal attainment is positively correlated

with the other person achieving her or his goal promotes group action. In words of Deutsch (2006: 24), “you sink or swim together”. Hence, collective entrepreneurial action may also base on efficiency of collective action which relates to the attainment of individual aims in joint action (Deutsch, 1949).

Second, and interestingly, collectivity seems to be associated with the definition of entrepreneurship as such. As opposed to the traditional idea of the individual entrepreneurial hero, our data speaks of entrepreneurship as a collective phenomenon. That is, in order to do what entrepreneurs do – and especially in order to accomplish something that is seen as entrepreneurial – an individual has to join forces with other people. As an interviewee says, entrepreneurial action is not done alone.

TABLE 6
COLLECTIVE ENCOURAGEMENT TO TEAM ENTREPRENEURSHIP

1st order concepts and the selected representative data
Teaming up of people made us build belief in our thing
- - and then of course when three people came, we could then optimistically encourage each other that we can really know how to do something, we had like belief in that thing. 311
We had enormous enthusiasm, will, and belief in ourselves compared to others
- - we had enormous enthusiasm and will and belief in that we, despite that previous, or experiences of the others are that it takes five to ten years, we did really believe that we are certainly quicker and better and smarter and we can do this... with lower costs and that... but it belongs to that moment and if we wouldn't believe that, so if we would think that (it takes) eight years and then we will begin to understand, then we would be like, it is not worth it, nothing comes out of this - - 411

Table 6 presents the theme 4. Consistently with the above ideas, teaming up is seen important in order to get a good start. In other words, awareness of not being on the journey alone and the team members' ability to encourage each other create enthusiasm and contribute to the team members' belief in success and through that belief also to the materialized outcomes. These ideas take us to the work of Bandura (1997) on efficacy beliefs and their importance on the outcome expectations and motivations of individuals. According to this work, a group can indeed be seen as a context for the interactive strengthening of the individuals' beliefs in mutual success – these beliefs having on the other hand substantial effect on the actual success of the entrepreneurial team. Thereby, it is logical that the team members consider that there is a need for TE in order to reach more demanding ends.

Coming together of entrepreneurial team members

Our second aggregate dimension speaks to the formation of the entrepreneurial team and answers in particular how TE is initiated and the team formed, and what criteria are used in team building. It includes themes forming around ‘initiative for entrepreneurial team and opportunity’, ‘search for team members’, and ‘criteria for team membership’. TE is made possible through the coming together of entrepreneurial team members. Indeed, Tajfel (1982) suggests that group membership is the very starting point of collective phenomena. Other scholars also see that collectiveness reflects formation of an in-group (e.g., Triandis, 1993). We see an in-group in TE as a social aggregation meaningful for its members who interact with each other on a regular basis in order to accomplish a set of mutual entrepreneurial objectives for which they have joint accountability (cf. Gibson, 2001). Next, we will first examine the theme ‘initiative for entrepreneurial team and opportunity’.

TABLE 7
INITIATIVE FOR ENTREPRENEURIAL TEAM AND OPPORTUNITY

1st order concepts and the selected representative data
<p>One of us had a business idea and he/she asked people to join and then we founded this firm Then in the end of last year, one of my former colleagues who is working in the city A, (s)he had an idea, a business idea and (s)he asked people around her/his previous work history, and I was one of them, and then we founded this firm in the end of last year, in the beginning of this year. 114</p>
<p>One of us contacted the others as we had similar kinds of business ideas - - I called X one afternoon, one and a half years ago, I felt that we had similar ideas what kind of services and products there should be... and X already had some kind of shell (passive) company. 222</p>
<p>One of us took initiative in order to form a group where we could do things the way we wanted And then, actually it might have been my idea in spring 2010 that should I, try to gather some kind of a new group and start doing things, in ways that you want to do them yourself. Then I began asking around... 312</p>
<p>The firm was initiated from us knowing each other before Let's say that when we have known each other before, the whole firm was initiated out of that actually. 211</p>
<p>A momentum was found in us working together before But on an everyday level so... we run into each other in working life in a way, so that we... have one... like a common project where we all three first came together, then two of us having the same employer history, so erm. There it came the, some kind of a momentum there. 321</p>
<p>This firm was born out of the three of us and the momentum found in that We had like belief in that thing and three of the same kind, so that it was that momentum that was born there that. Maybe as a solo person, nobody would have founded this firm as a solo person as I said initially. But then after a few months of processing, it was formed out of this trio, to a large extent. 311</p>
<p>Our firm was born from one saying a word in some place and the other seizing it Then in a way that you say one word in some place and the other person seizes it that, hey this would be nice, oh you are interested too. 322</p>

Table 7 presents the theme 5. Collectiveness is not initiated without an individual or multiple individuals acting on the opportunity for collective entrepreneurial action. We find multiple possible routes to TE that emphasize an individual or a group in the initiation of TE but also suggest that the initiation is a versatile, ambiguous, and multi-layered phenomenon where the separation of individual and group focuses is not always possible or appropriate. In our data, several fine-grained accounts are found on the initiation.

On the one hand, one person may have a business idea and she/he gathers together individuals who then concretize the idea into a firm together. Two or more persons may also have similar kinds of ideas (the individuals being aware of each other's ideas) and one of them contacts the other(s) in order to develop the idea further (one taking the initiative but two or more having an idea). One person might also have an idea of the group (rather than the idea) and puts effort in gathering together the group, the members of which then construct the opportunity and the firm together.

On the other hand, previous interactions and working together may have contributed to an (initial) understanding of an entrepreneurial opportunity that is then realized in a joint firm together. There might also be a previously existing group of individuals who start their enterprise from the group without any ex-ante understanding of the opportunity. Hence, previous interactions amongst individuals and the forming of an initial group based on the interactions may enable the group members identify momentum for TE together whether or not any of the individuals have a business idea before the interactions. Linking this to organizational literature and more specifically to the ideas of Giddens (1984), collectiveness might be embedded in existing connections and interactions between people and located in the social relationships and situational contexts (see also Deutsch, 1973). What this means is that the members of an existing collective are seen as agents enabled by their structures of resources, routines, and expectations to seize a business opportunity or to create one. Also, the business idea and the formation of a group might be intertwined in interactions in a way that they co-emerge and develop. Thus, previously loosely or unrelated individuals may interact and an opportunity is identified or created through that interaction.

Notably, the individual and group paths can overlap in a way that they do not exclude one another but initiation may include both individual and group dimensions or stages. For example, an individual may foresee or have a business idea but she/he cannot fully grasp it or

carry it out alone so she/he reaches for others in order to jointly do so. Thus, she/he begins interacting with other potential entrepreneurs thereby setting the stage for TE (the opportunity and/or the team).

TABLE 8
SEARCH FOR POTENTIAL TEAM MEMBERS THROUGH NETWORKS

1 st order concepts and the selected representative data
<p style="text-align: center;">One person was the common factor who knew the other team members from his/her career</p> <p>Yes and then this too, we are like, wasn't it X who was the common factor in the beginning, probably like (s)he came to gather people within her/his work career with whom (s)he had gotten along with somehow. 123</p> <p style="text-align: center;">I asked around for interested people I knew</p> <p>Then I began asking after interested people, from here and there. I asked within the company X (the previous employer), and old colleagues and acquaintances and... 312</p> <p style="text-align: center;">A common acquaintance suggested that we would become a firm</p> <p>-- and they had a common acquaintance who then like pushed them that hey... you have a good idea and you are a brilliant guy that... what if you would become... become a firm -- 411</p> <p style="text-align: center;">I messaged a team member after the member had met my husband</p> <p>Instead of her/him continuing discussions, I messaged X that hey that you have met my acquaintance and erm ... my acquaintance informed that they will not go like will not fund this kind (of a firm) because it is so out of their scope ... but here would be this kind of a person (the interviewee) who knows the field and there, it went this way really. 412</p> <p style="text-align: center;">We met people who we wished would come work with us every once in a while and there wasn't a sudden boom</p> <p>-- little by little even before this happened we begun to keep these kinds of meetings together every once in a while so that we saw these people who we hoped would come to work for the enterprise X when it is possible so that there wasn't any this kind of a sudden boom. 413</p>

Table 8 represents the theme 6. Potential group members are mainly searched for from acquaintances. The acquaintances might be direct so that the individuals know each other before hand. They might also be indirect where potential group members have a common acquaintance through whom the individuals are introduced or get in touch with each other. The interviewees mention colleagues or relatives, for example. Organization theory literature has defined these kinds of relationships between individuals as micro-level social networks (Hatch, 1997). The social context of the individuals may define who is connected with whom (Granovetter, 1973). More specifically, structural social capital that refers to the pattern of connections between individuals (Nahapiet & Ghoshal, 1998) indicates who the individuals can reach and how (Burt, 1997). Also, trust (i.e., one's willingness to rely on others in a situation that involves interdependence and risks of vulnerability: Mayer, Davis, & Schoorman, 1995) embedded and built in the social relationships enables connections, interactions, and collaboration (Putnam, 1993). Additionally, the interviewees state that the team members and potential new team members should see each other every once in a while

over time. This may indicate that interactions over time have a particular role in telling if the individuals will become a team together.

TABLE 9
CRITERIA FOR TEAM MEMBERSHIP

1st order concepts and the selected representative data

We gathered together experts from different fields
Otherwise we have gathered together experts from different fields. 112

One of us gathered people from different fields together in order to complete a puzzle of know-how
But that was one thing that when I met this innovator X (a member of the team) at the happening, I understood then that (s)he has gathered people within her/his work life so that people from different fields so that we get this kind of a ... this kind of a ... what it is ... a puzzle ... a puzzle that ... covers fields. 124

We were three skilled persons who complemented each other and joined together
We had three, I mean skilled persons who complemented each other and joined together. 311

One of us asked me with them due to my experience that was useful for the combination of know-how
- - and actually X asked me with them because... I had experience from the bio side so... so it was this combination. 411

We had little overlap in know-how, roles, and tasks
Then that we have very little that kind of, I mean like, very little overlap in know-how and roles so that it is very easy to, like, act and. Empower and. Everybody knows who should handle a certain task. So, so the team formed through that there. 312

Members have to be work spirited
So that a team, although everybody has not done it (entrepreneurial action), they have to have the kind of a spirit that they love and get energy from the work. 113

Members have to have drive and persistence
Everybody has like this drive and persistence so that erm. We didn't need to be afraid there that someone would begin to bug. 313

We searched for people who are self-governed
There has to be people who lead themselves. I mean the kind of a model (traditional supervision) works in some companies but it doesn't work at our place. We search for people who lead themselves to a large extent. 211

Members must to be able to get things done themselves
When one enters a startup one needs to be of course... entrepreneurial is something like. We do everything ourselves here. So someone (a potential group member) who gets down to things (business) and gets going. 112

Members have to be active and fix things by themselves as startups don't afford any bureaucrats
- - like it has been the most important thing for me that we get people in the startup who are... active they start to fix things by themselves... a startup doesn't afford these kinds of... any bureaucrats - - 413

Members need to get things done and act constructively
Or is it that people with whom (s)he had got things happen or done and this can partially explain why here are these kinds of constructionist people involved, it must be. 123

Members need to feel the idea as their own
- - actually this team was formed out of those people who also felt this idea as their own, hey there could be something so that it was born through that. 111

Table 9 represents theme 7. In our data there is a variety of criteria for team membership in entrepreneurship. The team is composed of individuals who have complementing skills and

know-how with each other based on resource needs related to the entrepreneurial opportunity. Team members need to be skillful in something that is of use in achieving the common goal. The knowledge of individuals' competencies is gained from the direct or indirect acquaintances. For example, many of the interviewed entrepreneurs had worked with each other previously so that they knew what the other's expertise was. Nahapiet and Ghoshal (1998) define this kind of relational social capital as the assets that can be created and leveraged through social relationships. Also, the social context of the individuals may define the information gained about other potential group members (Granovetter, 1973).

In addition, entrepreneurial team members need to have a certain kind of an attitude or a way of acting that enables them to contribute to the collective effort. Potential group members seem to be contacted based on their mental and practical action orientation to self-help, self-management and consideration of work being more than just a tool for money or about performing one's duties documented in job descriptions. These ideas lead us to literature on co-operatives in which successful co-operation is believed to rest on the ideas of co-operators voluntarily joining their forces, assuming responsibility of their own lives and actions, managing and developing themselves, being accountable to each other, and being intolerant as it comes to free-riding (Jussila, 2013; Novkovic, 2006, 2008). Also, consistently with the earlier ideas about the impetus for TE, it is considered important that the team is composed of members who feel the business idea as their own. In other words, it seems that the interviewees recognize the importance of psychological ownership for the members' attitudes and behaviors (cf. Pierce and Jussila, 2010, 2011).

Summary of the findings

TE is induced by a collective desire, collective value orientation, collective demand, and joint encouragement for TE in particular. The desire, value orientation, demand, and encouragement interplay and enhance each other. Yet, the impetus is not enough to start TE. Impetus is followed by and overlaps with the coming together of team members. Initiative should be taken in order to team up individuals for entrepreneurial purposes. Initiative can be taken by an individual or a group but it might not be possible to separate the two in the process and the process can be fine-grained when it comes to individual and group actions. Initiative is followed by a search for team members in relation to specific criteria for membership that include not only rational aspects but social-psychological dimensions.

DISCUSSION

Our study adds to the existing knowledge of the start of TE and opens up new perspectives for grasping the start of team startups. It should be noted first that TE start is distinctive from individual entrepreneurship start. Our study directs attention especially toward social-psychological issues and dynamics of the levels of analysis in the start of TE. We also distinguish collective-level entrepreneurial opportunities and entrepreneurship as a collective phenomenon from the outset.

The examination of why TE is initiated leads us to suggest that initiation of TE bases on an impetus that includes not only economic and formal issues but social-psychological aspects as central components of the impetus. Although TE might base on the idea that together individuals are concretely able to achieve more than alone (e.g., Harper, 2008) we add that TE might find its impetus in social-psychological aspects of collective encouragement, desire built from previous social-psychological experiences (especially on organizations and leadership), and collective value orientation. For example, teams have great power in encouraging individuals into entrepreneurship through interactive processes where collective encouragement is constructed. Without the teams, talented individuals might not become entrepreneurs at all. Individuals might also have a longing for collective fulfillment and creation of shared meaning which does not fit the traditional idea of an entrepreneur as a lone hero with self-interest as the most important motive. Hence, social-psychology has a central role in triggering and initiating entrepreneurship at the team level. Also, we elaborate further on the idea that TE is encouraged by perceived co-power of multiple individuals and balanced interests of individuals (Harper, 2008). Our study suggests that entrepreneurial opportunities at the collective level might be distinctive from the individual level opportunities, which triggers team level entrepreneurship intrinsically. Hence, our study suggests that there are different kinds of entrepreneurial opportunities, some of which can only be created and/or realized by an entrepreneurial team. For example, some opportunities would never emerge without a specific group of individuals who join together as a social unit. Interestingly, our findings also suggest that entrepreneurship might be increasingly defined and seen as a collective phenomenon from the outset which also motivates team building intrinsically. Thus, in order to become an entrepreneur and take entrepreneurial action, an individual needs to join forces with others. Otherwise, the individual would be doing something else than entrepreneurship (e.g., be a business owner or manager).

The examination of how TE is initiated and the team formed puts forward that individual and collective perspectives (such as lead entrepreneur and group approaches to entrepreneurial team formation: Kamm & Nurick, 1993) should not exclude one another but complement each other. We suggest that there might be transitions from the individual to the collective level in a way that makes TE dynamic and malleable. In other words, the start of team startups might entail both individual and group situations or phases and TE might emerge through different kinds of paths when it comes to opportunity creation and/or initiative. For example, our analysis of the initiative for TE suggests that an individual might have a business idea before emergence of a team, or there might be a group before the business idea is jointly created. These perspectives emphasize either an individual (a leader) or a group just like Kamm and Nurick (1990) suggest (see also Kamm et al., 1990; Forbes et al., 2006; Ruef et al., 2003). Although we find the approaches very helpful and valuable in examining the start of TE we believe that the separation into the two might not provide a versatile enough understanding of a complex phenomenon. For example, individual-focused start might transform into group start through joint development of the business idea. This might be the case in a situation where an individual has an initial idea or aspiration for TE but it only becomes concrete or viable as an opportunity through group discussions. Hence, we put forward that we should not try to draw too strict lines between individual and group-focused perspectives to team initiation and formation but allow shifts between the levels.

Also, we suggest that the individual and group approach should be understood in more specific terms. There is versatility in both of the approaches. For example, two individuals separately may have a business idea (of their own) but only by joining together their ideas become an entrepreneurial opportunity that can be realized together. The individual perspective can also be seen in terms of the idea or the initiative. An individual may have an idea and she/he contacts the others (the individual having an idea and taking initiative) or the individual might not have any business idea but only a desire toward entrepreneurship and she/he takes initiative to form a group that develops an idea (the individual taking initiative but the group developing the idea). Thus, our study suggests that there could be an idea or initiative focused individual approaches. Also, the group approach could be seen from a business or desire oriented view, for example.

Additionally, based on the insider interpretations we believe that the emergence of a group and an opportunity might be interrelated and overlap in a way that the two emerge

interactively, as anticipated by Kamm et al. (1990) but not studied in-depth by researchers before. This intertwinedness might affect the distinctiveness (originality) of the opportunity that emerges which again could serve as a source of advantage for team endeavors. We also find that it might not be possible to clearly separate the group and the opportunity. That is, the group and the opportunity reflect one another. For example, the opportunity might reflect collective identity of the team.

We also see that the resource and the interpersonal approaches to team composition overlap and intertwine as suggested by Forbes et al. (2006) but not studied in-depth before. We believe that they both have a central role but their importance might depend on the specific firm and situation. When it comes to the more specific criteria for team membership (e.g., Forbes et al., 2006; Ruef et al., 2003), social-psychological aspects, such as attitudes and action spirit, are important. While existing literature considers interpersonal attraction as one possible basis for team composition (e.g., Kamm & Nurick, 1993), our study adds that members are chosen based on their attitudinal inclinations which have not been considered profoundly in the existing literature. Indeed, demands towards potential new team members are high as the members need not only be skillful within a specific field of expertise but have the right attitude that fits the spirit of the team.

CONCLUSIONS

Our study suggests a comprehensive and fine-grained conceptualization of the start of TE as a collective phenomenon. The study emphasizes a versatile understanding on the dynamics of the TE start. We put forward that individual and collective level approaches overlap and intertwine. We also suggest that social-psychological issues should be included in the conceptualization of the start of TE more profoundly. In addition, our study suggests that emergence of individual and collective level opportunities are distinctive of each other. We anticipate that entrepreneurship might be seen collective more often than previous definitions and conceptualization do. We also make a methodological contribution through the way our data is collected and interpreted. We give voice to contemporary team entrepreneurs themselves which helps bring experience-based understanding and evidence on the phenomenon of interest. We utilize a systematic way of carrying out and reporting inductive analysis. In addition, we bring organizational theory literature into use in the TE studies.

Concepts from organizational literature offer frames through which TE can be understood in a structured way.

Giving voice to the entrepreneurs themselves offers a strong connection of the research findings not only to studying TE but to practice. Our study is useful for understanding, studying, planning, supporting, and teaching TE. First, scholars should understand TE as a dynamic phenomenon where individual and collective perspectives overlap and intertwine. Scholars should also see TE as a versatile phenomenon where economic and formal issues are intertwined with social-psychological dimensions. Researchers should strive to ask questions and use methods that support in-depth understanding of the complex phenomenon. They should also pay attention to the definitions and conceptualizations used. The idea that entrepreneurship might be collective more often than the entrepreneurship literature leads to suppose has substantial implications for how entrepreneurship is defined and conceptualized in the future. Definitions and conceptualizations of entrepreneurship as a phenomenon should include the notion on collectiveness.

Second, our study has practical implications for planning and establishing new team ventures. Understanding the start of TE is especially useful in the beginning of TE processes but also along the journey for entrepreneurs themselves. Prospective entrepreneurs gain from insights of why and how TE might be initiated. For example, the individuals who wish to become entrepreneurs together with someone gain from knowing that they can start with an idea or taking initiative to form a group. They can also revive their connections to certain individuals in their lives with whom they would see that their experiences and value orientations match. They could also engage in discussions with people they might or might not know beforehand as previous social-psychological experiences in work organizations have a substantial role in creating impetus to TE, for example. We also provide insights for venture capitalists and business angels in assessing and taking part in creating team ventures. Funders could look into the criteria for team membership, for example, or encourage joint development of new opportunities.

Third, policy-makers in both developed and developing countries should grasp entrepreneurship at the collective level in order to create appropriate policies and support programs for encouragement of new team ventures. For example, we suggest that policy-makers should focus on the dynamics of the start of TE – the interactions among business

ideas, individuals, and teams, not the three separately. Fourth, educators should plan and implement teaching practices in a way that takes the above mentioned dynamics into account. For example, we believe that teaching should support student-oriented learning, and empowerment and teaming-up among students.

Finally, our study is not without limitations and there remain questions that future studies should answer more specifically. First, we focus on high-technology industries which might affect the findings of this study. We suggest that future studies analyze the start of TE in various industrial contexts. Second, our main data is gathered within a relatively short period of time. Understanding the start of TE could gain from longitudinal studies that would provide a more profound picture of the process through which entrepreneurial teams are initiated and formed in particular. Our study also posits some more specific questions for future studies. As collectiveness of entrepreneurship bases on an aim or a goal related to business that cannot be achieved alone, we anticipate that individual and collective entrepreneurial opportunities differ from each other. Future research should distinguish the emergence of individual and collective-level opportunities more clearly. In addition, studies could focus on the dimensions and themes found in this study more closely in order to draw an even more in-depth picture of the specific aspects of the start of TE. Finally, researchers should study the concepts drawn from organizational theory literature in TE contexts, such as the role of social capital, trust and collective value orientation in the start of entrepreneurial teams.

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Publication 3

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Collective entrepreneurial teams: Structures within high-technology team startups

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**Collective Entrepreneurial Teams:
Structures within High-technology Team Startups**

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ABSTRACT

This study aims to describe and understand the constituent elements of “collectivity” within entrepreneurial teams. Using qualitative multiple-case study approach, we analyze individual and group interview data of four high-technology team startups through inductive thematic analysis focused on the structures of entrepreneurial teams. We suggest that in entrepreneurship, collectivity comprises of horizontal unity and vertical indivisibility of team members, and includes collective idea of business, collective action, collective attitudes and motivations, and collective feelings. We discuss the contribution of our study by comparing our findings with existing studies, and suggest how the new knowledge informs academic and practitioner domains.

Keywords: entrepreneurial team; collectivity; multiple-case study; thematic analysis

INTRODUCTION

Entrepreneurship is not necessarily embodied in a sole individual or even solely reducible to the actions of individuals but is often a socially distributed and created phenomenon that involves joint action of entrepreneurial team members (Harper, 2008; see also Beckmann, Burton, & O'Reilly, 2007; Clarysse & Moray, 2004; Gartner, Shaver, Gatewood, & Katz, 1994; Kamm, Shuman, Seeger, & Nurick, 1990; Reich, 1987; Stewart, 1989; Watson, Ponthieu, & Critelli, 1995). An entrepreneurial team has been defined as two or more individuals who jointly establish and develop a business in which they have an equity ownership (Carland, Hoy, Boulton, & Carland, 1984; Cooney, 2005; Francis & Sandberg, 2000; Kamm et al., 1990), build engagement and commitment to common goals and outcomes that can only be achieved by combinations of individual actions (Harper, 2008), and come to see themselves as a social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009).

Not all entrepreneurial teams are similar, however. Harper (2008) points to an important issue in his elaboration of the “team agent” in entrepreneurship (p. 613). He suggests a taxonomy of entrepreneurial teams in which some teams reflect more the individual (e.g., nested entrepreneurial teams with a lead entrepreneur and sub-entrepreneurs) while others seem more collective (e.g., emergent entrepreneurial teams where two or more team members see themselves as equal entrepreneurs in a joint endeavor). Harper (2008) concludes by suggesting that the different kinds of entrepreneurial teams should be distinguished and empirically examined.

Grasping the above suggestion, we examine such entrepreneurial teams that do not represent an individual or even merely the sum of individuals but amount over and above the individual team members and have special collective properties (Ensley & Pearce, 2001; Harper, 2008; Shepherd & Krueger, 2002; Watson et al., 1995; West, 2007). While scholars have moved attention from the individual entrepreneur to the entrepreneurial team (Cohen & Bailey, 1997; Harper, 2008; Schjoedt & Kraus, 2009) and suggested that team venture performance often relates to team-level issues (Eisenhardt, 2013; Ensley, Pearson, & Amason, 2002; Kaplan & Strömberg, 2004; Watson et al., 1995), the notion of collectivity (i.e., social entity or unity of people defined by meanings, qualities, and conditions constructed by the people involved: Alvesson & Kärreman, 2006; Finn, 2008; Morgeson & Hofmann, 1999) is less understood in the literature. Many team entrepreneurship studies are focused on the individuals involved, rather

than the team as a *collective* entity with particular structures between team members. For example, examination of team composition and formation, and team functioning often emphasizes team members' individual characteristics and/or competencies or the aggregate of individual human capital, views and skills within the teams (e.g., Ruef, Aldrich, & Carter, 2003; Visintin & Pittino, 2014; Ucbasaran, Lockett, Wright, & Westhead, 2003; Zhao, Song, & Storm, 2013), or the role of the lead entrepreneur in creating a direction and vision for the rest of the team to follow (e.g., Clarysse & Moray, 2004; Ensley, Carland & Carland, 2000).

The purpose of this study is to offer an understanding and description of collectivity within entrepreneurial teams. More specifically, our research questions are: What does entrepreneurs' collectivity comprise of? Or in other words, what are the necessary constituents of collectivity within entrepreneurial teams? Mapping the conceptual structure of collectivity in entrepreneurship is an important step to keep the entrepreneurship field close to the phenomenon of interest via appropriate abstractions (Forsström-Tuominen, Jussila, & Kolhinen, 2015) and to provide insights that help develop successful team ventures through understanding entrepreneurial teams at the collective level (Eisenhardt, 2013; Ensley et al., 2002; Harper, 2008; Kaplan & Strömberg, 2004; Watson et al., 1995).

We employ a deep, qualitative multiple-case study approach (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014) in order to be sensitive to a wide range of contextual and structural variables that may offer rich conceptual abstractions to elaborate existing thinking and guide future theory (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). The context of our study is four startup teams in high-technology industries, while our main data is from individual and group semi-structured thematic interviews with core team members of each startup. We focus on the collective level of analysis only, not the individuals per se although we see that collective phenomena base on individuals' interactions (Morgeson & Hofmann, 1999). Specifically, we take a group of people in interaction with one another as a relevant unit of analysis (Harper, 2008) and their interpretation of team entrepreneurship as the unit of observation. We use inductive, systematic thematic analysis by Gioia, Corley, and Hamilton (2013) to present a data structure that reflects links between the data and new concepts and helps uncover the cross-sectional components of collectivity within the entrepreneurial teams. Our research process proceeded from the data to interpretation and to theory without hypotheses derived from the existing literature. We use organizational theory literature to deepen and support

our analysis. Then, we discuss our findings in relation to relevant existing knowledge of team entrepreneurship literature so that we can recognize incongruities and discontinuities in the data relative to the existing knowledge in order to develop incrementally and revelatory useful knowledge (see Corley & Gioia, 2011).

COLLECTIVITY

In order to identify a need for our contribution, we specify the idea of collectivity (or collective) in general. According to Morgeson and Hofmann (1999), a collectivity represents an interdependent and goal-directed combination of individuals, groups, departments, organizations, or institutions. Notably, a collectivity is more than the sum of individuals involved (Klimoski & Mohammed, 1994). It is a social entity or unit of actors (Alvesson & Kärreman, 2006; Klimoski & Mohammed, 1994; Morgeson & Hofmann, 1999) that is characterized by group membership and unity of the group members (Tajfel, 1982).

The unity of actors is represented by the concept of collective identity as a perception of oneness of the group members (Ashforth & Mael, 1989; Tajfel, 1978; Tajfel & Turner, 1979). This means that the group of individuals perceive themselves as an 'us' (Pierce & Jussila, 2010) that shares common fate (Ashforth & Mael, 1989; Triandis, 1993), purpose, and direction (Albert, Ashforth, & Dutton, 2000; Ashforth, Rogers, & Corley, 2011; Ellemers, de Gilder, & Haslam, 2004). In this paper, we are especially concerned with *interpersonal identity* which emerges from interpersonal relationships and interdependence of an individual with a specific group of others (e.g., family, friends, and other small, face-to-face groups) (Brewer & Gardner, 1996).

Generally, it has been proposed that the entity or unit of people is not enough to define and describe collectivity. As Tajfel (1982) points out, various psychological processes follow from group membership. For example, the group members socially construct meaning to the unity that describes that specific entity (Alvesson & Kärreman, 2006; Finn, 2008). More specifically, collectivities are systems of interpersonal interaction (Giddens, 1984). They are characterized by collective structures (i.e., jointly produced behavior patterns) that emerge in interaction between individuals involved and lie between the individuals (Giddens, 1984; Morgeson & Hofmann, 1999). According to Giddens (1984) the structures reflect particular rules

and resources (i.e., interpretative schemes, facilities, and norms) that are organized into the properties of social systems and created and used by the actors. Thus, the collective structures emerge in interactions of the individuals but also affect the interactions (called the duality of structure by Giddens, 1984). Importantly, understanding the collective structure of a specific collective requires understanding the *context* within which the individuals involved act (such as entrepreneurship) because the context limits the *range of possible interactions* that create the structures (Morgeson & Hofmann, 1999; Peters & O'Connor, 1980). This insight is critical for studying entrepreneurs' collectives (e.g., Harper, 2008) and sheds light on why entrepreneurs' collectives might be *different from other collectives, and how studying collectives in the context of entrepreneurship may add to the literature on groups and teams in general* (e.g., Tajfel, 1978; Tajfel & Turner, 1979; Triandis, 1993).

In addition, we should note that collectives are not groups where people only think alike and are inevitably subject to group think (see Janis, 1982). Being a part of a collective does not mean that individuals would lose themselves and their ability to independent thinking and reasoning. Rather, they work hard to understand each other and accommodate different points of views in pursuit of joint objectives in a way that does not exclude individuals (Morgeson & Hofmann, 1999).

EXISTING KNOWLEDGE OF COLLECTIVITY IN ENTREPRENEURSHIP

Within entrepreneurship, we identify two streams of research that represent entrepreneurial teams as collectivities, including all multi-individual¹ entrepreneurship studies. First, some scholars have moved focus clearly away from the individual entrepreneur to the team-level and defined entrepreneurial teams in terms of individuals coming together as "social units" (e.g., Cohen & Bailey, 1997; Schjoedt & Kraus, 2009). Second, researchers have studied team-level constructs that can be seen to unite the individuals involved in the team venture, such as cognitive and affective states of cohesion and commitment (e.g., Ensley, Pearson, & Pearce, 2003; Watson et al., 1995) or more specifically "collective cognition" within entrepreneurial teams (e.g., Shepherd & Krueger, 2002; West, 2007).

¹ We include both team entrepreneurship (i.e., new ventures) and collective entrepreneurship (i.e., mainly established organizations) literature as they intertwine and draw from one another (see Cooney, 2005; Lechler, 2001) and help gain as extensive an understanding as possible. We refer to the literatures by using the word multi-individual.

“Entrepreneurial teams as social units” perspective shifts attention to the team as the relevant unit of analysis. Harper (2008) sees that the team accounts for over and above the individual team members and is not always solely reducible to the individuals. Other scholars have also realized that multi-individual entrepreneurship entails individuals’ membership in a team and relationships and connections between the team members (Cohen & Bailey, 1997; Ribeiro-Soriano & Urbano, 2009; Schjoedt & Kraus, 2009). Thus, this stream of study sees individuals connected by team membership in a social context that unites the individuals (Cohen & Bailey, 1997). While the above literature has taken team entrepreneurship studies a notable step further from the individualistic insights of economics toward understanding entrepreneurship at the team-level (see Harper, 2008), the studies are yet few and the idea of the unity or oneness seems not to be adopted in many studies. The studies take entrepreneurial teams as the sum of individuals and focus more on the individuals involved rather than the collective (e.g., Ruef et al., 2003; Visintin & Pittino, 2014; Ucbasaran et al., 2003). This might imply that the idea of an entrepreneurial team as a unit might need specification.

Other studies may be seen to reflect the unity through identification of special properties or constructs within entrepreneurial teams (e.g., Harper, 2008; Watson et al., 1995; West, 2007). The identified constructs are many. Team cohesion and commitment are cognitive and affective states among team members that influence individuals’ motivation and morale but also more concrete actions such as information sharing and decision-making within the teams (e.g., Ensley et al., 2003; Watson et al., 1995). Team cohesion refers to the sense of belonging to the team, the degree to which team members wish to remain as members of the team and stay loyal toward the team, and commitment toward team goals and tasks (Ensley et al., 2003; Lechler, 2001). Team commitment toward the entrepreneurial team and team outcomes represents enthusiasm for and focusing on common goals, effort, and performance of the team as a whole (Comeche & Loras, 2010; Cooper & Daily, 1997; Watson et al., 1995). Closely related to commitment and cohesion, other researchers have studied trust and affection toward the team (Ensley & Pearce, 2001; Zheng, 2012), identification with and obligations to the team (Blatt, 2009; Lounsbury, 1998; Toledano, Urbano, & Bernadich, 2010), and collective efficacy as team’s belief in their capability of carrying out particular joint action and outcomes (Shepherd & Krueger, 2002). For example, Blatt (2009) examines relationships between entrepreneurial team members and suggests that communal schemas (cognition) promote relational capital in the form

of trust, identification, and obligations. Additionally, collective entrepreneurship scholars have recognized that team level mental states of entrepreneurial spirit (Ribeiro Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2010), atmosphere (Toledano et al., 2010), or mindset (dos Santos & Spann, 2011) make a team more entrepreneurial as a whole (Ribeiro Soriano & Comeche Martínez, 2007).

Some scholars highlight collective vision of the entrepreneurial team members that relates to a common mental model of the strategy of the venture (Ensley et al., 2003; Harper, 2008; Lounsbury, 1998). For example, Lounsbury (1998) finds that organizational team members develop shared sense of purpose for their group. Harper (2008) illustrates that team members co-tune their perceptions into a common understanding of the world and a joint entrepreneurial vision. Indeed, there is a growing interest toward collective cognition within entrepreneurial teams (e.g., Shepherd & Krueger, 2002; West, 2007; for a review see de Mol, Khapova, & Elfring, 2015). Collective cognition refers to integrative cognitive patterns amongst the team members, and harmonization and synchronization of individuals' perspectives (Lechler, 2001; Watson et al., 1995). It represents a common or supra-individual mental model among the team members especially of the strategy and direction of the joint endeavor (Pearce & Ensley, 2000; Shepherd & Krueger, 2002; West, 2007). For example Watson et al. (1995) suggest that team venture members "must keep on the same "wavelength" about business cycles and strategies" (p. 396). Ensley and Pearce (2001) refer to strategy consensus among the team members and define shared cognition as overlap or agreement of individual members' mental models with each other.

West (2007) specifies that "the term 'collective cognition' refers to the content of the combination of individual perspectives and the structural characteristics of that combination" (p. 84). The content refers to constructs that guide venture action and performance, such as certain values amongst the team members (West, 2007). For example, work norms (Lechler, 2001) and routines (Lounsbury, 1998; Shepherd & Krueger, 2002) within the teams have been seen to reflect shared expectations in regard to ways of behavior. The structure involves cognitive architecture, such as scripts or schemas. There are two structural properties of collective cognition within entrepreneurial top management teams: differentiation and integration. Differentiation refers to the degree to which each construct is different from one another (agreement and consensus). Integration reflects the degree to which individual team members think similarly about a set of constructs. Thus, entrepreneurial team members' varying

perspectives should turn into a collective understanding that guides decisions and actions related to business, and eventually affect firm performance. (West, 2007) Some scholars see that collective cognition sets the basis for actions, plans, goals, coordination, management, and motivation within the team (Ensley et al., 2003; Harper, 2008). It guides new information seeking, interpretation, and decision-making based on memory stocks, for example (West, 2007).

Despite the valuable insights of the studies, the literature on collective structures is difficult to grasp due to fragmentation of ideas. On one hand, some collective structures, such as collective cognition, have been elaborated in-depth. On the other hand, other constructs, such as feelings and emotional aspects, have received less attention or might be missing. Also, no study provides a map of all the relevant constructs that reflect collectivity within entrepreneurial teams.

METHODS

This is a qualitative multiple-case study (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014) that aims at theory-elaboration (Eisenhardt, 1989; Eisenhardt & Graebner, 2007) through inductive analysis (Gioia et al., 2013). A case study is an in-depth empirical description of particular instances of a contemporary phenomenon in its real-world context. In a multiple-case study, two or more cases (e.g., organizations) are included in the same study. (Yin, 2014) Although a case study can be used for many purposes it is especially suitable for inductively elaborating theory in relatively new topic areas (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). More specifically, a case study is appropriate if main questions seek to examine a complex contemporary phenomenon and if the questions require an in-depth description (Eisenhardt, 1989; Flyvbjerg, 2006; Halinen & Törnroos, 2005; Yin, 2014).

The research process of this study adopts the recommendations of Eisenhardt (1989; see also Ravenswood, 2011). We take an inductive approach which indicates that our research process developed from an initial idea of collectivity to data collection in a specific context and from the data to interpretation and finally to theory. After defining the initial research questions and identifying the key concepts central for our study (i.e., collectivity, entrepreneurial team), we decided that a multiple-case study was suitable because it offers a strong basis for theory elaboration due to varied empirical data from more than one cases. Thus, multiple-case study

offers replications and extensions like experiments but in real-life contexts. (Eisenhardt & Graebner, 2007; Yin, 2014)

Context of the Study and the Case Startups

The cases were selected by the authors and a research assistant through theoretical sampling (Eisenhardt, 1989). We provide the details of the cases and the interviewed team members in Table 1.

Table 1. Details of the Cases

	Case 1	Case 2	Case 3	Case 4
Industry	Machinery and process technology	Information and communication technology	Information and communication technology	Biotechnology
Time in operation	6 months	1 year	2 years 6 months	5 years
Number of core team members interviewed	4	3	3	3
Age of team members	43 – 50	28 – 38	33 – 45	38 – 39
Gender of team members	all male	all male	all male	2 males, 1 female
Education of team members	University degrees in Technology, Economy, or Industrial Arts	2 university degrees in Technology, 1 studying in a university in the field of Technology	University degrees in Technology	University degrees in Technology or Biology
Nationality of team members	3 Finns, 1Austrian	2 Finns, 1Pakistani	all Finns	all Finns
Connection of team members before the startup	Knew each other from work	2 knew each other from their university studies	Had worked with each other	2 knew each other from work and 1 was introduced through a common acquaintance
Team members involved in the startup	all involved for 6 months	2 were co-founders of the venture and involved for 2 years, 1 for a year	All involved for 2 and a half years	2 involved from the beginning and 1 a bit later
Working in the startup full-time/part-time	2 full-time, 2 part-time	1 full-time, 2 part-time	All full-time	All full-time, 1 was leaving to establish another startup
Changes in team membership	Yes	Yes	No	Yes
Researchers connection to the enterprise	Did not know any members	Did not know any members	Did not know any members	Did not know any members

This study includes four cases chosen so that they would enable us answer our research questions and represent the phenomenon under study transparently (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Yin, 2014). The selection of cases was based on four criteria. First, the cases needed to be enterprises that were established by two or more individuals together. Second, the group of individuals needed to be in development of a new product or service jointly as an entrepreneurial team. Third, the enterprises needed to have been in operation from a few months

up to five years in order to reflect entrepreneurial opportunity processes and established entrepreneurial teams, with a history of working together. Fourth, the industries were chosen deliberately because high technology industries are characterized by high degree of uncertainty and complexity, where teams are typically found and can potentially be more effective. We looked for suitable cases in the Internet, newspapers (e.g., lists of most potential startups), and through our own contacts. We created a list of possible cases and contacted the enterprises directly through email. After a response from each company, we checked that they met the selection criteria specified above. The number of cases was finally defined by saturation and pragmatic considerations of time and money (Eisenhardt, 1989).

Data and Analysis Technique

We wanted to employ multiple data sources in order to increase the credibility and convincingness of the study (Eisenhardt, 1989; Gioia et al., 2013) but most importantly to get a better feel of the context and the phenomenon ourselves, which is critical for the analysis. The emphasis of the study is on the latter, since we primarily analyze the primary data and, use of the secondary data is to corroborate, triangulate, and enrich our comprehension of the primary data (Eisenhardt, 1989; Yin, 1994). Our primary data consists of individual and group semi-structured thematic interviews with the core members of each case enterprise. In two of the cases, not all members of the entrepreneurial team could be interviewed due to their time commitments. The interviewees are seen as knowledgeable agents, i.e., they know what they do and are able to explain about their experiences, actions, and thoughts (Gioia et al., 2013). In order to get as truthful and honest account as possible, anonymity was promised to the participants. Thus, we made attempts to capture the authentic voice of the informants, which is recommended to help capture concepts relevant to human experience and offer multiple views on the cases (Gioia et al., 2013; Stake, 1995).

Before the actual interview data collection, we designed the interview forms for the individual and group interviews. The interview questions were focused on the research questions and key concepts in a way that would inspire the interviewees to talk openly about their experiences. The interview themes included personal details of the interviewee, the enterprise and its development, the team and its development, values and courses of action of the team, work

practices, communication, leadership and management, decision-making, knowledge sharing, ownership, efforts and inputs, and future goals and plans of the team. We also gave the interviewees a chance to add anything they felt was missing from the questions (i.e., what the interviewees felt is important in studying entrepreneurial teams). We avoided leading-the-witness questions but did ask about the phenomena that we were interested in because we believe that only by asking about the phenomena of interest can we gain enough data about the phenomena. However, our questions did not include terms drawn from entrepreneurship literature (e.g., “entrepreneurial opportunity”) or even the word “collectivity.” We modified the interview questions and added new questions when it seemed appropriate to gain a deeper understanding about the phenomenon of interest. We also made field notes that began the analysis process.

We conducted a total of 18 interviews out of which 14 were individual interviews and four group interviews in summer and fall 2013. The individual interviews took 26 – 90 minutes. The group interviews took 32 – 65 minutes. Only one individual and group interview remained brief. All except one individual and one group interview were in Finnish, which were later translated into English. We first interviewed all team members of each startup individually and then together. By conducting the individual interviews before the group interview, we wanted to ensure that we get independent data first. By interviewing the team members as a group, we wanted to give the interviewees an opportunity to reflect on their experiences jointly and corroborate the data. Observing group interactions directly enriched the data as they may offer deeper and more direct insights into the dynamics of the group than the individual interviews only. Thus, the group interviews corroborate the individual data because the study is about group-level phenomenon itself and not only about retrospective accounts on non-group related phenomena, for example. All of the interviews were tape-recorded with permission from the interviewees and transcribed verbatim by a research assistant and the first author. The secondary, archival data includes homepages, Facebook, LinkedIn, and Twitter pages, blogs, and news about the startups. This data was used to corroborate information provided by the interviewees wherever possible. We have not included specific extracts from the public pages in this study because this data is public and, therefore, disclosing this information may lead to the violation of our promise of anonymity to the individuals.

After familiarization with the enterprises and the data, we began a within and cross-case pattern search analysis which enables identification of similarities and contradictions

(Eisenhardt, 1989). The specific analysis technique used in this study is “thematic analysis” introduced by Gioia et al. (2013; see Shapira, 2015; Smets, Jarzabkowski, Burke, & Spee, 2015 for examples of application). The analysis method was chosen because it is especially suitable for elaborating new concepts and ideas (Gioia et al., 2013). It also offers a systematic technique that provides rigor to an inductive case study (Eisenhardt, 1989). The thematic analysis includes presentation of a 1st order and a 2nd order analysis that enables the construction of links between the data and the new concepts visible (Gioia et al., 2013).

At the first level of analysis, we first listed all the aspects that seemed relevant in regard to our research questions. The data was coded so that it was possible to identify the case, the type of the data (i.e., individual interview, group interview, email, home pages, Facebook, LinkedIn, Twitter, news, and blogs), and the interviewee (e.g., 123). First, the number of codes was substantial as we strived to stay true to the informant-centric terms and codes. Then, we revised the 1st order concepts in order to make sure that they were firm and stable, and with minimal overlap with each other.

At the second level of analysis, we sought for similarities and differences among the 1st order terms and gave labels to different categories which reduced the number of themes and moved the analysis to the theoretical realm with the help of researcher-centric, 2nd order themes. Thus, we formed data-to-theory connections. The analysis continued by searching for 2nd order aggregate dimensions where the 2nd order themes were distilled further (Gioia et al., 2013). At the same time, following our interpretation of the data we studied the organizational literature outside entrepreneurship research and applied it to our analysis in order to enrich the analysis and entrepreneurship research (Eisenhardt, 1989). After the 1st and 2nd order analyses, we formed a data structure which provides a graphical presentation of how the analyses progressed from raw data to the themes (Gioia et al., 2013).

Finally, we continued the analysis by examining the entity of the major emergent concepts, themes, and dimensions and their interrelations (Gioia et al., 2013). Also, we studied the existing literature on “collectivity” within entrepreneurial teams in more depth in order to uncover what is currently known and how our work might serve to increase knowledge or even change thinking of team entrepreneurship. It should be acknowledged that we were not uninformed of the existing literature (in and outside entrepreneurship research) when conducting the analysis but aimed to avoid an immersion in prior research (Gioia et al., 2013) and

particularly its potential guiding effect as a resource or as the only lens for interpretation. Indeed, good data analysis practice requires this process of theory elaboration to be strongly iterative and recursive among the data, the emerging theory, and the existing literature (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). We studied the data through several times and continually returned to both the data and existing literature to develop our final version of findings. Thus, the research process was overlapping and accumulative in a way where understanding increased and was refined over time.

Table 2. The Research Process

Phase	Initial research questions and key concepts	Method choices	Case criteria, search, and selection	Data collection	Data analysis	Study of existing team entrepreneurship literature	Reflection of findings with existing knowledge	Conclusions	Writing the report
Content	The notion of collectivity in general and entrepreneurial team	Multiple-case study approach	Four cases selected guided by idea of collectivity and entrepreneurial teams	Designing interview forms, conducting interviews, collecting documents, field notes	Thematic analysis and interpretation + organizational literature	Literature review	Linking analysis to previous studies, novelty of the study	Main contributions, utility of the study	The research report as a whole
Section of the article	Introduction, collectivity, methods	Methods	Methods	Methods	Methods, findings	Existing knowledge of collectivity in entrepreneurship	Discussion	Conclusions	All
Time	From May 2012 forward	September 2012	April – November 2013	June – November 2013	June – October 2014	November – December 2014	January – June 2015	January - June 2015	June 2014 – June 2015
Notes	Iteration and recursiveness								

Table 2 presents an overview of our research process. We outline the phases of the process, the sections where each phase is present in this article, and the approximate time spent on each phase. However, as the process has been overlapping and recurring, these should be taken as indicative overview of our research process rather than viewed as a strictly compartmentalized and rigid linear progression from one phase to another.

FINDINGS

In our analysis of collectivity within the entrepreneurial teams, we find forty-nine 1st order concepts that we categorize into thirteen 2nd order themes and five aggregate dimensions. Table 3 below presents the detailed data structure of our study.

Table 3. Data Structure

Aggregate dimensions, 2nd order themes, and the related 1st order concepts

COLLECTIVE ENTITY

Horizontal unity
 As opposed to being a team here and a team there we are one unit
 We are all one group
 We are all like blocks intertwined
 There has not been a moment of division between us

Vertical indivisibility
 We are not divided in different hierarchical ladders
 We are not unipolar but we have a team
 We are a startup team and not one individual guru shouting around
 There is no one person who others follow

COLLECTIVE IDEA OF BUSINESS

Collective purpose
 We have a joint basis of values
 We have a joint reason for doing this and it is different of others
 The idea of what this is about is understood all the time thereby aligning and guiding our thoughts

Shared goals
 Everything goes well as long as we have the same goal
 The whole firm has a joint goal for which everyone works
 We have shared dreams
 Consensus enables everyone to commit

Joint strategy
 There is a joint vision aligning our work
 Our thoughts on where we should go and the big picture of how the business is carried out fit together
 We are so close to each other that the bigger lines of business have been clear to everybody
 We have a joint view on our products and services
 We are all on the same map when it comes to sales

COLLECTIVE EFFORT

Collective at work
 The whole firm is one team working together
 We pull together quite much
 Nobody actually does anything alone
 More than one person is linked to everything

Collective mind at work
 We are very unanimous
 People can understand and realize things from 'seeds' and can conclude each other's thoughts
 Everyone knows what others do and with whom they have talked
 Everyone knows what others do and where others are

Collective credit
 We have no division to mine and your credits
 No-one can tell who can take credit for the business idea

COLLECTIVE ATTITUDES AND MOTIVATIONS

Mutual belief
 We have joint optimistic belief
 It is good for peoples' creativity, belief and mind that we really understand what we are doing

Mutual trust
 Thanks to trust and shared principles we do not need to think of legal contracts
 We respect and trust each other in being able to make decisions at the same level
 We trust each other's action
 No one keeps a monologue but everyone can speak up

Mutual support
 We are not alone mentally
 If one is in need of help we come and pull together to help each other
 If one needs help, one gets help right away
 Our group supports each other

COLLECTIVE FEELINGS

Shared sense of being alive, interested, and positive
 It is our joint thing and important to me that we have a good spirit of doing this
 We have a terribly good spirit all the time
 Curiosity and positive enthusiasm unite us
 We have a social tone of doing new things together

Shared sense of affection and happiness
 We have family like passion everyone likes to be part of
 We have a feeling of belonging together
 We have a friend-like atmosphere
 We have fun together
 We have a lot of fun all the time

The first aggregate dimension ‘collective entity’ speaks for the unity and indivisibility of the entrepreneurial team – entailing collective structures that serve to align individual ideas, actions, thoughts, feelings, etc. Showing consistency across the accounts in our data we identify a variety of these structures (aggregate dimensions 2 – 5) including collective idea of business, collective effort to realize that idea, collective attitudes and motivations assisting in the effort, and collective feelings both assisting in the effort and enriching the collective lives of the entrepreneurs. Next, we will examine the aggregate dimensions as well as the included themes and concepts in more detail.

Collective Entity

The first aggregate dimension, collective entity, covers the themes ‘horizontal unity’ and ‘vertical indivisibility’. These themes speak to the existence of a collective entity and specify that entity in the entrepreneurial contexts of our study.

Table 4. Horizontal Unity

1st order concepts and the selected representative data
As opposed to being a team here and a team there we are one unit
-- I would well argue that we are like one unit and we don't have like that team there and another team here -- 411
We are all one group
-- I think we are one group all -- 412
We are all like blocks intertwined
-- I think it is what I said in the morning too that it is this that there is not a single piece there and another one beside but we are all like blocks intertwined. 421
There has not been a moment of division between us
-- and there hasn't been this division into different like these kinds of groups that would then gossip around the coffee table and couldn't be able to work (together) so that there wasn't that kind of a moment at all 411

The ‘horizontal unity’ theme (see Table 4 above) includes voices accounting for oneness, integration, and intertwinedness across team members. The below extract represent this theme. The first number of the interviewee code refers to the case company (1, 2, 3, or 4), the second to individual or group interview (1 or 2), and the third to the team member (1, 2, 3, or 4).

- - *I think it is what I said in the morning too that it is this that there is not a single piece there and another one beside but we are all like blocks intertwined. 421*

The interviewee had said in the individual interview that the venture members are a unit. (S)he continued in the group interview by reflecting that the members are like blocks intertwined rather than pieces beside each other. Thus, the members are horizontally united. The unity involves membership of individuals in a group, which is a core component of all collective phenomena (Katz & Kahn, 1987). More specifically, as Ashforth and Mael (1989) see, perception of oneness of group members reflects social identification. Indeed, many scholars believe that collective phenomena will occur only if a collective identity emerges (e.g., Melucci, 1996). Thus, collective identity is a root construct of organizations that represents the very definition of an entity such as a team (Albert et al., 2000) of entrepreneurs.

Table 5. Vertical Indivisibility

1st order concepts and the selected representative data
<p>We are not divided in different hierarchical ladders</p> <p>I don't see any kind of two hierarchical layers of people, that would be in economics, that would be the case within smaller circles - - 212</p> <p>We are not unipolar but we have a team</p> <p>- - we are not that kind of unipolar that we would have like the entrepreneur and the boys. So that's not our setting but we have this kind of like a team. 113</p> <p>We are a startup team and not one individual guru shouting around</p> <p>That kind of in a way that might be (possible) in theory in a game company where there is the guy with a hoodie he sees himself as a guru, he like...then shouts around can you code this, that could be just barely...but well...that's like is it any kind of this kind of a startup team then or is it one individual's...well in that case but we are certainly not like that. 123</p> <p>There is no one person who others follow</p> <p>- - it's often (generally speaking) that there is me and the others follow me -type of stuff, for me then okay if you are absolutely right about something and you are sure that you are the best in the world, that can work of course but I have well learned that most often four is better than one and ten is better than one and so on - - 123</p>

The 'vertical indivisibility' theme speaks to unity and oneness from a different angle reflecting equality and democracy amongst the team members as seen in Table 5. There is no hierarchical division between the team members.

“That kind of in a way that might be (possible) in theory in a game company where there is the guy with a hoodie he sees himself as a guru, he like...then shouts around can you code this, that could be just barely...but well...that’s like is it any kind of this kind of a startup team then or is it one individual’s...well in that case but we are certainly not like that.” 123

As the interviewee says, division between an individual leader (the guy with a hoodie who shouts around) and ‘the others’ who would obey the leader’s commands would reflect an individual entrepreneur rather than a startup team. Other interviewees also account for their teams departing from dominant ideas of economics and organizations (see Table 5). In the case entrepreneurial teams, power and control are distributed horizontally among all team members as opposed to vertical hierarchy where the organization is structured and operated around a solo individual leader (Burns & Stalker, 1961; Mintzberg, 1979).

Collective Idea of Business

The entrepreneurial entity reflects socially constructed collective structures with a variety of contents found in our data. Our second aggregate dimension, collective idea of business, includes themes of ‘collective purpose’, ‘shared goals’, and ‘joint strategy’. We start with outlining the theme ‘collective purpose’.

Table 6. Collective Purpose

1st order concepts and the selected representative data
We have a joint basis of values
-- we have a sufficient joint basis of values -- 211
We have a joint reason for doing this and it is different of others’
-- those organizations and people have totally different reasons why they do that work than us -- 411
The idea of what this is about is understood all the time thereby aligning and guiding our thoughts
-- I think it’s good that it’s in front of everybody’s eyes all the time, people understand that that’s what this is about, and it should show and guide thoughts that they (the thoughts) would be in line with each other at that point. 212

As reflected in Table 6 above, the team members have a collective understanding of their purpose, the big picture of what the world and they themselves would miss in the absence of their collective enterprise.

“ - I think it’s good that it’s in front of everybody’s eyes all the time, people understand that that’s what this is about, and it should show and guide thoughts that they (the thoughts) would be in line with each other at that point.” 212

The above extract illustrates shared understanding among all team members about what the business is about. Such joint understanding reflects collective mind or cognition (i.e., a mutually shared mental model that represents the comprehension of unfolding events, actions, and knowledge by a group of interacting individuals as a whole: Klimoski & Mohammed, 1994; Weick & Roberts, 1993) and collective identity by providing answers to the questions of what does the group stand for (Albert et al., 2000; Ashforth et al., 2011). The data leads us to the work of Abela (2001) and Springett (2004, 2005) among others on corporate purpose. According to Springett (2005), corporate purpose is “the most fundamental decision about a company” (p. 358) that answers the question why the company “is in business in the first place” (Springett, 2004, p. 300). The purpose means the inherent object for which the business exists and might be broader than the profit only. The values of the individuals, in this case those of the collectives, provide a basis for the definition of purpose (Abela, 2001). Thus, corporate purpose “sits at the confluence of strategy and values” expressing “the company’s fundamental value – the raison d’être or overriding reason for existing” (Ellsworth, 2002, p. 4). Therefore, corporate purpose provides “the end to which strategy is directed” (Ellsworth, 2002, p. 4).

Table 7. Shared Goals

1st order concepts and the selected representative data
<p>Everything goes well as long as we have the same goal -- as long as we have like the same goal everybody so this will go...quite well - - 412</p> <p>The whole firm has a joint goal for which everyone works - - so that has been that kind of a common goal for the whole firm that everyone has nevertheless worked for (achieving) it in a way or another - - 413</p> <p>We have shared dreams I think these common moments and common ideas when we meet together, it’s impossible to do without a team. 221 Yeah, we have shared dreams. 223</p> <p>Consensus enables everyone to commit - -we needed to have a little more consensus (regarding big decisions) so then we saw what the value of it (consensus) is...so that when it’s done, the decision, so everyone can really commit to that completely - - 421</p>

Related to the collective purpose, team members have shared and agreed-on goals that direct collective entrepreneurial action (see Table 7).

-- as long as we have like the same goal everybody so this will go...quite well -- 412

The role of shared goals is essential to the teams. They guide commitment and action. In terms of Abela (2001), the group members have a mutual conception of particular goals derived from the purpose of the enterprise and chosen by the members of the entrepreneur collective. The goals also relate to collective identity that answers for its part where the group is going (Albert et al., 2000; Ashforth et al., 2011; Ellemers et al., 2004).

Table 8. Joint Strategy

1st order concepts and the selected representative data
There is a joint vision aligning our work
-- that there sure has to be a vision but that it's joint and everybody does the work. 123 Some line. 124 Some kind of a line -- 123
Our thoughts on where we should go and the big picture of how the business is carried out fit together
-- at least the bigger picture of how the business is carried out. Where should we go with the firm and ... our thoughts fit together, that's it. 322
We are so close to each other that the bigger lines of business have been clear to everybody
-- but those bigger lines (of business) have always been clear to everybody...when, and we are that close to each other -- 413
We have a joint view on our products and services
I think we all have a view when we discuss this, our service product and else, we all have a view after all what it is. 122
We are all on the same map when it comes to sales
So when the sale (lead) comes so everyone is on the same map by and large. 313

Table 8 presents voices speaking to a collective cognition on joint strategy amongst the team members.

-- but those bigger lines (of business) have always been clear to everybody...when, and we are that close to each other -- 413

The team members share a vision and an understanding of their strategy (the bigger lines of business) which is linked to team members being close to each other. The vision and

understanding includes a joint view of products and services (see Table 7). There is a collective knowledge structure that helps keep the people involved on the same “map” or “page” about business. These ideas continue our data’s alignment with organizational science literature that has included an increasing interest in group cognition or mind (e.g., Klimoski & Mohammed, 1994; Weick & Roberts, 1993).

Collective Effort

This aggregate dimension focuses on the team’s work and outcomes and how they are collectively viewed by the team members. It includes the themes of ‘collective at work’, ‘collective mind at work’, and ‘collective credit’.

Table 9. Collective at Work

1st order concepts and the selected representative data
<p>The whole firm is one team working together Er well in a way I think we are one team the whole firm, I mean we do this together - - 412</p> <p>We pull together quite much - - I think we pull together quite much - - 411</p> <p>Nobody actually does anything alone Nobody actually does anything alone here. 311</p> <p>More than one person is linked to everything - - everything we do so more than one person is always linked to (involved in) that, whatever the part of the project is - - 411</p>

Table 9 presents the theme ‘collective at work’ that reflects joint work of individuals.

“Nobody actually does anything alone here.” 311

The seamless integration into a single undivided entity is reflected in that the individuals see that they work together on ‘everything’. No-one is seen to do things alone but individuals’ work is seen to be intertwined in a way that is not only strictly technical but is natural and even entails fun aspects of job. Organizational scholars have seen task interdependence as dependence of one individual on the others for the accomplishment of a given task (Thompson, 1967). Researchers have also understood that high task interdependence is typical of collective action (Bridoux,

Coeurderoy, & Durand, 2011) and emergence of collective structures (Morgeson & Hofmann, 1999). While these insights are relevant in understanding interdependence within the startup teams, interdependence also relates to the unity of individuals which makes interdependence an intrinsic part of collective work.

Table 10. Collective Mind at Work

1st order concepts and the selected representative data
We are very unanimous
We are like very unanimous at the current level of abstraction. 111
People can understand and realize things from ‘seeds’ and can conclude each other’s thoughts
I mean that to get something, somebody to understand some specific thing, so if I say something, I suppose in a way that (s)he realizes and understands some specific things when I say it this way that (s)he can conclude my thoughts - - and if I communicate with others on a daily basis, I kind of begin to get used to that people independently understand and realize stuff when given appropriate seeds - - 212
Everyone knows what others do and with whom they have talked
But (this is about) group action in a way that we know quite well where each one of us is and what they’re doing and with whom they’ve talked about things. Everyone knows. 312
Everyone knows what others do and where others are
- - I would believe that everyone knows quite clearly (precisely) what the others do...and where the others are - - 411

Table 10 presents the theme ‘collective mind at work’. The oneness of the team members reflects cognitive unity and intertwinedness across the team members as they pursue their collective goals.

“But (this is about) group action in a way that we know quite well where each one of us is and what they’re doing and with whom they’ve talked about things. Everyone knows.” 312

The team member reflects on individual team members knowing well what everyone is doing and how the carrying out of business is going. This and the other interviewees’ accounts speak to a collective cognition amongst the team members, collective memory and collective resources for interpretation. Thus, the group is a social entity with cognitive and psychological significance (Gibson, 2001). What this means, for example, is that with very little effort (with ‘appropriate seeds’) the team members can understand each other or communicate large bodies of knowledge (i.e., utilize chunking) (see Table 10). This adds to efficiency and effectance of knowledge

interaction amongst the collective and is thereby likely to substantially assist the entrepreneurs in their collective operation.

Table 11. Collective Credit

1st order concepts and the selected representative data
We have no division to mine and your credits The thing works in that way, that like, in a way, whether setbacks or successes, so that they are not like somebody's credits, in a way but they are things that are done together. 313
No-one can tell who can take credit for the business idea About that (business) idea...I am not sure who can take credit out of it, I can't take full credit out of it, I think nobody can. 222

Table 11 presents the theme 'collective credit'. Business is not carried out for individual but for the collective credit.

"The thing works in that way, that like, in a way, whether setbacks or successes, so that they are not like somebody's credits, in a way but they are things that are done together." 313

The integration into a single undivided entity is reflected in that the members' individual contributions to the collective effort are hardly identifiable. Thereby, the team members do not make a division between mine and your credits and they are even unable to identify individual credits on specific outcomes which might reflect interdependence of collective work (Thompson, 1976). In such a context, it is even typical that members of organizations do not 'remember' how they actually got to where they have collectively travelled (Morgeson & Hoffman, 1999).

Collective Attitudes and Motivations

Further, we identify an aggregate dimension of collective attitudes and motivations which reflects mutual belief, trust, and support. We first examine the theme 'mutual belief'.

Table 12. Mutual Belief

1st order concepts and the selected representative data
<p>We have joint optimistic belief</p> <p>-- when three people came (together), so we could then optimistically encourage each other that we really know how to do something, we had like belief in that thing (business) - - 311</p> <p>It is good for peoples' creativity, belief and mind that we really understand what we are doing</p> <p>Plus of course this kind of that, overall it is nice to have people who... in a way that, it is good for peoples' creativity and for this kind of like belief and mind, in a way that, that it like, that there are like, that there are people (the team members) who really understand what we are doing. 123</p>

Table 12 presents the team members' joint optimistic belief in their business.

“-- when three people came (together), so we could then optimistically encourage each other that we really know how to do something, we had like belief in that thing (business) - -“ 311

The informant says that three people who came together were able to encourage each other in a positive, optimistic sense when it comes to their ability to pursue the business. Thus, the set of business objectives and related supportive values that form the core ideology of the firm is held up by the belief in it by the organizational members (Collins & Porras, 1994). As we follow the lead of our data, we find a collective-level construct of collective efficacy (Bandura, 1997) particularly useful in grasping elements of collectiveness of entrepreneurship. Collective efficacy – which is seen as an emergent group property that is more than the sum of the individual attributes – can be defined as a joint belief of team-members that together they can reach their goals and utilize opportunities in their environment (Bandura, 1997). We find the construct relevant since the team members talk of how they have come to believe in their mutual knowledge, skills, and competence. The team members also talk of how taking the route to entrepreneurship collectively as opposed to alone and how being able to rely on one-another contributes to their belief in going far and accomplishing things they never even dreamed of.

Table 13. Mutual Trust

1st order concepts and the selected representative data
Thanks to trust and shared principles we do not need to think of legal contracts
But at the same time, we don't have to like, we have certain trust, everybody is involved based on the same principle and I think it has been easy to come along through that because we haven't have to think about legal contracts or else. 111
We respect and trust each other in being able to make decisions at the same level
- - respect of one another so that one trusts in that the other can make decisions at the same level so promote the same thing through that. 211
We trust each other's action
With quite trusting minds, people can trust in each other's doings so. 212
No one keeps a monologue but everyone can speak up
and we have well got incredibly good feedback from outside, funders and who ever visits here so in a way everybody has a good feeling when they leave here and that wouldn't necessarily be the same feeling if there was like one and the others... 421 right right 423 ... so I think it is transmitted to everyone who comes to sit in this meeting room for example so that one person doesn't keep a monologue here and the others nod that yes sir that's how it goes. 421

Our analysis indicates that mutual trust is a central component of collective structures (see Table 13). Trust relates to interdependence of people in working together, or dependence of people on one another in achieving common goals (Mayer, Davis, & Schoorman, 1995). Trust enhances the desire to contribute to the common goals and encourages collective behavior patterns such as free exchange of knowledge and information, and organizational citizenship and broad work role definitions that help perform the collective goals (Jones & George, 1998). Team members do not need to think about formal contracts but can rely on each other because everybody trusts that everyone else on the team is involved in the same purpose and goals. Further, we find the construct of “psychological safety” relevant for this theme (Edmondson, 1999). Psychological safety can be defined as the shared belief (group-level cognition) that the team is a safe context for interpersonal risk-taking (Edmondson, 1999). Trust and psychological safety may be correlated and mutually reinforcing since trust may lead to feelings of psychological safety, and that in turn may lead to trusting others in the team. There is in fact a norm or principle according to which it is acceptable to disagree or present new ideas, not just nod in agreement (see Table 13). Hence, the team is a safe context for presenting opinions and new ideas, which can be considered critical for collective entrepreneurship.

Table 14. Mutual Support

1st order concepts and the selected representative data
We are not alone mentally -- I was not alone mentally - - 413
If one is in need of help we come and pull together to help each other If someone needed help so it wouldn't be like I will not do anything for you. Everybody would come and pull together. 122
If one needs help, one gets help right away -- and if one asks for help, one gets help right away every time that okay, I'll handle that and I'll do this here and it has not changed luckily and I hope it'll never change. 421
Our group supports each other - - the team is needed in a way that it is the kind of a group of people that like supports each other - - 113

Table 14 presents the theme ‘mutual support’. As action is taken together for collective credit, everybody supports and helps each other. The team members support each other through mental and practical help.

“If someone needed help so it wouldn't be like I will not do anything for you. Everybody would come and pull together.” 122

The interviewee reflects on a situation where someone would need help and sees that the team members would always come and pull together. Thus, they would not think in individual terms but from the point of view of collective effort and credit. Continuing the data's connection to the psychological safety construct (Edmondson, 1999), the team members see that they can freely seek help from their team, without feeling insecure about exposing their vulnerability. An outcome of this aspect could be the development of a viable context for rapid group learning. According to Edmondson (1999), group's learning behavior includes such group behaviors as seeking feedback, asking for help, talking about errors, and experimenting. Overall, these behaviors have implications for the group's capability to work together on subsequent group tasks (Hackman, 1987; Hackman & Oldham, 1980) – thereby also promoting collective efficacy (Bandura, 2000; Lewis, 2011).

Collective Feelings

The final aggregate dimension is ‘collective feelings’ which includes the themes of ‘shared sense of being alive, interested, and positive’ and ‘shared sense of affection and happiness’.

Table 15. Shared Sense of being Alive, Interested, and Positive

1st order concepts and the selected representative data
It is our joint thing and important to me that we have a good spirit of doing this Then our joint thing when we have had these workshops together and innovated together so those are these kinds of that, in addition to that they have of course taken the issues (business) forward considerably, but for me it has been that kind of a feeling that YES here we have like a good spirit of doing this! 122
We have a terribly good spirit all the time We have had a terribly good spirit all the time- - 412
Curiosity and positive enthusiasm unite us -- also what clearly like unites (us) is like curiosity and like positive enthusiasm to do like, good, like quality - - 113
We have a social tone of doing new things together So that there is however that certain social, nice tone of doing new things together. 312

Table 15 presents the first of the two themes including team members’ joint positive spirit evoked by the collective business and the team.

“Then our joint thing when we have had these workshops together and innovated together so those are these kinds of that, in addition to that they have of course taken the issues (business) forward considerably, but for me it has been that kind of a feeling that YES here we have like a good spirit of doing this!” 122

As seen in the above extract, collective work and group membership relate to a positive social tone and enthusiasm among the team members. The team members have come to develop a jointly encouraging and enjoyable spirit or atmosphere especially toward their business and achieving their business-related goals. Notably, the spirit was apparent in the group interviews for us interviewees (and in the secondary data). There was a lot of discussion, encouragement, joking, and reflective responses among the team members. These observations led us to the small subset of organizational research focusing on emotion beyond the individual in organizations (e.g., Kelly & Barsade, 2001; Barsade & Gibson, 1998) according to which the team’s affective

context (e.g., emotional history and emotion norms) can impose an affective tone on the team members or amplify or constrain the ways in which a group experiences or expresses emotion when together.

Table 16. Shared Sense of Affection and Happiness

1st order concepts and the selected representative data
We have family like passion everyone likes to be part of
- - it has been, begun from quite a little but like that kind of a small family doing this and that pas- and that like passion and everybody has liked it, it has been very nice to follow and to be a part of it - - 412
We have a feeling of belonging together
- - that brought that kind of a feeling of belonging together - - 413
We have a friend-like atmosphere
But in a way the atmosphere is a 'group of friends' -like atmosphere. 111
We have fun together
- - well you see what the goings-on and feeling are in this room at the moment and we have fun together - - 422
We have a lot of fun all the time
- - we have had darnn fun all the time. So that's not, that's a totally different feeling or take on weekend, take the laptop out a little, do some work with it. 312

As the last theme of our analysis, we outline 'shared sense of affection and happiness' in Table 16 above. The team members have a set of shared positive feelings toward the team and the collective action.

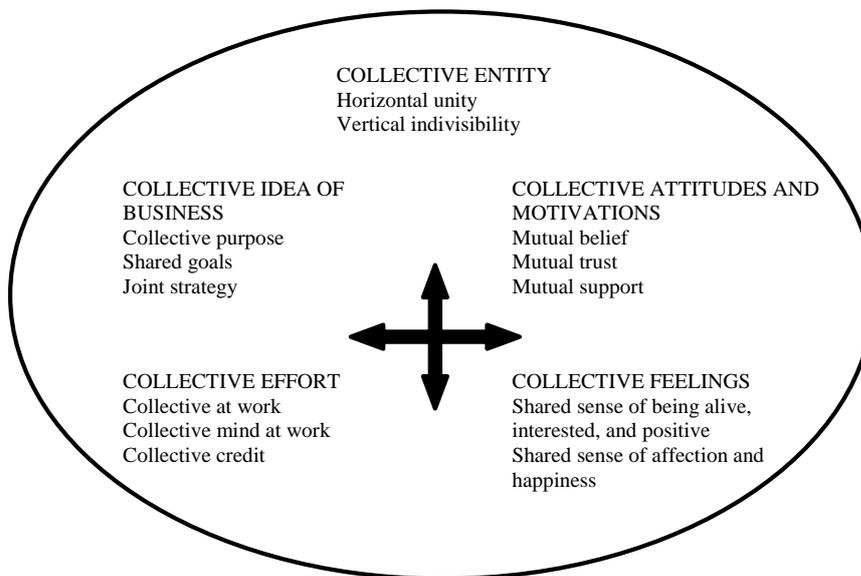
- - well you see what the goings-on and feeling are in this room at the moment and we have fun together - - 422

The above extract is from a group interview and the informant points to the positive feeling among the team in the interview situation. The group members seem to feel to belong together and care for each other and their joint work. They have a positive atmosphere and experience fun while doing the collective work. The positive feelings can be seen as strongly intertwined with collective cognitions and mind (Harré, 1986). The construct of collective identity, for example, incorporates a sense of emotional involvement among the group members (Ashforth & Mael, 1989; Ellemers et al., 2004; Triandis, 1993) and the emotional significance of the membership to the individual (Tajfel, 1978).

Summary of the Findings

We bring our analysis to a close by drawing a map of the major emergent dimensions, themes, and concepts, and their interrelationships. Figure 1 summarizes our analysis.

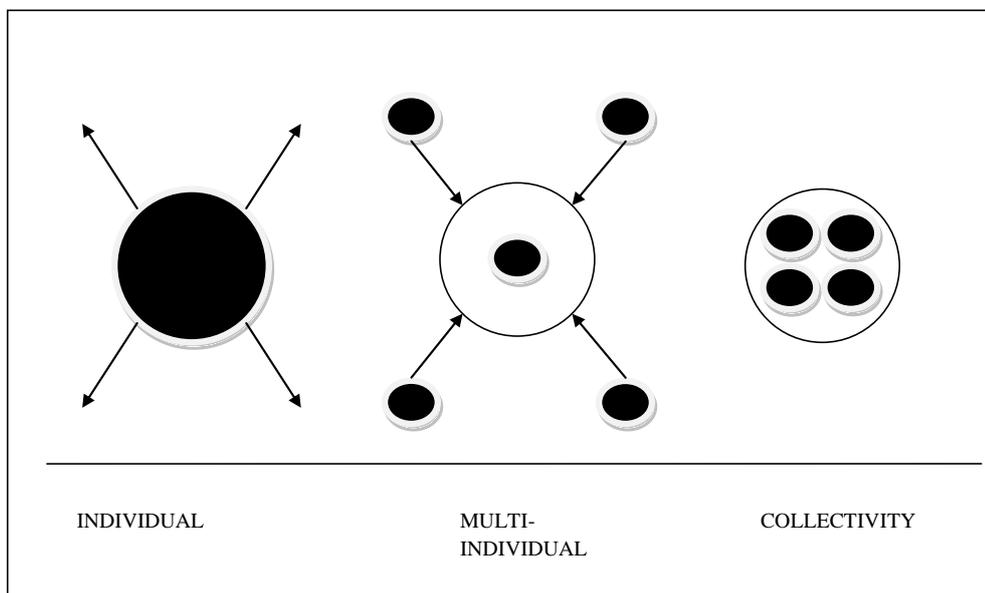
Figure 1. Summary of the Findings



Collectivity reflects unity and indivisibility of the team members. This entity is further reflected in structures of collective idea of business, collective effort, collective attitudes and motivations, and collective feelings. Importantly, the different components of collectivity are strongly interlinked. For example, mutual understanding about the business, purpose, and goals creates belief in the business and encourages a shared spirit and feelings. When team members jointly elaborate on business ideas (create a joint view and direction of the business), they are left with an enthusiastic and positive feelings that they are successful, that they are able to pursue the business together as a team, and with positive beliefs about their future success. Also, joint purpose and goals synchronize actions and enable the understanding of each other and development of trust. Once again, trust promotes collective spirit, view, and understanding. The

shared understanding on business also encourages helping each other in carrying out tasks that for its part affects joint understanding. Thus, these kinds of connections and intertwined nature of the structures characterize collectiveness in entrepreneurship. The interconnections might come with specific advantages related to pursuing new opportunities, learning, and collective efficacy.

Figure 2. Distinctions of Individual, Multi-individual, and Collective Entrepreneurial Teams



We further elaborate on the differences between entrepreneurial teams in regard to the degree to which they reflect collectivity. Figure 2 illustrates differences among the entrepreneurial teams. As seen on the left side of the figure, some entrepreneurship reflects the individual who acts and interacts with his/her environment. Some entrepreneurial opportunities are pursued by multiple individuals together but might not reflect collectivity due to a strong individual leader and hierarchical division, for example. Other teams develop into collectivities with unity, equality and democracy, and collective structures amongst the team members.

DISCUSSION

Our study elaborates entrepreneurial teams as collectives. It answers to the calls of Harper (2008) to examine different kinds of entrepreneurial teams and distinguish their particular properties. We identify and specify collective entrepreneurial teams. Our study adds to the existing knowledge of collectivity in entrepreneurship and opens up new perspectives for understanding, studying, planning, supporting, and teaching team entrepreneurship. First, while scholars have grasped dimensions of collectivity in entrepreneurship (e.g., Cohen & Bailey, 1997; Ensley & Pearce, 2001; Shepherd & Krueger, 2002; West, 2007; Zheng, 2012) an organized and profound conceptualization has been missing and many studies reflect more the individual than the collective. We offer a systematic and comprehensive definition of collective entrepreneurial teams and a map of relevant concepts that help grasp entrepreneurial teams at the collective level of analysis. We define entrepreneurs' collectivity as collective entity characterized by collective structures of collective idea of business, collective entrepreneurial effort, collective attitudes and motivations, and collective feelings. We also specify the entity and the contents of all of the structures. For example, while entrepreneurial teams have been seen as social units before (e.g., Cohen & Bailey 1997; Harper, 2008; Schjoedt & Kraus, 2009) we specify the collective entity in team entrepreneurship through constructs of horizontal unity and vertical indivisibility. Hence, we add equality and democracy as root concepts of collective entrepreneurial teams.

Second, although existing studies have included suggestions that multi-individual entrepreneurship accounts for more than the sum of individuals (Cohen & Bailey, 1997; Harper, 2008; Reich, 1987; Shepherd & Krueger, 2002; West, 2007) and that multi-individual entrepreneurship entails membership of individuals in a social unit (Cohen & Bailey, 1997; Ribeiro-Soriano & Urbano, 2009; Schjoedt & Kraus, 2009) research has not clearly specified what distinguishes multiple individuals' entrepreneurship from the entrepreneurs' collective (the entity of individuals instead of individuals separately). Also, some studies seem to adopt an individual-focused understanding of entrepreneurial teams (e.g., Ucbasaran et al., 2003; Zhao et al., 2013) which is also highly important but does not provide insights of collectivity. Our study highlights properties of collectivity-based entrepreneurial teams.

Third, by emphasizing collectivity, we continue challenging existing thinking and shift it from individualism and self-interest to unity of individuals and collective structures

between them. Our study clearly moves away from the dominant, economic paradigm of the individual leader or owner within collective entrepreneurial teams. Drawing from the idea that collectivity reflects vertical indivisibility (distribution of power and control), we posit that traditional ideas of organizations and leadership that are built around the individual may not be sufficient or suitable to understand, explain, and predict phenomena in organizations that represent collectivity in entrepreneurship. Also, our findings, together with the organizational literature utilized, direct attention to social-psychological concepts in understanding collectivity in entrepreneurship. For example, our study speaks to collective structures assisting in achieving entrepreneurial goals but also enriching the lives and experiences of the entrepreneurs. We also believe that future ventures might increasingly reflect collectivity in entrepreneurship due to prospective entrepreneurs' willingness to create a meaningful, mutually understood and shared business (see Forsström-Tuominen et al., 2015). In addition, we propose that not all entrepreneurial teams may or need to reflect collectivity (see Harper's taxonomy, 2008) – rather, team endeavors vary in the degree to which they are individualistic or collective.

Fourth, existing literature has included the notion of integrative patterns across team members that might be seen to unite the members cognitively and emotionally. For example, Watson et al. (1995) suggest that individual actions and interactions should be integrated and synchronized at the collective level of entrepreneurship. More specifically, collective cognition of business (Ensley et al., 2003; Pearce & Ensley, 2000; West, 2007) has been seen central to multi-individual entrepreneurship. Scholars have also seen team commitment and cohesion important (Ensley et al., 2003; Lechler, 2001; Watson et al., 1995) and stated that multi-individual entrepreneurship is characterized by entrepreneurial spirit or atmosphere (Ribeiro Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2010; Toledano et al., 2010). Compared to the previous notions of collective cognition and emotions our study provides more details about the structure and elements of collective cognition and affective states in team entrepreneurship. We add that collective cognition includes collective knowledge structure, collective memory, and collective resources for interpretation. Additionally, our study goes beyond business aspects of entrepreneurial teams that have been typically covered (cites) through highlighting the role of emotions and feelings as collective structures of the teams, that help them collectively conceptualize and articulate opportunities. For example, existence and actualization as a collective are essential to the purpose of collective entrepreneurship.

Importantly, entrepreneurial team collectivity is distinctive from organizational or management team collectivity (e.g., cognition) due to their specific contexts. While the ideas of entrepreneurs' collectivity can be applied in other complex team settings it should be noted that entrepreneurs' collectivity emerges in entrepreneurial opportunity contexts and related action. Entrepreneurial contexts involve *new* opportunity discovery or creation, rather than allocation of given ends-means frameworks, for example (Harper, 2008). That is, not all organizational or management teams reflect entrepreneurs' collectivity. Also, entrepreneurs' collectivity is distinctive from entrepreneurial team cognition and other cognitive or affective states as collectivity includes a broader and more comprehensive set of concepts that help grasp entrepreneurial teams at the collective level of analysis. Thus, entrepreneurs' collectivity is not only about cognition but a variety of collective constructs that reflect the teams as units and indivisible.

Fifth, our findings suggest that specification of the collectivity could be especially important considering the positive influences that the collectivity and its constituent elements may have on the ventures' performance compared to solo (or multi-individual) entrepreneurship. We find several positive dynamics and connection between the dimensions of collectivity. First, the unity and unanimity creates commitment and drive for the team – serving collective efficacy. Second, collective consciousness and understanding promote collective belief in achievement of goals, for example. Third, joint belief encourages achievement of goals and utilization of opportunities. Fourth, the collectivity reflects extended intellectual and memory capacity via subtle merge of individuals' viewpoints over and above the sum of individuals which enables making use of knowledge and information among all team members. We suppose entrepreneurs' collectives are able to utilize large bodies of knowledge in a flexible manner that is useful in dynamic environments. This may improve performance of the entrepreneurial teams that represent collectivity. Fifth, emergence of collectivity creates a favorable context for learning, via group behaviors as seeking feedback, asking for help, talking about errors, and experimenting (Edmondson, 1999). Sixth, trust reflects respect in a way that nobody takes advantage of one another. Seventh, collective feelings serve collective action, shape cognitions and enrich the lives of the team members. Thus, collectivity might enable the members collectively grasp opportunities, learn new knowledge and means through both ration and aesthetics, and achieve high goals and dreams which would not be possible in the case of individual-based ventures

(including team ventures with low collectivity). We also suggest that collectivity reflects long-term orientation due to joint elaboration of business ideas, for example, that create enthusiasm and positive feelings among team members toward the team effort and the other team members. Highly individualistic entrepreneurship might not entail a long-term orientation because individuals are already looking forward to sharing the gains and exiting the enterprise if they see any problems emerging in the business or interpersonal relationships.

Finally, we make a methodological contribution. We detail a systematic way of carrying out inductive research in the field of entrepreneurship that helps structure complex, interdisciplinary, and multi-layered (individual and group) phenomena. We give direct voice to entrepreneurs themselves that enables identification of concepts relevant to actual experiences of practitioners. We present our findings in a way that lets the reader evaluate the convincingness of our interpretation in a transparent manner.

Increasing and building knowledge of collectivity within entrepreneurial teams, in-depth qualitative analysis, giving voice to entrepreneurs themselves, and incorporating concepts outside multi-individual entrepreneurship literature open up new perspectives for studying and practicing entrepreneurship. The idea of collectivity could affect how entrepreneurship is defined, which questions are asked, and how research is designed and implemented. In particular, it should affect the depth and nuances through which multi-individual entrepreneurship is defined and studied. For example, since not all team entrepreneurship reflects collectivity, scholars should distinguish between different levels of analysis more clearly.

In addition to theoretical utility, our study has practical contributions. First, we believe that practicing and prospective team entrepreneurs gain from understanding collectivity. Understanding what the collectivity means and entails helps entrepreneurs understand their teams and team action. They might also take advantage of the collective constructs (e.g., collective knowledge structure) in building successful new enterprises. That said, we believe that understanding collectivity is especially useful in the beginning of new team entrepreneurship processes (but also along the journey). We also provide insights for venture capitalists and business angels in assessing and taking part in building successful new team enterprises. Additionally, we believe that our ideas can be applied to other contexts, such as board or management teams. For example, established organizations may gain from understanding collectivity in promoting entrepreneurial team efforts among employees.

For policy-makers and educators, our elaboration of collectivity offers insights in encouraging and supporting collective entrepreneurship. Policy-makers should grasp entrepreneurship at the collective level in order to create appropriate policies and support programs for encouragement of new collective-based team ventures. Educators should design and implement entrepreneurship education in a way that encourages collectivity and collective empowerment among students. For example, teaching practice should allow versatility and student-based learning.

Finally, we acknowledge a few limitations of our study. First, we focus on team startups in specific, high technology industries. Since context affects the kind of individuals available in the context, and frames their interactions, these industries may utilize unique structures may be different from entrepreneurial teams in contexts that are different in meaningful ways. Thus, it would be fruitful to study collectivity within different industries in the future to parse out the effect of specific industry/work contexts. Second, we examine new ventures. We see that future research should study older enterprises, as well as established organizations. We also believe that it would be good to examine enterprises along the different stages of their development. Third, we focus on the in-group but believe that to a varying extent collectivity may include 'out-groups', such as investors and customers. Hence, future studies could extend the notion of collectivity to cover other stakeholders, such as investors. Fourth, our case firms may reflect successful cases - we encourage studying collectivity among less successful ventures too, and contrasting the difference in structural elements on a variety of dimensions. Sixth, while an aim of this study has been to give voice to entrepreneurs themselves and we see the entrepreneurs as knowledgeable agents (Gioia et al., 2013), we acknowledge that all our data is from the team entrepreneurs themselves which means that they have been in control of what they want to elaborate on and tell us about. While we did try to triangulate and corroborate using secondary information, we cannot claim to remove all biases resulting from self-reports. Future studies could collect data through observation and more generally, using ethnographic lenses, for example.

Our study also posits research questions that aim at describing and understanding entrepreneurship as a collective level phenomenon more extensively. Considering the scope of a paper, we have focused on the collectivity (definition and contents) only. It will be necessary to examine how the collectivity is initiated and constructed. We anticipate that certain kinds of

social interactions and actions (collective as opposed to individual) contribute to the emergence of the collectivity. We also see that it would be important to study individuals' micro contributions to the collectivity more specifically – these could be in the area of verbal and nonverbal communication, behavior, general social skills, etc. Although we have not considered individuals' interactions as such in this paper we see that collective phenomena base on interactions amongst individuals and hope to avoid anthropomorphizing (Morgeson & Hofmann, 1999).

Some more specific questions to be answered in the future include examination of the specific dimensions of collectivity, such as collective feelings. Future studies should grasp emotions and feelings as a structure of entrepreneurial teams more in-depth. For example, we believe that love as a collective feeling within the entrepreneurial team settings might be overlooked as a 'does not belong to business' feeling and construct and, thereby, serves as an emancipatory topic of research. Second, an important research area remains in the interactions between different components of the collectivity. For example, how are the components connected to and affect each other? Third, future research should aim to describe and understand more specifically how the collective structures influence interaction over time (see Giddens, 1984; Morgeson & Hofmann, 1999). Also, our study provides a starting point for the development and validation of an instrument for measuring collectivity within entrepreneurial teams (see Morgeson & Hofmann, 1999; Klimoski & Mohammed, 1994) through the definitions and dimensions of collectivity that we introduce. This enables theory testing in the future. We remain confident that a lot of research in this area will follow.

CONCLUSIONS

Our paper provides conceptual advancement by indentifying relevant constructs reflecting collective entrepreneurial teams. We suggest that understanding entrepreneurial teams as collectivities helps gain a more profound understanding of entrepreneurship as a collective-level phenomenon. We also make a methodological contribution. We suggest a way of doing systematic, inductive research into the field of entrepreneurship. Our approach enables an in-depth, sensitive, and rich description of a complex phenomenon. We give voice to entrepreneurs themselves which seems as a fruitful avenue since our data and analysis are internally consistent

and coherent. We find relevant concepts and theories to support our analysis and our study is coherent when it comes to theory. In addition, we make use of organizational theory literature in our analysis which builds bridges between entrepreneurship studies and traditional organizational literature.

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Reinforcing collectivity in entrepreneurial actions within startup teams: A multiple-case study

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**REINFORCING COLLECTIVITY IN ENTREPRENEURIAL ACTIONS WITHIN
STARTUP TEAMS: A MULTIPLE-CASE STUDY**

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Abstract

Using a qualitative multiple-case study approach and data from four high-technology team startups, we elaborate theory on organizing entrepreneurial actions as team efforts and the kinds of interactions that reinforce the teams as collectivities. Through systematic thematic analysis, we find that entrepreneurial action reinforces collectivity through and during (a) joint analysis and planning of entrepreneurial opportunities and strategies, (b) joint decision-making and realization of the opportunities, and (c) evaluation, feedback, and sanctions of entrepreneurial action. We identify interactions that reflect joint elaboration of opportunities, open and continuous sharing of knowledge and feelings, equality and democracy, joint effort and credit, informality and non-bureaucracy, and feedback and helping. The insights could be applied across a variety of organizational contexts.

Keywords: entrepreneurial team; entrepreneurial action; multiple-case study; systematic thematic analysis

INTRODUCTION

Scholars increasingly suggest that entrepreneurship is a collective phenomenon more often than the individual-focused dominant approaches lead to assume (e.g., Forsström-Tuominen, Jussila, & Kolhinen, 2015; Gartner, Shaver, Gatewood, & Katz, 1994; Kamm, Shuman, Seeger, & Nurick, 1990). As Harper (2008) puts it, pursuit of new business opportunities is not necessarily embodied in a sole individual but is often a socially distributed and created phenomenon that involves joint action of entrepreneurial team members. An entrepreneurial team is defined as two or more individuals who jointly establish and develop a business in which they have an equity ownership (Carland, Hoy, Boulton, & Carland, 1984; Cooney, 2005; Kamm et al., 1990), build engagement and commitment to common goals and outcomes that can only be achieved by combinations of individual actions (Harper, 2008), and come to see themselves as a social unit (Cohen & Bailey, 1997; Schjoedt & Kraus, 2009). In addition to new ventures, entrepreneurial teams are prominent in a variety of organizational contexts that aim to adopt innovative practices and ways to organize work (Ribeiro Soriano & Comeche Martínez, 2007; Reich, 1987; Stewart, 1989).

While some scholars acknowledge that entrepreneurial teams should be seen as units with *collective* characteristics such as shared thinking and action patterns (e.g., Shepherd & Krueger, 2002; West, 2007), we still do not know much about the structuring and organization of entrepreneurial teams that become “collectivities” (i.e., social units of people defined by the meanings, qualities, and conditions of the unit constructed by the people involved: Alvensson & Kärreman, 2006). Understanding the structuring and organizing of entrepreneurial teams would be important not only because team interpersonal interactions might affect venture performance (Chowdhury, 2005; Ensley, Carland, & Carland, 2000; Ensley & Hmieleski, 2005; Kamm et al., 1990; Lechler, 2001; Watson et al., 1995; Yang & Aldrich, 2014) but also because it might help to encourage potential future entrepreneurs in their entrepreneurial aspirations that may be increasingly collective (Forsström-Tuominen et al., 2015). In this paper, we offer a description and understanding of entrepreneurial action components and interactions embedded in them that help us understand organizing in the context of entrepreneurial teams as collectivities. We aim to answer how entrepreneurial teams organize their actions in pursuit of entrepreneurial

opportunities by multiple individuals together and what kinds of interactions embedded in entrepreneurial action contribute to the collectivity. Thus, we highlight types of actions and interactions, and their backdrop that contribute to making entrepreneurs a collective rather than a collection of individuals.

We employ a qualitative, inductive multiple-case study approach in order to elaborate theory (Eisenhardt, 1989a; Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014). Recalling the calls of Hjorth, Jones, and Gartner (2008) we give voice to lived experiences of entrepreneurs who act within specific social contexts and provide our interpretation of the experiences. We use systematic thematic analysis (Gioia, Corley, & Hamilton, 2013) to present a data structure that reflects links between the data and new concepts, and to build a theoretical model of entrepreneurial action within entrepreneurial teams. To avoid narrowness and to provide nuance and depth in our interpretation (see Hjorth et al., 2008), we utilize organizational theory literature and especially Giddens's (1984) ideas on duality of structural properties and agencies in our analysis. We reflect on the empirical analysis with relevant existing knowledge so that we can recognize incongruities and discontinuities in the data relative to existing knowledge (Corley & Gioia, 2011).

EXISTING KNOWLEDGE OF ENTREPRENEURIAL ACTIONS IN TEAM ENTREPRENEURSHIP

In team entrepreneurship literature, team venture interpersonal actions and interactions (i.e., team functioning) have received less attention than team composition and formation (e.g., Ruef, Aldrich, & Carter, 2003; Visintin & Pittino, 2014), processes or stages of team venture formation and operation (e.g., Clarysse & Moray, 2004; Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006; Kamm & Nurick, 1993), and venture performance related to the group compositional and process issues (e.g., Chowdhury, 2005; Schjoedt & Kraus, 2009). When team functioning is examined, the focus is often on conflict and disagreement issues (see Ensley & Hmieleski, 2005; Francis & Sandberg, 2000). The studies that have examined actions and interactions within entrepreneurial teams with a broader perspective suggest that collective entrepreneurship¹ is

¹ We include both team entrepreneurship (i.e., new ventures) and collective entrepreneurship (i.e., mainly established organizations) literature as they intertwine and draw from one another (see e.g., Cooney, 2005; Lechler, 2001) and help gain as extensive an understanding as possible.

enabled by social interactions between individuals (Lechler, 2001) embedded in an organizational context (Johannisson, 2004). More specifically, entrepreneurial action at the collective level entails membership of the individuals in a team and actions taken in regard to the team effort (Ribeiro-Soriano & Urbano, 2009). There are three strands of literature that are relevant to our study. First, scholars have identified that *interactions* between individuals contribute to emergence of collective cognition, mind, understanding, commitment, or cohesion within entrepreneurial teams. Second, particular style of *shared leadership* that enables joint interactions is seen to serve the entrepreneurial teams. Third, scholars have identified specific interactional *conditions* within the teams.

Collective Constructs as the Basis of Joint Entrepreneurial Action

Scholars have observed that entrepreneurial teams are characterized by collective constructs that emerge in interactions between team members and affect actions taken. An important construct at issue is a common mental model of business (i.e., a collective cognition of direction and strategy of a firm which is the basis for actions, plans, goals, coordination, management, and motivation within entrepreneurial teams: Pearce & Ensley, 2000; Ensley, Pearson, & Pearce, 2003; Shepherd and Krueger; 2002; Watson et al., 1995; West, 2007). In addition, researchers have examined other team-level integrative phenomena, such as team commitment which represents enthusiasm for and focusing on common goals, effort, and performance (Watson et al., 1995) and cohesion that refers to the sense of belonging to the team, the degree to which team members wish to remain as members of the team and stay loyal toward the team, and commitment toward team goals and tasks (Ensley et al., 2003; Lechler, 2001). Commitment and cohesion are cognitive and affective states of the team members that influence individuals' motivation and morale but also more concrete actions, such as information sharing and decision-making (Ensley et al., 2003).

Shared Leadership

Other studies focus more specifically on management-related interactions that serve joint action in multi-individual entrepreneurship. Organization and execution of leadership (i.e., initial and

on-going idea elaboration or visioning for the venture, and initial and on-going control and command of the venture and its members: Carland & Carland, 2012) is central to the literature. Particular leadership styles or practices that enable the collective vision and a certain kind of entrepreneurial attitude, atmosphere, or spirit among all organizational members represent collective entrepreneurial action (Comeche & Loras, 2010; Ribeiro-Soriano & Comeche-Martínez, 2007; dos Santos & Spann, 2011; Yan & Sorenson, 2003). Scholars have seen that entrepreneurial teams are characterized by informality, flat hierarchy, shared control, and absence of formal leadership structures (e.g., Ensley, Hmieleski, & Pearce, 2006; Reich, 1987; dos Santos & Spann, 2011; Stewart, 1989). These ideas reflect shared leadership within entrepreneurial teams (Carland & Carland, 2012).

Shared leadership entails mutual control, influence, authority, and power among team members (Carland & Carland, 2012; Ensley et al., 2003). As opposed to individual-focused vertical leadership, shared leadership is a team-level process where leadership is carried out by team members together, rather than by a solo executive (Ensley et al., 2003; Ensley et al., 2006). Decentralization means that everyone in the organization should have an opportunity and capacity to participate in entrepreneurial action (dos Santos & Spann, 2011). All team members should be able to identify and respond to new opportunities (Comeche & Loras, 2010), participate in development of business actively (Cooney, 2005), and learn from previous experiences (Reich, 1987; dos Santos & Spann, 2011). As Reich (1987) sees, collective entrepreneurship is about synergetic contributions of team members. Thus, leadership should encourage the talent and creativity of all organizational members through team work and joint effort (Comeche & Loras, 2010) where individuals' tasks are interdependent of and intertwined with one another (Reich, 1987). Shared leadership demands direct involvement of the individuals so that they can exchange and talk about ideas in a way that abstract concepts become more concrete (Carland & Carland, 2012). It includes the way the team members share responsibilities, motivate and empower each other, share feedback, and direct activities together (Ensley et al., 2003). Notably, shared leadership requires skillful and self-confident individual team members (Ensley et al., 2000).

Despite the notion of non-hierarchy and empowerment of organizational members, many scholars see that collective or team entrepreneurship does not eliminate the need for a solo

leader (e.g., Reich, 1987; Stewart, 1989; Yan & Sorenson, 2003). The existence of a “lead entrepreneur”, for example, reflects hierarchical differentiation of individuals when it comes to status, authority, leadership, benefits, and compensation (Harper, 2008; Yang & Aldrich, 2014). However, the role of the leader has also been seen to be a guide for others toward achievement of a common goal and creating a favorable context for joint action, rather than a boss in a traditional hierarchical sense (e.g., Bennis & Biederman, 1998; Comeche & Loras, 2010; Ribeiro-Soriano & Urbano, 2009). Additionally, some scholars have seen that the appropriate leadership structure and actions may change along the growth of the venture (e.g. Cooney, 2009).

Interpersonal Communication, Coordination, and Collaboration

Existing literature has specified some particular interactional conditions that enable or reflect collective-level entrepreneurship (e.g., Blatt, 2009; Breugst, Patzelt, & Rathgeber, 2015; Chowdhury, 2005). As collective entrepreneurial action is supposed to be lean when it comes to hierarchy, command and control are replaced by communication and coordination (Reich, 1987). The quality of communication (i.e., the ways and means of information exchange within a team) depends on frequency, formalization, structure, and openness (Lechler, 2001). Daily interactions, on-going dialog, and discussion of common issues between the members are crucial for collective entrepreneurship (Lounsbury, 1998). For example, organizational members should be able to share information and knowledge and provide and get continuous feedback (Ribeiro-Soriano & Urbano, 2009). Such communication also enables understanding of each other’s views and emergence of shared understanding and feelings (Comeche & Loras, 2010).

Watson et al. (1995) find interpersonal flexibility, conflict resolution, open sharing of information, and personal communication focused on problem-solving as core dimensions of interpersonal process effectiveness. The scholars also suggest helpfulness as a core component. Helpfulness includes helping one another beyond what is required, friendliness, and cooperation which are oriented toward interaction with others. (Watson et al., 1995) Other scholars have also recognized mutual help and solidarity as core facets of collective entrepreneurship (Comeche & Loras, 2010; Lounsbury, 1998). Lechler (2001) defines mutual support as collaboration, rather than competition, between the team members. Yet, conflicts are a part of most social interaction

and studies have seen conflicts typical for entrepreneurial teams (see Ensley & Hmieleski, 2005; Francis & Sandberg, 2000). Conflict resolution, on the other hand, involves the ways in which the team members handle potential conflicts between the team members (Lechler, 2001).

METHODS

Our study process follows the recommendations of Eisenhardt (1989a; see also Ravenswood, 2011). We first defined our aims, initial research questions, and concepts central to our study (see keywords). Next we decided to use a qualitative multiple-case study approach (Eisenhardt & Graebner, 2007; Flyvbjerg, 2006; Stake, 1995; Yin, 2014), since it offers a strong basis for theory elaboration (Eisenhardt & Graebner, 2007; Yin, 2014). Using theoretical sampling (Eisenhardt, 1989a), we searched for suitable cases in the Internet, newspapers (e.g., lists of most potential startups), and through our contacts. The aim was to include such ‘real world’ cases (see Hjorth et al., 2008) that would enable us to answer our research questions and represent the phenomenon under study transparently (Eisenhardt & Graebner, 2007; Yin, 2014).

Data and Research Context

The case firms had to meet the following four criteria. First, they had to be established by two or more individuals together. Second, there had to be development of a new product or service jointly as an entrepreneurial team. Third, firms needed to have been in operation from a few months up to five years. Fourth, firms had to be in high technology industries as they are characterized by intense interactions and complexity that may imply a potential to become a collectivity. Four cases were eventually selected. The number of cases was finally defined by saturation and pragmatic considerations (Eisenhardt, 1989a). We provide the details of the cases and the interviewed team members in Table 1.

Table 1. Details of the Cases

	Case 1	Case 2	Case 3	Case 4
Industry	Machinery and process technology	Information and communication technology	Information and communication technology	Biotechnology
Time in operation	6 months	1 year	2 years 6 months	5 years
Number of core team members interviewed	4	3	3	3
Age of team members	43 – 50	28 – 38	33 – 45	38 – 39
Gender of team members	all male	all male	all male	2 males, 1 female
Education of team members	University degrees in Technology, Economy, or Industrial Arts	2 university degrees in Technology, 1 studying in a university in the field of Technology	University degrees in Technology	University degrees in Technology or Biology
Nationality of team members	3 Finns, 1Austrian	2 Finns, 1Pakistani	all Finns	all Finns
Connection of team members before the startup	Knew each other from work	2 knew each other from their university studies	Had worked with each other	2 knew each other from work and 1 was introduced through a common acquaintance
Team members involved in the startup	all involved for 6 months	2 were co-founders of the venture and involved for 2 years, 1 for a year	All involved for 2,5 years	2 involved from the beginning and 1 a bit later
Working in the startup full-time/part-time	2 full-time, 2 part-time	1 full-time, 2 part-time	All full-time	All full-time, 1 was leaving to establish another startup
Changes in team membership	Yes	Yes	No	Yes

We chose to employ multiple data sources mainly in order to get a better feel of the context and the phenomenon. Our main data from which quotations are shown consists of individual and group semi-structured thematic interviews. In all of the case firms, we interviewed all of the core team members separately and then together as a team. In two of the cases, not all team members could be interviewed due to their timetables and travel. We chose to give voice to the knowledgeable agents who experience the phenomenon of interest themselves since it helps to capture concepts relevant to human experience, actions, and thoughts and offer multiple and nuanced views on the cases (Gioia et al., 2013; Hjorth et al., 2008; Stake, 1995). Anonymity was promised to the participants.

Before data collection, we designed the interview forms for the individual and group interviews. The questions were focused on the research questions and key concepts in a

way that would inspire the agents to talk openly about their experiences. The interview themes included personal details of the interviewee, the enterprise and its development, the team and its development, values and courses of action of the team, work practices, communication, leadership and management, decision-making, knowledge sharing, ownership, efforts and inputs, and future goals and plans of the team. We also gave the agents a chance to add anything they felt was missing from the questions (i.e., what the interviewees felt is important in studying team entrepreneurship). We avoided leading-the-witness questions but did ask about the phenomena that we were interested in because we believe that only by asking about the phenomena of interest can we gain focused enough understanding about the phenomena. However, we did not ask by using terms drawn from entrepreneurship literature as such (e.g., entrepreneurial opportunity). We also made field notes that initially begun the analysis process.

We conducted a total of 18 interviews out of which 14 were individual interviews and four group interviews in summer and fall 2013. The individual interviews took 26 – 90 minutes. The group interviews took 32 – 65 minutes. Only one individual and group interview remained brief. All except one individual and one group interview were in Finnish, which were later translated into English. We first interviewed all team members of each startup individually and then together. By conducting the individual interviews before the group interview, we wanted to ensure that we get independent data first. By interviewing the team members as a group, we wanted to give the interviewees an opportunity to reflect on their experiences jointly and to corroborate the data. Observing group interactions directly enriched the data as they may offer deeper and more direct insights into the dynamics of the group than the individual interviews only. Thus, the group interviews corroborate the individual data because the study is about a group-level phenomenon itself and not only about retrospective accounts on non-group related phenomena, for example. All of the interviews were tape-recorded with permission from the interviewees and transcribed verbatim by a research assistant and the first author. The secondary, archival data includes homepages, Facebook, LinkedIn, and Twitter pages, blogs, and news about the startups. This data was used to corroborate information provided by the interviewees wherever possible. We have not included specific extracts from the public pages in this study because this data is public and, therefore, disclosing this information may lead to the violation of our promise of anonymity to the individuals.

Data Analysis

After familiarization with the enterprises and the data, we began a within and cross-case pattern search analysis which enables the identification of similarities and contradictions (Eisenhardt, 1989a). The specific analysis technique used in this study is the inductive thematic analysis introduced by Gioia et al. (2013). The analysis method was chosen because it is especially suitable for elaborating new concepts and ideas and provides rigor to inductive study (Gioia et al., 2013; see Shapira, 2015; Smets, Jarzabkowski, Burke, & Spee, 2015 for examples of application).

The analysis includes presentation of a 1st order and a 2nd order analysis that enables to make the links between the data and concepts visible (Gioia et al., 2013). At the first level of the analysis, we listed in all the aspects that seemed relevant in regard to our research questions. The data was coded so that it was possible to identify the case, the type of the data (i.e., individual interview, group interview, home pages, Facebook, LinkedIn, etc.), and the interviewee. First, the number of codes was substantial and discrete as we strived to stay true to the informant-centric terms and codes. Then, we revised the 1st order concepts in order to make sure that they were firm, broader, and did not overlap too much.

At the second level of analysis, we sought for similarities and differences among the 1st order terms and gave labels to different categories which reduced the number of themes and moved the analysis to the theoretical realm with the help of researcher-centric, 2nd order themes. Thus, we formed data-to-theory connections. The analysis continued by searching for 2nd order aggregate dimensions where the 2nd order themes were distilled further. (Gioia et al., 2013) Following our interpretation of the data we applied broader literature and knowledge to our analysis in order to both deepen the analysis and enrich the existing literature (Eisenhardt, 1989a).

After the 1st and 2nd order analyses, we formed a data structure which provides a graphical presentation of how the analyses progressed from raw data to the themes. Finally, we continued by examining the relationships among the major emergent concepts, themes, and dimensions and formed a model. (Gioia et al., 2013) It should be acknowledged that we were not uninformed of the existing literature (in and outside entrepreneurship research) when conducting

the analysis but aimed to avoid too in-depth knowing of prior research (Gioia et al., 2013) and particularly its potential guiding effect as a resource of interpretation. In fact, this process of theory elaboration was strongly iterative and recursive among the data, the emerging theory, and the existing literature (Eisenhardt, 1989a; Eisenhardt & Graebner, 2007). Thus, the process has been overlapping and accumulative in a way where understanding has increased and refined over time.

FINDINGS

In our analysis of entrepreneurial action and interactions that contribute to the entrepreneurial teams as collectivities, we found 42 1st order concepts that we categorized into nine 2nd order themes and three aggregate dimensions. Table 2 presents the data structure of our study.

Table 2. Data Structure

Aggregate dimensions, 2nd order themes, and the related 1st order concepts

JOINT ANALYSIS AND PLANNING OF OPPORTUNITIES AND STRATEGIES

Joint Signification of Opportunities and Strategies
 Some ideas and means of doing things are only born through conversation
 Our business idea becomes gradually concrete through talking and planning just like a lake forms from little drops
 The idea of what we should do has crystallized through exchange of opinions
 Through thinking and experiencing together we have come to know what we do
 The vision is created, developed, and refined through on-going joint discussion

Sharing Information, Knowledge, and Feelings
 Everybody knows where the others in the team are, what they're doing, and with whom they have talked
 We know what the others in the team are doing
 We have to continuously keep the information up
 Quite often it is feeling that is shared and thereby a successful startup requires working exchange of feelings

Continuous, Direct, and Open Communication
 This is a discussion club in practice
 Opening up and talking to each other is most essential
 Joint understanding emerges from complete transparency and openness
 Our organization is characterized by continuous and direct communication around one table
 People run out of belief if the interval of meeting and seeing each other is more than two weeks
 In order to not lose the entity there have to be weekly meetings addressing why we do this
 Instead of communicating through phone or email from our home offices we meet in our office every day
 Technology is utilized to share information
 Virtual medias allow for one person speak at a time and not to really communicate

DECISION-MAKING AND REALIZATION OF OPPORTUNITIES AND STRATEGIES

Joint Decision-Making
 Everyone makes suggestions on their parts not just the CEO
 Potential ideas, sales and else are evaluated together
 We cross-discuss and circulate innovatively
 Decisions are made by us as opposed to a single individual

Consensus Elaboration
 We talk things over and reach consensus in a Swedish way
 We discuss until an absolute consensus and acceptance is reached
 Based on a consensus practice the reasons for decisions are known to all
 We have consensus but we can disagree on specific views
 All decisions are joint since we have made them democratically and unanimously

Equal and Democratic Leadership
 We have no clear leader to tell us what to do
 We don't have any kind of hierarchy or German-Aryan army goings-on
 We are not divided in hierarchical ladders of people
 It is cooperation instead of actual hierarchy
 We are democratic as it comes to power, initiative, and coordination

Joint Effort, Responsibility, and Credit
 Team constructs the best when things are done together and not for individual credit
 We have a habit and idea of working together, joint responsibility, and sharing rewards

EVALUATION, FEEDBACK, AND SANCTIONS OF ENTREPRENEURIAL ACTION

Informality and Non-bureaucracy
 We have avoided contracting
 Too much stiffness and bureaucracy is bad
 We don't have formal goings-on

Feedback and Helping
 People help one do things by pushing
 We know how to encourage each other
 We support and help each other
 We have no anonymous box for feedbacks
 We easily tell if there is a problem

As Morgeson and Hofmann (1999) suggest, a collective phenomenon emerges in interpersonal interactions that give structure to the phenomenon. Also, the range of possible acts is limited by the particular context (Morgeson & Hofmann, 1999; Peters & O'Connor, 1980) – in this case the entrepreneurial setting. Our analysis reflects stages of opportunity and strategy process and interactions they entail. The first aggregate dimension speaks for analysis and planning of entrepreneurial opportunities and strategies by the team members together. The second dimension includes decision-making and realization of the opportunities and strategies in joint organizational action. The third dimension entails evaluation, feedback, and sanctions related to the action. The above stages overlap and intertwine as the startups are constantly searching for their direction. Further, we link our analysis to Giddens's (1984) ideas on duality of structure and agency. We see that the dimensions reflect three interrelated structural properties and agencies that include signification – communication, domination – power, and legitimation – sanction. These structural properties and agencies are mediated by particular rules and resources that include interpretative schemes, facilities, and norms. The rules and resources represent structures organized into the properties of social systems and used by actors. We will outline the dimensions and their connections to the structures and agencies more specifically below.

Joint Analysis and Planning of Opportunities and Strategies

The first aggregate dimension concerns joint analysis and planning of entrepreneurial opportunities and strategies by the entrepreneurial team members initially (i.e., in the beginning of entrepreneurship) and on a continual basis (i.e., along discrete steps leading to the development of the firm). These opportunity and strategy-related interactions are central to entrepreneurial action within entrepreneurial teams. The ideas of Giddens (1984) lead us to elaborate on the first dimension through the structural property of “signification” that is linked with communication as a form of agency. The structure and agency are mediated by interpretative schemes that represent stocks of knowledge that are used as rules and resources for interpretation (Giddens, 1984).

Table 3. Joint Signification of Opportunities and Strategies

1st order concepts and the selected representative data

Some ideas and means of doing things are only born through conversation

Well some ideas and not only ideas but means of doing things are only born through conversations. 124

Our business idea becomes gradually concrete through talking and planning just like a lake forms from little drops

Well every time we talk about things and plan ahead and not like that kind of, a cloud, but there emerges a little drops and the drops become this kind of a lake at some point and the lake ends when it's ready, and it (the business idea) becomes a little more concrete all the time. 124

The idea of what we should do has crystallized through exchange of opinions

It (a mutual view on business, products and services) has truly crystallized through exchanging opinions, what should we do then. 122

Through thinking and experiencing together we have come to know what we do

Well when the company X was founded we were a few guys and we didn't quite know what to do and... then we begun thinking what we would want to do, what we could do... with those starting points that we had then and those experiences that we had then ... now we know what we do to a large extent - - 411

The vision is created, developed, and refined through on-going joint discussion

The vision has been created through discussing so that not that everyone would have come with their own vision but we have discussed it continuously and continuously and it has been refined and something has been left out and something has been added, (it has) developed through discussing together. 112

Table 3 presents the theme 'joint signification of opportunities and strategies'. Discussing the business related ideas, goals, visions, and plans among the team members is central for joint entrepreneurial action. In analyzing and planning, the team members construct meaning for their business (and the team) through accumulating knowledge stocks and joint understanding. The next extract illustrates this insight. The first number of the interviewee code refers to the case company (1, 2, 3, or 4), the second to either individual or group interview (1 or 2) and the third to the team member (1, 2, 3, or 4).

"Well every time we talk about things and plan ahead and not like that kind of, a cloud, but there emerges little drops and the drops become this kind of a lake at some point and the lake ends when it's ready, and it [the business idea] becomes a little more concrete all the time." 124

The summing up of individual's connected and reciprocal interactions eventually form meaning for business that crystallizes like drops of water in a lake. Berger and Luckmann (1966) suggest that social reality is constructed by interactions (language) and interpretations that are based on inter-subjectivity (i.e., between subjective understandings). Weick (1979, 1995) sees that

organizational members socially construct organizational realities as they try to make sense of happenings both at the time of the happening and retrospectively, and then act on that understanding – a process called enactment. In Giddens’s (1984) terms, communication produces meaning for opportunities through joint mental models or schemes that represent the comprehension of unfolding knowledge by a group of interacting individuals as a whole (see also Klimoski & Mohammed, 1994; Weick & Roberts, 1993).

Table 4. Sharing Information, Knowledge, and Feelings

1st order concepts and the selected representative data
<p>Everybody knows where the others in the team are, what they’re doing, and with whom they have talked But joint action in a way that we know quite well like where each of us is and what they’re doing and with whom they have talked. Everybody knows. 312</p> <p>We know what the others in the team are doing - - we like briefly discuss exceptionally small decisions too in a way or at least we know, let’s say that at least we know...or let’s say, there comes the information of what the other is doing. 211</p> <p>We have to continuously keep the information up - - but I would believe that everybody knows quite precisely what the others too are doing...and where the others are going...and that’s always something that should be every...I mean maintained and improved all the time - - 411</p> <p>Quite often it is feeling that is shared and thereby a successful startup requires working exchange of feelings but actually quite often it’s not so much about information (but) it’s more about feeling that is shared - - so I could not imagine a successful startup where really this kind of exchange of feelings wouldn’t work. 123</p>

Table 4 outlines the next theme that exemplifies the core role of knowledge in joint entrepreneurial action through signification and communication. Analysis and planning of opportunities and strategies happens largely through exchanging information and knowledge among team members.

“But joint action in a way that we know quite well like where each of us is and what they’re doing and with whom they have talked. Everybody knows.” 312

This suggests that team members feel confident about the adequacy of their knowledge about the current conditions of their business. Organizational literature on knowledge management has shown that processing knowledge and information is essential in team work (Nahapiet & Ghoshal, 1998; Nonaka, 1991; Nonaka, von Krogh, & Voelpel, 2006; Nonaka, Toyama, & Nagata, 2000). Information and knowledge distribution can be defined as making individual

information or knowledge available across a team or an organization (Nonaka, 1991). Distribution of knowledge and information may assist in the development of a collective understanding and vision (enabling meaning).

“but actually quite often it’s not so much about information (but) it’s more about feeling that is shared - - so I could not imagine a successful startup where really this kind of exchange of feelings wouldn’t work.” 123

In addition to knowledge and information, the team members reported that they exchange feelings. Feelings too give meaning to the venture and drive the venture further. Some scholars such as Harré (1986) suggest that feelings (or emotions) are largely socially constructed in communication among people. We believe that feelings might have a similar mediating role as knowledge between signification and communication. In communicating, the team members construct “stocks of feelings” that are reflected in signification of opportunities and strategies.

Table 5. Continuous, Direct, and Open Communication

1st order concepts and the selected representative data
<p>This is a discussion club in practice Maybe this is like that kind of a discussion club in practice. 212</p>
<p>Opening up and talking to each other is most essential it's probably this kind of opening up, men talk to each other -thing, that's the most essential. 113</p>
<p>Joint understanding emerges from complete transparency and openness -- and that's (joint understanding) actually about the communication that (we talked about) that we have strived to be like... like completely transparent from the very beginning -- so that we have been like...someone could say like madly open -- 411</p>
<p>Our organization is characterized by continuous and direct communication around one table Well it can always be emphasized that sitting around this one table here in a way that our organization is characterized by this kind of continuous and direct communication probably. There wasn't that at the previous employer, so that everybody sat in their own booths there and. It was a little gloomy, that action. That (the communication) is the absolute number one. 311</p>
<p>People run out of belief if the interval of meeting and seeing each other is more than two weeks well this kind of seeing each other is absolutely necessary after all because we have seen that people run out of belief if the interval of meeting is more than two weeks. 113</p>
<p>In order to not lose the entity there have to be weekly meetings addressing why we do this We have strived to keep these weekly meetings from the very beginning where we go through all the issues of the firm...so we strive to...we have like (sigh), even from my own experience... known that...the entity is lost quite quickly in one's own hard work in a way so that it is very important to try to keep the context all the time that hey this is the entity why we do this so that there isn't that kind of a feeling that I just do this little thing here and it isn't actually related to anything else -- 411</p>
<p>Instead of communicating through phone or email from our home offices we meet in our office every day -- instead of speaking on the phone, through email from our home offices, we have an office, we have a team, we meet every day and. 422</p>
<p>Technology is utilized to share information In addition to that we strive for sharing information. So that we have like Google drive, we have email addresses like linked, we use those if we have something...That outside the meeting we call. The meeting is mainly sufficient for us. But then really all these kinds of documents we share through a shared drive. These are all the practices that come to my mind. 111</p>
<p>Virtual medias allow for one person speak at a time and not to really communicate Tools don't work and then there is a lot of that... it's like one keeping the speech. This is about communication after all. If (we communicate) through some Skype so everybody else needs to be quiet because otherwise the system (Skype) doesn't work -- these kinds of phone conferences are for structured, dying organizations where it's only heard when one speaks at a time. 123</p>

As Table 5 presents, communication within the entrepreneurial teams has some specific qualitative features. The team entrepreneurs strongly state that their communication is continuous, transparent, and open to the degree that is not usual in most established organizations and would be regarded “mad” by members of those companies (see Table 5). Both persistency and intensity of interactions are important.

“Well it can always be emphasized that sitting around this one table here in a way that our organization is characterized by this kind of continuous and direct communication probably. There wasn't that at the previous employer, so that everybody sat in their own booths there and. It was a little gloomy, that action. That [communication] is the absolute number one.” 311

The entrepreneurs reported spending a significant amount of time in interactions, sitting around the same table or in the same room without walls between people. Interviewees believed that technology can be utilized for sharing and maintaining some basic information (e.g., reports, documents) but face-to-face interactions cannot be replaced. For example, even though meetings have an air of being casual, everybody is expected to be present in regular meetings (see Table 5). If something important occurs in between meetings, the team members quickly call or email each other in order to inform each other. Yet, technological tools might not fit the teams' communication practices.

“Tools don't work and then there is a lot of that... it's like one keeping the speech. This is about communication after all. - - ” 123

The interviewees reflected that virtual media only allow one person to speak at a time which did not suit the teams' way of interacting (please also see our analysis below on equality and democracy of interactions). Many organizational scholars have identified the importance of face-to-face communication because the spatial location of people affects the frequency and intensity of interactions and aid in identity construction (e.g. Hatch, 1997; Thatcher & Zhu, 2006). Giddens (1984) sees that communication involves a context of co-presence. The more close people are to each other spatially, the more frequently and intensively they interact (Hatch, 1997). This could be especially relevant in the startup phase, where the entrepreneurial idea needs the development of symbols and language that can only become somewhat explicit and amenable to an organization and dissemination via discussion, debate, negotiation, and a workable consensus.

Decision-Making and Realization of Opportunities and Strategies

The second aggregate dimension includes realization of entrepreneurial opportunities through interactions where decisions are made about strategy and organizing of joint action. Thus, this dimension entails management of and command over the venture. The dimension can be understood through the structure-agency pair of domination and power that is mediated by facilities – the relationships in which power is exercised (e.g., hierarchy, division of work) (Giddens, 1984). Giddens (1984) suggests that structures of signification have to be understood in relation to domination because domination is inherent to existence of codes of signification (see also Leflaive, 1996). We specify that domination in team startups is reflected in decision-making and realization of meaningful opportunities and strategies. Note that domination is not about who will rule over others but about how the (dominating) structures are constructed in relationships between people. That is, there is no value judgment related to exercise of power over someone else.

Table 6. Joint Decision-Making

1st order concepts and the selected representative data
Everyone makes suggestions on their parts not just the CEO ...that yes I am the CEO, I act in a way that my task is to suggest a lot but I'm not the only one of course...that everyone suggests for like their parts. 113
Potential ideas, sales and else are evaluated together - - and of course keep up the knowledge so that if someone hears about potential, idea and sales and else, so we evaluate that together. 312
We cross-discuss and circulate innovatively And then soon, we sit there innovatively when it comes to quite many decisions, like you noticed, so we circulate cross (or) scientifically. 311
Decisions are made by us as opposed to a single individual we don't have one person here who would make the decisions...WE make the decisions. 421

Table 6 presents the theme 'joint decision-making'. The theme summarizes the idea that interactions that produce decisions related to opportunities and strategies are mutually involving amongst the team members.

"...that yes I am the CEO, I act in a way that my task is to suggest a lot but I'm not the only one of course...that everyone suggests for like their parts." 113

Thus, even the role of the CEO does not restrict the possibilities and expectations of everybody contributing to the decisions that will be executed. No one person or opinion dominates but all of the team members take part in making decisions together.

Table 7. Consensus Elaboration

1st order concepts and the selected representative data
<p>We talk things over and reach consensus in a Swedish way -- I think we have something like... a Swedish culture like things are talked over and some consensus but. 222</p>
<p>We discuss until an absolute consensus and acceptance is reached Decisions in practice so usually someone pulls an idea, would this be good, then we discuss. We elaborate consensus together so that it has never been that someone would have been opposed to and we make a decision in spite of that. Everyone has agreed on the decisions after the discussions. We discuss what's good, what's bad, what could be changed so that it's all right for everyone. Through discussing. 111</p>
<p>Based on a consensus practice the reasons for decisions are known to all I would say that quite Swedish this practice (of discussion) in a way. That this kind of that. Really. There, there is like...I think it bases on consensus, there wouldn't become a big mystery for anyone that why something was decided the way it was decided -- 123</p>
<p>We have consensus but we can disagree on specific views We have not had any kinds of conflicts here. We sure have different opinions. -- We do not disagree, that's too extremely said. We bring out different views. 311</p>
<p>All decisions are joint since we have made them democratically and unanimously Now we act maybe quite like democratically all decisions are like joint at least for now we have made all (the decisions) unanimously. 113</p>

Table 7 presents the theme 'consensus elaboration'. Elaborating a consensus in discussions amongst the team members characterizes entrepreneurial action within the entrepreneurial teams.

"-- I think we have something like... a Swedish culture like things are talked over and some consensus but." 222

Remarkably many of the interviewees refer to "the Swedish way" of elaborating consensus through discussing together (see e.g., Hofstede, 1991 for cultural differences). The interactions do not exclude anyone but agreement among all team members is essential. However, "consensus" in this context does not mean group think (see Janis, 1982).

"We have not had any kinds of conflicts here. We sure have different opinions. -- We do not disagree, that's too extremely said. We bring out different views." 311

Consensus does not indicate that the team members would not have different opinions although none of the entrepreneurs see that there would have been any particular conflicts (affective rather than cognitive: see Amason, 1996). Rather, consensus on which everyone can agree requires thorough, intense, and mutually involving interactions. It is about a subtle and nuanced merging of individual insights.

Table 8. Equal and Democratic Leadership

1st order concepts and the selected representative data
<p>We have no clear leader to tell us what to do We have no clear leader who would say that now we do this this this and we don't do that. 312</p> <p>We don't have any kind of hierarchy or German-Aryan army goings-on -- and we don't have like...in a certain way we don't have any kind of hierarchy -- we don't have that kind...er how could I say it now...German-Aryan army goings-on certainly that that...I don't think that there is a threshold for anyone to go and talk with our CEO about anything for example -- 411</p> <p>We are not divided in hierarchical ladders of people I don't see any kind of two hierarchical layers of people, that would be in the economics, that would be the case within smaller circles -- 212</p> <p>It is cooperation instead of actual hierarchy It's more like maybe cooperation than that kind of actual, there, that kind of hierarchical stuff that. 313</p> <p>We are democratic as it comes to power, initiative, and coordination We are in some way very democratic -- Everyone has power, everyone is allowed to take initiative, coordination happens democratically that's how I feel at least. 111</p>

Consensus elaboration is strongly linked to equality and democracy of leadership as it controls emergence of hierarchies. As specified in Table 8 above, entrepreneurial action within the teams is strongly characterized by equal and democratic organizing of entrepreneurial action.

“We have no clear leader who would say that now we do this this this and we don't do that.” 312

There are no solo leaders who would exercise power and control over the others. Power is decentralized and hierarchy nonexistent. There are minimal differences in status. Every team member takes action to the same degree although not in the same way but through different kinds of roles and has the possibility to influence outcomes and people. Thus, allocative and authoritative facilities (Giddens, 1984) are shared.

“We are in some way very democratic - - Everyone has power, everyone is allowed to take initiative, coordination happens democratically that’s how I feel at least.” 111

The entrepreneurial teams are democratic in a way that every team member has power and is allowed and expected to take initiative. Burns and Stalker (1961) suggest that equality and democracy reflect horizontal hierarchy where power and control are distributed among all team members as opposed to vertical hierarchy where the organization is structured and operated around a solo individual leader. Indeed, new ventures typically do not have several hierarchical layers but lack middle management, for example (Mintzberg, 1979). Drawing from organizational literature on status, power, and control (e.g., Hatch, 1997), we see that traditional, individual-focused and pyramidal hierarchy might limit interactional dynamics among team members and collectiveness by centralizing interactions and the possibility to have an effect on outcomes around an individual (i.e., reflecting domination of an individual), and enhancing the identity of the lead entrepreneur (see Ashforth, Rogers, & Corley, 2011). As an interviewee reflected, the individual leader would reflect the dominant ideas of individual-focused economics but the startup team departs from the traditional ideas (see Table 8).

Table 9. Joint Effort, Responsibility, and Credit

1st order concepts and the selected representative data
<p style="text-align: center;">Team constructs the best when things are done together and not for individual credit</p> <p>In a way like, I think becoming a team forms the best... or constructs in that when there comes then, we have had quite a lot of setbacks every once in a while and then when there come these successes where we do it together. So as long as there like... in a way like... erm. The thing works in that way, that like, in a way, whether setbacks or successes, so that they are not like somebody’s credits, in a way but they are things that are done together. So so. It usually boosts in the same way whether it’s a setback or a success. 313</p>
<p style="text-align: center;">We have a habit and idea of working together, joint responsibility, and sharing rewards</p> <p>Maybe it relates to that too that, or it has been a habit that we have done (worked) together, we have been able to think that we carry the responsibility together. Then if it bears fruit, they are also shared together. 111</p>

Table 9 specifies the theme ‘collective effort, responsibility, and credit’. The accounts define more closely that joint work and sharing contribute to the entrepreneurial team as a collectivity, rather than a solo individual. Activities are collective as opposed to solo and leave little room for individual domination.

“ - whether setbacks or successes, so that they are not like somebody’s credits, in a way but they are things that are done together. - -“ 313

As the interviewee states, outcomes are not any individual’s credits but done together. Everybody contributes and everybody is credited and responsible for the common outcomes.

Evaluation, Feedback, and Sanctions of Entrepreneurial Action

The third aggregate dimension represents evaluation, feedback, and sanctions related to joint entrepreneurial action. Entrepreneurial action is characterized by non-contractual and informal interactions. It is evaluated through norms, joint helping, and resolving of problems when interacting with one another on a continual basis. The team members know what is expected of them and how they should act. Giddens (1984) sees that structures of signification have to be understood also in connection with legitimation as the third structural feature that is linked with sanction as agency. These are mediated by norms as rules and resources (Giddens, 1984).

Table 10. Informality and Non-bureaucracy

1st order concepts and the selected representative data
We have avoided contracting
- - We strive to avoid...we have avoided making contracts and else a lot so. 111
Too much stiffness and bureaucracy is bad
And too much stiffness is bad. Although (s)he (a bureaucratic) would start walking (leave) because of us then if...322 Right. 323 Yes yes. It wouldn't. 321 Straitlaced so well. 322 Bureaucracy maybe. 321 Yes. 323
We don't have formal goings-on
We don't have very formal these kinds of goings-on so that. 313 We don't have any formal stuff in use now. 323

Table 10 outlines the theme ‘informality and non-bureaucracy’. Non-hierarchical and democratic action that bases on consensus and exchange of information, knowledge, and feelings is legitimated in informal and non-bureaucratic interactions.

“ - - We strive to avoid...we have avoided making contracts and else a lot so.” 111

There are no strict procedures or contracts that would control actions but they are socially legitimated by the team members. As there is no single dominating individual or opinion and power is decentralized, there is no need for rigid contracts and bureaucracy that would serve to legitimate the domination. This fits the ideas presented in organizational literature that high bureaucracy is often linked to hierarchical organizations (Hatch, 1997).

Table 11. Feedback and Helping

1st order concepts and the selected representative data
<p style="text-align: center;">People help one do things by pushing</p> <p>There are certain bits and pieces which must be done, and I think in a team people help you get those done by pushing you, you know. 222</p>
<p style="text-align: center;">We know how to encourage each other</p> <p>I think we know how to encourage each other just like this face-to-face or through email that hey that you wrote a very good memo that that thank you, just like this maybe more but we are quite good at that, I think we all remember to say that wow well done! 422</p>
<p style="text-align: center;">We support and help each other</p> <p>- - then another thing is that kind of supporting each other that if you email or say that now I have this issue that...I would need a little help or would you have time to check this through so that usually goes like...like to the first place of the task list for some reason that when helping a friend so that's the first thing there that okay I'll handle this first and then do my own work again...which is just like great. 411</p>
<p style="text-align: center;">We have no anonymous box for feedbacks</p> <p>we don't have any kind of this kind of anonymous box for feedbacks where we could put criticism or praises - - 411</p>
<p style="text-align: center;">We easily tell if there is a problem</p> <p>- - I think we are quite sensitive...to tell immediately if there is some...if there is some problem in one's own work...so everyone tells quite easily most probably that now there is this kind of a problem so that I don't think that there has been that kind of a situation that someone, that there would have occurred big problems because someone would have tried to solve some issues alone and then would have not succeeded in it. 413</p>

Table 11 presents the final theme that focuses on 'feedback and helping' that serve to continuously legitimate action through providing evaluation and assurance that the team members are going to the right direction and doing the right things.

"There are certain bits and pieces which must be done, and I think in a team people help you get those done by pushing you, you know." 222

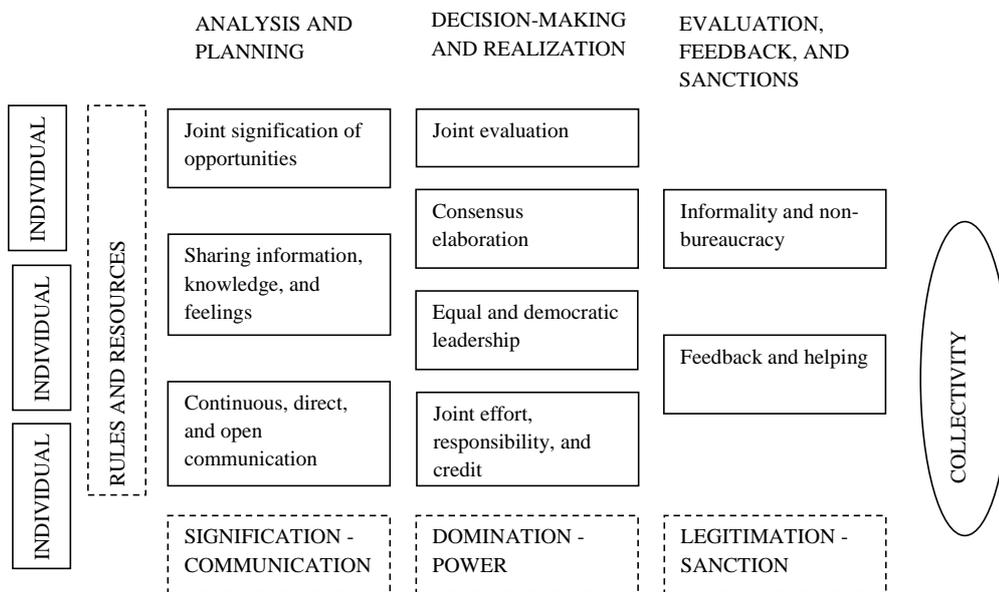
As the interviewee says, people help an individual to do things by pushing each other which implies that there are socially constructed norms in the team (Giddens, 1984). Also, feedback and concrete helping control action and inform the team members if everything is acceptable as it is

or if something needs to be changed. Instead of formal, normative sanctions that would be linked to structural asymmetries of domination team members reflexively monitor interactions with one another frequently (Giddens, 1984)

Summary of the Findings

Figure 1 summarizes our findings by presenting a model of entrepreneurial actions that contribute to collectivity within the entrepreneurial teams.

Figure 1. Summary of the Findings



Our model of entrepreneurial action that reinforces collectivity within entrepreneurial teams identifies three dimensions that reflect properties of collective structures and agencies linked to them. The model also outlines rules and resources that mediate the structural properties and agencies and serve as tools for entrepreneurial action during different phases of development of the venture.

DISCUSSION, LIMITATIONS, AND FUTURE RESEARCH

Studies have examined several interactions, actions, and constructs that reflect collectiveness of entrepreneurial actions within entrepreneurial teams. Literature has suggested that entrepreneurial teams should be united by common mental models and shared goals (e.g., Pearce & Ensley, 2000; West, 2007) and develop commitment and cohesion toward the team and team effort (e.g., Ensley et al., 2003; Lechler, 2001; Watson et al., 1995). Collectiveness has been seen to entail shared leadership that involves every team member in development of ideas and visions, and taking control and command over the venture (e.g., Carland & Carland, 2012; Ensley et al., 2003; Ensley et al., 2006). Interpersonal, direct, and open interactions and communication are central for the functioning of the collective (e.g., Lechler, 2001; Lounsbury, 1998). We take the above strands of inquiry further and detail the micro-conditions and structuring activities that functioning entrepreneurial teams report. Thus, we provide a finer-grained model of entrepreneurial action that includes interactions and organizational structures that reflect collectiveness within entrepreneurial teams. We identify several intermediate constructs, specific phases, and links among these that operate as milestones to construction of the collective. These findings provide further grist to develop models that are generalizable across contexts and are predictive as well as diagnostic relative to a variety of outcome variables. Further, Leflaive (1996) suggests that if enterprises are seen as structures of domination they are dynamic and in continuous change (see also Carland & Carland, 2012). We modestly propose that entrepreneurial teams as collectivities should be seen as dynamic and continuously evolving. Our study abstracted some of the mechanisms (e.g., interactions), and intermediate outcomes (e.g., emergence of consensus) undergird this dynamism. Also, our analysis suggests a sharper focus on emergence of structures of knowledge, relationships of power, and norms within entrepreneurial teams, along with a study of contextual contingencies where collectivities do not emerge. The role of technology in communication is found to be mainly supportive, rather than central. Finally, we make a methodological contribution by utilizing inductive, in-depth methods to elaborate theory. We believe these kinds of qualitative methods are central for studying complex phenomena that have not yet been studied much. We also believe that systematic reporting of findings is important for gaining rigor into qualitative study.

Our study comes with utility for research and practice (see Corley & Gioia, 2011). For researchers, we suggest taking into account the different facets of collective dynamics in examining and defining entrepreneurial teams. We encourage applying our model also to organizing collective work of other groups, such as professional groups with low power distance, knowledge-based workers, etc. In addition, we suggest utilizing in-depth qualitative methods such as in-depth interviews with informants that live in the context of the phenomenon under study and inductive, systematic analysis.

Our context provides boundaries around our findings. We focus on specific industries characterized by high technology and potentially inclined to collectiveness due to complex business environments where multiple individuals' skills and abilities are needed to be combined in order to start and operate a venture successfully (Chowdhury, 2005; Clarysse & Moray, 2004; Kamm et al., 1990; Eisenhardt, 1989b). Our industry context may also have limited the diversity of team members, which may make it easier to develop group identity and trust, and increase the likelihood and speed of emergence, as well as the quality of collective structures within entrepreneurial teams. We suggest that collective entrepreneurial action within entrepreneurial teams should be studied across several industries. Different industry contexts may subject the teams to different levels of stresses and interdependencies among team members, depending on the complexity of the underlying knowledge, opportunity structures, and urgency of action, which may affect the pattern of interactions and the resultant development of collectivity. It may also help identify clearly a range of antecedents and contexts that are associated with the development and existence of collectives, and their performance implications. We also acknowledge that the regional and cultural context and demographic and cultural similarity among the entrepreneurial team members may be prone to collectiveness. Collective entrepreneurial action should be studied across different kinds of regions, cultures, and teams in the future.

Our cases are also "successful" cases, (in the sense that teams existed, they were working, and members expressed satisfaction with their work), and we do not have data from teams that disbanded because the team could not develop toward collectivity. "Successful" cases here are not meant in the sense of business or financial success or performance of the venture, rather it refers to the presence of a collective. Future studies may try to contrast the conditions

and antecedents to successful versus unsuccessful emergence of collectivity. Importantly, we suggest it would be fruitful to carry out longitudinal studies in order to grasp the process and the role of time more profoundly to develop the critical process elements and their relationships leading to an emergence of collectivity over time. In addition, our data is mainly based on the retrospective accounts of the informants. Although we did not ask directly about collectiveness as such, the interviewees were in control of what they decided to tell and elaborate on. For example, they might have edited out accounts inconsistent with collectivity. That said, our approach to data and analysis is that we see the interviewees as knowledgeable agents who are able to elaborate on and even be critical toward their own perceptions and experiences (Gioia et al., 2013). Also, group interviews corroborate the data as we could observe the groups themselves.

Further, our research suggests that collectivity could be associated with group identity. Future research could tease out whether group identity leads to collectivity, or develops as a consequence of collectivity, along with other contextual variables. Thus, the links between collectivity, team collective efficacy (i.e., team's beliefs in the team's capacity to accomplish a task: Bandura, 2000), and social identity (i.e., the desire of individuals to judge themselves based on their group membership, and their efforts to confer distinctiveness or superiority on themselves based on membership in certain groups: Tajfel & Turner, 1979; Turner, 1982) need to be established. Collectivity could lead to feelings of collective efficacy but conditions of collective efficacy would need to be separated from those of social identity. As Lewis (2011) suggests in this context, this can be done by "establishing that a team displaying collective efficacy does so because members find the goal to be personally appealing, and attainable by their group, and because team membership does not negate individual creativity or one's willingness to learn or to question" (Lewis, 2011, p. 964). While our findings are suggestive of this possibility, studies with more direct measures of these constructs may help reach more definitive conclusions. Our findings suggest that collectivity is the structure that allows for intense disagreements within a safe harbor (since one is honestly arguing with "oneself") in creating an informed consensus about an uncertain future, and an elaborate consensus about acceptable collective actions making actions possible. The kind and quality of actions can be elaborated in future studies.

An important "so-what" aspect of teams is performance on a variety of dimensions.

We encourage studies that would examine the positive and negative effects of the interactions within entrepreneurial teams. We anticipate that there are several positive consequences of the collective actions and organization but there may also be some negative effects on various dimensions. Positive effects could include enhanced efficiency and agility through open and active knowledge distribution, for example. Collectivities may be able to take decisions fast compared to other teams, and speed of decision-making may be critical in some contexts (Eisenhardt, 1989b). More effective teams also “continually organize the structures of their firms at the ‘edge of chaos’” (Eisenhardt, 2013, p. 805). It is also likely that more effective teams spend more time on continually structuring and reinforcing themselves while making decisions that lead to performance, in a dynamic fashion. This suggests reinforcing loops of activities and prior performance that reinforce the collective, enabling fast and necessary decisions to achieve satisfactory performance in the next period. These aspects can be studied via a variety of ways, including ethnographic studies and retrospective accounts of team members. Negative effects might include an overwhelming emotional involvement, leading to feelings of loss of personal identity. It may also lead to strong group identity boundaries, reducing the group’s acceptance and assimilation of new team members, and destroying the team altogether in case of change in membership (see Tajfel & Turner, 1979; Triandis, 1993). Future studies could also focus on the aggregate dimensions separately in order to gain an even more nuanced picture. In addition, we suggest that individual contributions to the collective effort should be examined particularly. It should be studied what each individual brings to the collective and how joint effort is distributed in practice. For example, individuals may perceive opportunities and situations from different viewpoints depending on their background and education. Individuals are not thinking in the same way but provide their own ideas for the good of the collective. Individual contributions might also be reflected through team members’ roles because not every team member does the same thing in the venture but contributes differently to the joint effort. We also believe that the dynamic and changing nature of collective entrepreneurial action deserves more attention. For example, socially constructed norms and informality suggest a flexible and adaptive way to react to changes in the environment. In-depth longitudinal studies that start from the time that the team was formed and proceeds to emergence of collectivity are highly encouraged. These kinds of studies should identify obstacles and milestones on the path to collective.

Our analysis helps practicing and prospective entrepreneurs understand how to construct collectivity in their teams. The model offers a comprehensive view of actions and organizational structures that enhance collectiveness. By highlighting the role of interactions, our study emphasizes social and conversational skills, tolerant and empathetic listening, and contextual sensitivity even in the face of urgency to act as important aspects of “expertise” that entrepreneurs may aim to be adept at. The informal work rules and the development of “technology campus” in companies such as Google, which allow for seamless changeover of work and play and sometimes integrate the two together, allow increased and diverse face-to-face interactions across a multitude of emotions, which may be more conducive to reinforcement of collectivity. Our model supports other research that discourages excessive “telecommuting” practices as counter-productive, especially to the development of collectiveness (see Elsbach, Cable, & Sherman, 2010; Thatcher & Zhu, 2006).

CONCLUSION

Considering the important role that entrepreneurial teams play in pursuit of new opportunities, studying them from the point of view of the specific ways in which team members interact with each other in order to pursue entrepreneurial action together is important. Our findings demonstrate that entrepreneurial teams that become collectives may be managed and operated distinctively from individual-led ventures. We identify collective entrepreneurial action and interaction components that characterize entrepreneurial teams as *collectivities*. In addition to mapping the terrain for future research in this area, the insights from our study provide guidance for organizations and managers in organizing and managing team efforts in other organizational contexts that require or may benefit from collective endeavor.

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Collective entrepreneurship: Towards a process model

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Collective Entrepreneurship: Towards a Process Model

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ABSTRACT

Considering that entrepreneurship is often a multi-individual and dimensional phenomenon and occurs in a variety of organizational settings, scholars increasingly utilize collective entrepreneurship (CE) as a concept. However, the concept CE is used in a variety of ways and an in-depth elaboration on collectiveness in the entrepreneurial opportunity emergence and exploitation context seems yet to be missing. Integrating literature on group development and shared mental models with the entrepreneurial opportunity setting, we suggest a contingency-based process model of CE that distinguishes CE from individual (and multi-individual) entrepreneurship (IE) while embracing variability from the individual to the group-level. We believe that CE emerges to different degrees according to the conditions of collective opportunity emergence and exploitation in which a joint understanding among group members develops. We see that the collective quality of the relationships between the members transit the group into a collective entrepreneur. We propose that CE reinforces or degenerates through shared entrepreneurial action mechanisms along time in a variety of multi-actor contexts. Our model suggests a delineation of CE and develops the construct as dynamic and malleable which advances future theory building and empirical work, and may improve its utility for entrepreneurship education and practice.

Keywords: collective entrepreneurship; entrepreneurial process; entrepreneurial action; joint understanding

INTRODUCTION

In the field of entrepreneurship, scholars increasingly utilize the concept of collective entrepreneurship (CE). The interest in the concept bases mainly on three insights. First, entrepreneurship has been seen to be a multi-individual phenomenon more often than the traditional individual-focused literature leads to suppose (Gartner, Shaver, Gatewood, & Katz, 1994; Kamm, Shuman, Seeger, & Nurick, 1990). Second, scholars have seen that entrepreneurship might involve not only economic but social context and value dimensions (Chouinard, Desjardins, & Forgues, 2002; Connell, 1999; Johannisson, 2004; Panagiota & Nastis, 2011). Third, entrepreneurship may entail efforts of many kinds of actors in a variety of organizational settings including not only new ventures but also established organizations and intra or inter-organizational collaboration that aim at new value creation through joint efforts (Johannisson, 2004; Lounsbury, 1998; Reich, 1987; Ribeiro-Soriano & Urbano, 2010; dos Santos & Spann, 2011).

While the studies focused on CE have been trailblazing in the field of entrepreneurship that traditionally emphasizes the role of a solo entrepreneur (see Davidsson & Wiklund, 2001), the use of the concept CE remains fragmented in research and practice. The existing literature offers various CE definitions and conceptualizations. The definitions and conceptualizations take a different stance on collectiveness of the phenomenon of interest (see Morgeson & Hofmann, 1999) where some conceptualizations reflect more individual-level and static logics of individual entrepreneurship (IE). Also, the studies focus on one or another organizational context (e.g., new ventures or established organizations, see [Harper, 2008]) and take into account the entrepreneurial context (i.e., opportunity recognition or creation, evaluation, and exploitation: Shane & Venkataraman, 2000) to a varying degree. Therefore, it seems that systematic and comprehensive conceptual underpinnings of the construct CE might be missing. There is a need for an underlying model of CE that elaborates *what* the collective in entrepreneurship stands for and *how* entrepreneurship emerges as or transforms into a collective phenomenon in a variety of multi-actor entrepreneurial opportunity contexts. It is towards answering the above questions that this paper is directed.

As the development of any collective construct should begin by understanding the function of the given phenomenon (Morgeson & Hofmann, 1999), we recall that several entrepreneurship scholars agree that entrepreneurship is a multidimensional process of recognizing or creating, evaluating, and exploiting new opportunities (e.g., Alvarez & Barney, 2007; Cha & Bae, 2010; Gartner, 1985; Eckhardt & Shane, 2003; Moroz & Hindle, 2012; Shane & Venkataraman, 2000; Stevenson & Jarillo, 1990). Entrepreneurial opportunities are situations for introducing new future goods, services, raw materials, markets, or organizing methods through the

formation of new means, ends, or means-ends relationships (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000). The pursuit of opportunities entails a wide variety of creative, strategic, and organizing activities (Alvarez & Barney, 2007; Moroz & Hindle, 2012; Schumpeter, 1934) including not only economic and legal but also cognitive and affective relations of the entrepreneurs to the endeavor (Cardon, Wincent, Singh, & Drnovsek, 2009; Drnovsek, Cardon, & Murnieks, 2009; Shepherd & Haynie, 2009).

Based on the entrepreneurial context, we suggest a contingency-based process model of CE that highlights interpersonal interactions as the basis of CE and suggests entrepreneurial opportunity related actions as a relevant unit of analysis (see Morgeson & Hofmann, 1999; Parsons, 1951). In order to elaborate the model, we integrate literature on group development (e.g., Tajfel, 1982; Tajfel & Turner, 1979; Triandis, 1993; Wry et al., 2011) and shared mental models (e.g., Ensley & Pearce, 2001; Gibson, 2001; Klimoski & Mohammed, 1994; Weick & Roberts, 1993) with the entrepreneurial opportunity action setting. We propose that CE is characterized by collective opportunity *emergence* and *exploitation* through entrepreneurial action where a joint understanding about the opportunity (i.e., a mutually shared mental model that represents the comprehension of unfolding events, actions, and knowledge by a group of interacting actors as a whole [Klimoski & Mohammed, 1994; Weick & Roberts, 1993] while valuing the variety of individual characteristics and roles in specific situations over time) emerges within a group of actors. We also believe that the members become united as a collective of entrepreneurs. As the shared understanding does not exist per se but unfolds in the interrelations and interactions of the group members (Morgeson & Hofmann, 1999), we suggest that the degree of the understanding is not fixed but dynamic and malleable varying from loose to tight and reinforcing or degenerating (from IE to CE and vice versa) according to the quality of the relationships between entrepreneurial group members over time (Blatt, 2009).

Broadly, we shift thinking by considering CE as a dynamic and malleable phenomenon, the idea of which contributes to the field of entrepreneurship and might help rethink management and entrepreneurship. The shift in thinking emphasizes the level of abstraction where several organizational phenomena may reflect CE but where not all multi-individual or organizational and social-context entrepreneurship should be named as CE. Rather, we believe that IE may develop into CE and the other way around to different degrees. In more detail, we offer a delineation of CE which advances the study and the development of the concept.

PAST CE CONCEPTUALIZATIONS

Table 1 summarizes the past conceptualizations of CE and related research of team entrepreneurship (TE). Although TE researchers mostly have not had CE in mind explicitly when making their arguments, we consider TE because it has been linked to the *collective* nature of entrepreneurship (Ensley, Carland, & Carland, 2000) and teams have been said to make an enterprise a *collective* effort (Ruef, Aldrich, & Carter, 2003). CE and TE have also been seen as interchangeable concepts (see Yan & Sorenson, 2003) and TE literature has been utilized in CE conceptualizations (e.g., Panagiota & Nastis, 2011). In addition, CE studies merge with TE research by examining *teams'* entrepreneurial behavior in established organizations (e.g., Comeche & Loras, 2010; Ribeiro-Soriano & Comeche-Martínez, 2007; Stewart, 1989; Toledano, Urbano, & Bernadich, 2010). Thus, CE and TE share many kindred concepts (e.g., group or team formation and performance [Ruef et al., 2003; Schjoedt & Kraus, 2009]). Our model of CE might even clarify the contribution of TE studies.

TABLE 1
Past Conceptualizations of CE and TE

Category	Focus	Author(s), date	Utilization	Treatment of CE
Solo entrepreneur operating either <i>in</i> or <i>with</i> a collective of actors	Social contexts and other actors	Johannisson (2004)	Explicit	Enacted socio-economic action and process that involve mutual aid and solidarity (see also social values and co-operation) within direct interaction between members of a collective as a social resource (see also social skills and agency)
		Etzkowitz & Klofsten (2005)	Explicit	Collaboration among different institutional actors (business, government, and academic)
		Auerswald & Branscomb (2008)	Explicit	"The combination of individual and networked capabilities" (p. 341)
	Social skills and agency	Etzkowitz (2003)	Explicit	The role of several actors in forming new firms and organizations
		Weik (2011)	Explicit although mostly connected to institutional entrepreneurship	Linked to institutions and agency, collective agents, mobilization of others and social skills, collective efforts, loops, and interdependence
Solo entrepreneurs acting as a collective	Social values and co-operation	Connell (1999)	Explicit	Combination of business risk and capital investment with social values of collective action that aims for the economic and social betterment of a locality by an enterprise that produces products or services by transforming social norms, values and networks
		Chouinard, Desjardins, & Forgues (2002)	Explicit	A co-operative community acting for its socio-economic development according not only to economic demands but also cultural and social ones within the community
		Dana & Dana (2007)	Explicit	Co-operatives as vehicles for CE where individuals' skills are integrated into a group and the group's collective capacity to innovate is greater than the sum of individual parts
		Panagiota & Nastis (2011)	Explicit	Different kinds of co-operatives with dimensions of economic development, environmental protection, and social equity as pillars of sustainable rural development
	Mode of governance	Bataille-Chedotel & Huntzinger (2004)	Explicit	The principles, form or type of governance of co-operatives
	Vertical integration or collaboration and co-operation	Lounsbury (1998)	Explicit	Individuals sharing similar roles across organizations and developing a shared occupational identity to advocate a common cause
		Cook & Plunkett (2006)	Explicit	"a form of rent-seeking behavior exhibited by formal groups of individual agricultural producers that

				combine the institutional frameworks of investor-driven shareholder firms and patron-driven forms of collective action” (p. 421)
		Burress, Cook, & Klein (2008)	Explicit	Vertical integration of producers as ownership and governance structure of producer ownership
The team or collective as an intrapreneur	Entrepreneurship among employees and teams in established organizations	Reich (1987)	Explicit	“the talent, energy, and commitment of a team” (p. 77) that contribute to economic success of an established organization, “endeavors in which the whole of the effort is greater than the sum of individual contributions” (p. 78)
		Stewart (1989)	Explicit	Entrepreneurial teams of employees and collaboration and entrepreneurial activities among employees in profitable and existing firms
		Yan, & Sorenson (2003)	Explicit	“the synergism that emerges from a collective and that propels it beyond the current state by seizing opportunities without regard to resources under its control” (p. 37, according to Stevenson & Jarillo, 1990)
		Ribeiro Soriano & Comeche Martínez (2007)	Explicit	Entrepreneurial activities of subordinates and entrepreneurial teams in established firms enabled by a particular style of leadership
		Ribeiro-Soriano & Urbano (2009)	Explicit	Entrepreneurial teams and collaboration of employees inside an established organization for continuous innovation
		Comeche & Loras (2010)	Explicit	“an emerging synergism of a collective that drives an organization to its present stage, giving dimensions for opportunities without taking into account the resources available at that moment” (p. 24, according to Stevenson & Jarillo, 1990)
		Ribeiro-Soriano & Urbano (2010)	Explicit	“work among entrepreneurial teams within organizations and collaboration among employees” (p. 350) (according to Stewart, 1989) where CE serves as a facilitator of corporate entrepreneurship activities in employee-organization relationships
		Toledano, Urbano, & Bernadich (2010)	Explicit	Collaboration of employees, owners and groups sharing information and efforts to develop corporate entrepreneurship within established firms
		dos Santos & Spann (2011)	Explicit	Innovation activity of employees as entrepreneurs in

				established companies
Collective as the entrepreneur	Team entrepreneurship	Kamm, Shuman, Seeger, & Nurick (1990)	Explicit although mainly implicit	Entrepreneurial teams in new business creation and management processes where the individuals involved have an equity interest (ownership)
		Watson, Ponthieu, & Critelli (1995)	Implicit	Team's interpersonal dynamics affecting performance of ventures that are jointly established and managed by individuals who have an equity interest
		Ensley, Carland, & Carland (2000)	Implicit but write about collective nature of entrepreneurship and collective action in the context of entrepreneurship	Team entrepreneurship as collective activity and the collective nature of entrepreneurship, existence of the lead entrepreneur in the team
		Francis & Sandberg (2000)	Explicit but mainly implicit	Team entrepreneurship as a driver of competitiveness through group dynamics such as interpersonal relationships of friendship
		West (2007)	Implicit but writes about collective efforts, collective deliberations, collective perspective and knowledge structure, collective understanding, collective cognition etc.	Collectiveness linked to teams' collective understanding and cognition

As we present in Table 1, there are seven main foci through which collectiveness within entrepreneurship has been approached and four categories in which the seven perspectives fall. First, entrepreneurship can be considered as a fundamentally collective phenomenon as the entrepreneur is embedded *in a social and institutional context* of market and industry actors and relations (Auerswald & Branscomb, 2008; Etzkowitz & Klofsten, 2005; Johannisson, 2004). Second, for some, collectiveness is about social skills and the role of the entrepreneur as *the mobilizer of other actors or resources* in network or collaborative processes (e.g., Etzkowitz, 2003; Johannisson, 2004; Weik, 2011). In the above meanings, we find a conceptual category of the solo entrepreneur operating either *in* or *with* a collective of actors. Third, others link CE to *joint action* (by multiple principals) guided by social values and aiming at collective outcomes, especially to those of co-operatives (e.g., Chouinard et al., 2002; Connell, 1999; Dana & Dana, 2007; Panagiota & Nastis, 2011). Fourth, CE has been used to refer to a specific mode of governance of co-operatives that is based on *joint ownership and control* (by multiple principals) (e.g., Bataille-Chedotel & Huntzinger, 2004). Fifth, others regard CE as *market-driven and contractual collaboration* (by multiple principals) in the form or the structure of multiparty alliances, networks, or vertical integration (e.g., Burress, Cook, & Klein, 2008; Cook & Plunkett, 2006). CE has also been examined as collaboration between employees in different organizations highlighting occupational identity in advocating a common cause (Lounsbury, 1998). The above perspectives

seem to us as a category of *solo* entrepreneurs acting *as* a collective¹. Sixth, many have taken note of CE as work and collaboration among employees and teams in established organizations, and grasped the phenomenon to different extent when it comes to group action and social-psychological phenomena of the group becoming a collective (e.g., Comeche & Loras, 2010; dos Santos & Spann, 2011; Ribeiro-Soriano & Comeche-Martínez, 2007; Ribeiro-Soriano & Urbano, 2009, 2010; Reich, 1987; Stewart, 1989; Toledano et al., 2010 Yan & Sorenson, 2003). In this meaning of CE, we see the team or collective as an intrapreneur.

Moving towards the idea of *a collective as the entrepreneur*, TE scholars have addressed the significance of teams in establishing and managing new business ventures (e.g., Francis & Sandberg, 2000; Kamm et al., 1990; Ucbasaran, Lockett, Wright, & Westhead, 2003) as collective efforts (Ruef et al., 2003) where a team is formed prior to or after the recognition of an opportunity or the establishment of a business enterprise (Francis & Sandberg, 2000) and consists of individuals having hierarchical (Ensley et al., 2000) or equal ownership (interest) of the same venture (Watson, Ponthieu, & Critelli, 1995).

Although the past CE conceptualizations are of great value in encouraging thinking beyond the individual entrepreneurial hero (Reich, 1987) there remain some shortcomings. The previous conceptualizations present an array of current multi-individual entrepreneurial settings and incorporate significant ideas and concepts beyond formal and economic aspects, such as attitudes (Comeche & Loras, 2010), commitment, collaboration, learning (Ribeiro-Soriano & Urbano, 2010), common understanding (Stewart, 1989; Toledano et al., 2010), and collective identity (Comeche & Loras, 2010; Lounsbury, 1998; Ribeiro-Soriano & Urbano, 2010; Toledano et al., 2010), but the development of a collective-level entrepreneurship theory seems some times to be troubled by the logics of IE. For example, Cook and Plunkett (2006) explore the emergence of jointly-owned firms where entrepreneurial activity takes place at the level of the *solo* member-owners and the jointly-owned firm referring to a specific kind of a multiparty alliance taking the form of a co-operative where control remains with the patrons (i.e., the solo entrepreneurs) regardless of joint ownership in the co-operative effort. Also, TE studies have often focused on team members' individual characteristics, demographics, and resources, and related team formation or composition (e.g., Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006; Ruef et al., 2003), turnover (e.g., Ucbasaran et al., 2003), and team venture performance related to the group compositional issues (e.g., Cohen & Bailey, 1997; Schjoedt & Kraus, 2009). The studies have also emphasized the role of a lead entrepreneur or the formation of the team around or by him or her (e.g., Ensley et al., 2000). Most notably, entrepreneurial teams are often understood to have an unequal power structure (Eisenhardt & Bourgeois, 1988) where power (equal or unequal distribution of it) is allocated to an individual

¹ Lounsbury (1998) makes a distinguished contribution by viewing the group of individuals more as a social entity as such.

person (Schjoedt & Kraus, 2009) viewing the team as consisting of the one real entrepreneur with stronger control, drive, action, decision making, and mind-set in relation to the others in the team (e.g., Clarysse & Moray, 2004; Ensley et al., 2000; Shaver & Scott, 1991). Several CE scholars similarly believe that CE does not eliminate the need for an individual and personally accountable leader (e.g., Reich, 1987; Ribeiro-Soriano & Comeche-Martínez, 2007; dos Santos & Spann, 2011; Stewart, 1989; Yan & Sorenson, 2003).

While scholars have called for attention towards interpersonal interactions and group dynamics in entrepreneurship (e.g., Chowdhury, 2005; Lechler, 2001), the previous CE conceptualizations seem to miss an in-depth understanding on the interactions between the members of the collective (Johannisson, 1987; Morgeson & Hofmann, 1999). As Blatt (2009) states, “the structural factors, such as prior ties and demographic homogeneity, do not specify the cognitive and behavioral underpinnings through which entrepreneurial teams can leverage potential sources of advantage” (p. 533; see also Chowdhury, 2005). Although some CE scholars have questioned the individual-focused perspectives by involving democratic, equal, and shared action components (e.g., Comeche & Loras, 2010; Lounsbury, 1998; Ribeiro-Soriano & Urbano, 2009), CE literature needs to adopt an even more collectivized perspective by understanding collectiveness as a value orientation that emphasizes interdependence and membership of a group, a strong identification of an individual with an in-group, and shared goals and efforts (Tiessen, 1997; Triandis, 1993; Wagner & Moch, 1986). Also, the extant perspectives are mostly static and dichotomous. This is conflicting to the action-basis of collective phenomena where collectiveness unfolds in the shifting relationships and interactions of the members of the collective (Morgeson & Hofmann, 1999).

TOWARDS THE MODEL OF COLLECTIVE ENTREPRENEURSHIP

At the collective level, the dynamics of emergence and exploitation in entrepreneurial action base on the coming together of multiple entrepreneurs. Reich (1989) appropriately states that CE accounts for “endeavors in which the whole of the effort is greater than the sum of individual contributions” (p. 78). Thus, individuals’ skills, roles, or activities should not be eliminated from the CE model but the focus of thinking should be on the group as one collective entrepreneur. Lounsbury (1998) makes a promising contribution by examining conditions that give rise to a formal organization and arguing that CE is connected to a common identity and a sense of marginality in a social context that involves multiple individuals sharing a goal. He explains the emergence of CE as a result of a shared sense of social marginality and a linkage to a wider social environment, and realizes that, in order for a new organization to emerge, actors need to give meaning to their action, create boundaries around them and others, and make sense of their social

being. Other CE literature also implies that CE could be an outgrowth of collective synergism (Comeche & Loras, 2010; Yan & Sorenson, 2003), entrepreneurial spirit (Ribeiro Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2010), atmosphere (Toledano et al., 2010), symbiosis between a corporation and individuals (Johannisson, 2004), or mind-set (dos Santos & Spann, 2011) that are developed by the multiple actors through working together (Comeche & Loras, 2010).

We suggest that a *collective entrepreneur* is a group² of multiple (two or more³) interdependent actors (e.g., individuals, groups, departments, organizations⁴) engaged in mutual interaction where they come to see themselves and to be seen by others as a social unit, socially construct a collective opportunity in which they share goals and outcomes, and amongst whom a socially constructed joint understanding⁵ (cognitive and affective structure) emerges in collective entrepreneurial action. Accordingly, we define that the word *collective entrepreneurship* should be used only when *the entrepreneurial process (aimed at economic and social psychological value) involves two or more entrepreneurs (who collectively recognize themselves as an entrepreneur group engaged in mutual and interdependent interaction in connection to a collective opportunity) who produce (amongst the collective entrepreneur) a joint understanding in collective entrepreneurial action.*

Our definition serves the CE field because it not only embraces the interactional dynamics of collective phenomena but takes into account the entrepreneurial opportunity context. To understand the emergence and exploitation of the collective opportunity, we draw from concepts that represent the relationships between entrepreneurial group members (Blatt, 2009). More specifically, our definitions draw upon literature on group dynamics that involves cognitive and

² There are differences between the concepts of a group and a team (Klimoski & Mohammed, 1994; Schjoedt & Kraus, 2009). Although some may see the term “team” more suitable here (e.g., as team members are understood to see themselves as a social unit [Cohen & Bailey, 1997] and be interdependent [Klimoski & Mohammed, 1994]), we prefer “group” to avoid association to TE only (e.g., Clarysse & Moray, 2004; Ensley et al., 2000; Shaver & Scott, 1991).

³ Sometimes a team is supposed to include three or more members but we believe that two is enough to represent a collective of multiple actors. Note that there are also differences whether the term group or team is utilized when deciding how many actors are included. (see Francis & Sandberg, 2000)

⁴ We believe that a collective entrepreneur can include other than individual actors (persons) too although interactions always come down to the individuals (Morgeson & Hofmann, 1999).

⁵ By utilizing the concept of understanding, we do not intend to fall into anthropomorphizing but see that the understanding is located in the interconnections and interactions of individual actors (Morgeson & Hofmann, 1999).

social psychological processes of group phenomena that contribute to development of the group as a social entity with characteristic cognitive and affective properties (e.g., Tajfel, 1982; Weick & Roberts, 1993; West, 2007).

Groups and collective action are essentially based on interdependence between group members (Mayer, Davis, & Schoorman, 1995) because the actors need to recognize that they are interdependent within the context of the environment in order to interact, form a group, and take further action as a group (Druskat & Pescosolido, 2002; Ferrary & Granovetter, 2009). Thus, the level of interdependency between multiple actors may serve as a foundation for CE and affects the degree to which any group becomes a collective entrepreneur. Interdependence is further elaborated in the idea of Tajfel (1982) that group membership is the starting point of collective phenomena. Social identity theory (Tajfel & Turner, 1979) defines social identity as “that part of an individual’s self-concept which derives from his (or her) knowledge of his (or her) membership in a social group together with the value and emotional significance attached to that membership” (Tajfel, 1978: 65 [parenthesis added]). Social identity refers to cognitive awareness of interdependence while incorporating a sense of emotional involvement (Ashforth, Rogers, & Corley, 2011; Ellemers, de Gilder, & Haslam, 2004; Wry et al., 2011). It represents a perception of oneness of the group members (Ashforth & Mael, 1989). Collective identity refers to similarities between the members of the group and differences in relation to other collective identities (Wry et al., 2011) in a way that defines a situated sense or location of the social entity (Albert, Ashforth, & Dutton, 2000; Ashforth & Mael, 1989; Ashforth et al., 2011) through in-group (“we”) and out-group (“they) comparison and categorization (Katz, 1993; Katz & Gartner, 1988; Tajfel, 1982; Tajfel & Turner, 1985). Collective identity as a concept more specific for a particular group further involves perceiving of sharing a common fate with the other members of the group (Ashforth & Mael, 1989; Triandis, 1993) by providing answers to the questions of what does the group stand for and where it is going (Albert et al., 2000; see also Ashforth et al., 2011; Ellemers et al., 2004). Scholars widely believe that collective action will occur only if a collective identity emerges (e.g., Melucci, 1996; Turner, 1982). In addition, Ashforth and Mael (1989) note that collective identity leads to action that is congruent with the identity. However, others see that certain feelings of belonging come to be reinforced or weakened through action (della Porta & Diani, 2003). We believe that collective identity represents the emergence of a group as a social unit and affects the opportunity-related actions taken in regard to the constructed collective identity that reconstructs in further action once again affecting the action, as suggested by Giddens (1984) in the idea on duality of structures and agencies.

Strong boundaries around in-group and out-group contribute to in-group cohesion (Tajfel, 1982) which refers to strong interdependence as a positive emotional interrelatedness and

attachment that group members have with the group and the other members of the group, concern with and significance of their membership, and willingness and desire to stay as a member of the group (Cartwright, 1968; Evans & Dion, 2012; Piper, Marrache, Lacroix, Richardsen, & Jones, 1983). The degree of cohesion facilitates group interaction and sharing understandings (Ensley & Pearce, 2001). The development of cohesion within the social unit affects group behavior and action through commitment, contribution, effort, and drive of the members to the group.

Mayer et al. (1995) point out that interaction increases the importance of trust which can be defined as one's willingness to rely on others in a situation that involves interdependence and risks of vulnerability (see also Blatt, 2009; McKnight, Cummings, & Chervany, 1998). Collective-level phenomena are inherently affected by trust because it enables interactions, collaboration, and sharing, and contributes to feelings of interdependence and belonging that make a bunch of actors more of a collective. Although McKnight et al. (1998) propose that trust can develop based on individuals' disposition to trust and institutional cues without firsthand knowledge of the other members of the group, trust is often understood to be created in socialization processes and through interaction history, and serving as a bonding agent that allows further social interaction and achievement of its potential (Ribeiro-Soriano & Urbano, 2009; Toledano et al., 2010). Some degree of trust is needed in order for the actors to interact and a sense of belonging to the group increases trust in the in-group through social identification and categorization (Tajfel, 1982; Tajfel & Turner, 1979). Also, the members of groups who have had time to develop high cohesion exhibit strong trust for one another and the group. Thus, trust develops through cognitive and affective influences of group membership (Williams, 2001) that both is enabled by and enables interaction.

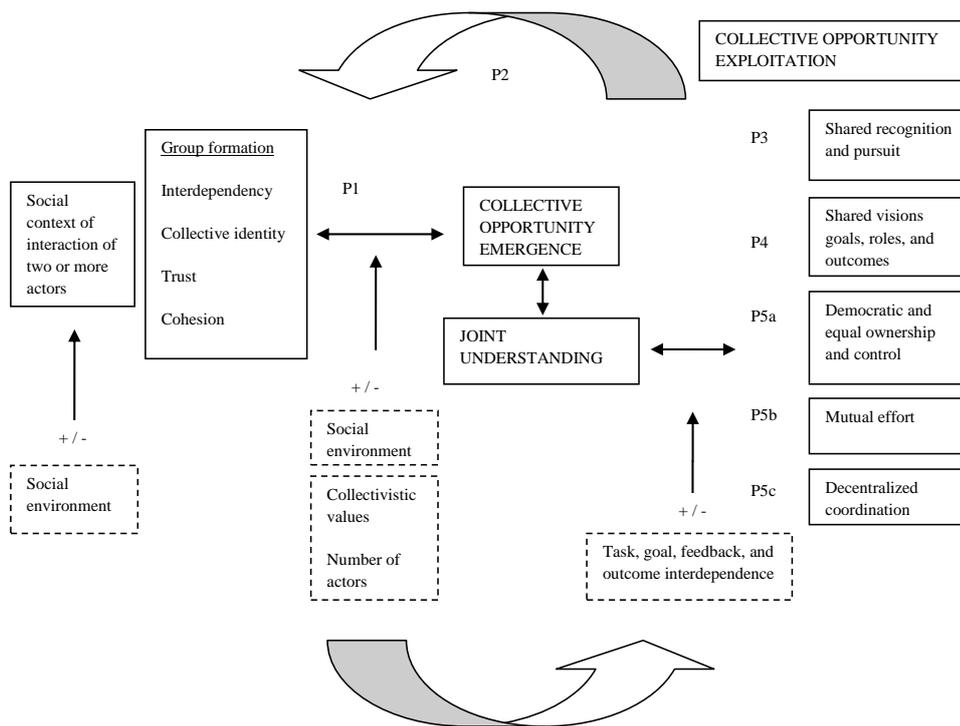
Interdependency, group membership and collective identity, cohesion, and trust are followed by cognitive and psychological processes (Gibson, 2001; Tajfel, 1982) as the members strive to understand each other (Ribeiro-Soriano & Urbano, 2010) and their mutual action through sharing information, efforts, and feelings. Novelty of the new entrepreneurial setting (see Blatt, 2009) motivates the group members to talk to each other in striving to make sense of what is happening (Weick, 1995). Thus, a transition from individual to group impressions and understandings emerges (Ashforth et al., 2011; Tajfel, 1982). We draw from the notion that "a group is an entity with psychological significance" (Gibson, 2001: 122; see also Gibson & Earley, 2007) and has a mind of its own (Weick & Roberts, 1993) although we prefer the word understanding to avoid association to group think (Janis, 1982). We believe that the group formation interactions and further action contribute to a joint understanding as an aggregate structure of CE where the understanding reflects internalized beliefs, assumptions, and perceptions of the group and their action, that is, how group members as a collective think and feel about their

group and group effort developed when group members interact to make sense of their situation and ways of action (Klimoski & Mohammed, 1994).

CE PROCESS MODEL

As the shared understanding transcends the borders of individual cognition and affect through group interactional processes (Gibson, 2001), we see that to grasp shared understanding is to be attentive to process (Weick & Roberts, 1993) that is not orderly with clear stages (Katz, 1993) but continuous and changing in action. We present our CE process model in Figure 1 and will elaborate the developmental aspects in detail below basing on the above presented ideas of group membership interactions.

FIGURE 1
CE Process Model



Interactional Connection of Two or More Actors

As Figure 1 presents, we suppose that a number of actors, such as individuals or groups, begin interacting in a specific context that involves mutual interaction and interdependence (although maybe slight) between the actors within the context of the social environment. For example, individuals may share a hobby where they come to meet each other regularly or they may be college friends who spend time together over a glass of beer or have a joint task or study to be carried out. Similarly, present and past colleagues often have a strong social connection that enables present and future communication between them. Also, the interactions may take place face-to-face or through information technology based on, for example, the shared target of interest or the common project. Thus, CE is founded on the interactional connection of two or more individuals or other actors in any action context related or not to an entrepreneurial idea or dream (see Short, Ketchen, Shook, & Ireland, 2010) where the actors, however, share some preliminary social components (e.g., trust) that enable the initial interactions between them.

The social environment in which the actors are embedded (Johannisson, 2004) plays a role in the coming together of the actors through formal and informal channels (Druskat & Pescosolido, 2002). Some environments might be more favorable to social contacts although most of the current societies provide plenty of opportunities for interactional encounters (considering increased networking, team work, and utilization of information and communication technology). Also, some current social and economic situations (e.g., lay-offs, down shifting) may serve as pushing factors for new or revived contacts (e.g., between former colleagues who share a social or collective identity).

Collective Opportunity Emergence in Group Interactions

Frequency and proximity of the interactional connection affects group formation. The more the actors interact and meet each other, the more likely they become a social unit with high levels of trust and cohesion. As entrepreneurship is concerned with new opportunities and the entrepreneurs (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000; see also Short et al., 2010), we believe that, at the collective level, opportunity emergence should account for the interactions between the group members in group formation. Scholars suggest that an entrepreneurial opportunity occurs when entrepreneurs conjecture that some resources are not utilized in their best way (Shane & Venkataraman, 2000), and entrepreneurial opportunities depend on asymmetries of information and beliefs (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000). Also, entrepreneurial opportunities involve novelty where entrepreneurs cannot apply pre-known processes or mechanical

calculations (Blatt, 2009; Shane & Venkataraman, 2000). To discover an opportunity, the actors should possess relevant information and cognitive properties (Shane & Venkataraman, 2000) and engage in new information seeking and cognitive processes. As no two actors possess all of the same information and cognitive properties at the same time (Shane & Venkataraman, 2000), we believe that a collective opportunity emerges in the nexus of actors' different stocks of information and shared cognitive processes and cannot develop through an individual alone. Because ideas and dreams only become an opportunity through evaluation and analysis over time (Short et al., 2010), a collective opportunity cannot emerge independent of the entrepreneurs that are connected through group interactions. Thus, our view represents more of a creation perspective to opportunities (see Alvarez & Barney, 2007). We believe that opportunity development is distinctive at the collective-level due to the interactions of the actors that contribute to the emergence of a group as a social unit.

More specifically, we suggest that four dimensions define the collective opportunity. First, following the view of Berger and Luckmann (1967) that all ideas are created and developed by human interactions that give meaning to our world and help develop a shared understanding of this meaning, we propose that the co-presence of the actors and their recurrent interactions within the social environment contribute to the development of the collective opportunity. Collective opportunities are developed in interactions of group formation by the group members where the interconnected actors come to share and socially interpret (i.e., make sense of [Weick, 1979]) situations, actions, experiences, knowledge, and feelings, and give meaning to the group's being and action in relation to the social environment. An individual may have an idea or dream by him or herself but it becomes a collective opportunity through group interactions in which the group members label the idea as an opportunity. The opportunity might also be discovered in the interactions from the very beginning. However, the collective opportunity is only viable through the group interactions that give meaning to it and the shared understanding of the meaning by the group members. We suggest that in situations where group members have spent enough time together to develop trust and cohesion, for example through social identification and categorization (Tajfel, 1982; Tajfel & Turner, 1979), the collective opportunity is more likely to emerge as trust and cohesion facilitate group interactions and sharing understandings (Ensley & Pearce, 2001).

Second, our understanding entails that a specific collective opportunity is visible only to a particular social group because an idea only becomes an opportunity when a group of actors is sufficiently organized to define it as such (Hargrave & Van de Ven, 2006) and to give meaning to it, that is, to make it socially existing (Berger & Luckmann, 1967; Weick, 1979; Weick, Sutcliffe, & Obstfeld, 2005). We suggest that the actors need to recognize that they are interdependent within the context of the environment (Druskat & Pescosolido, 2002; Toledano et al., 2010) which enables group formation and membership interactions (Druskat & Pescosolido, 2002; Ferrary &

Granovetter, 2009; Mayer et al., 1995; Tajfel, 1982). Based on their interdependence, the group members come to see themselves and to be seen by others as a social unit (Schjoedt & Kraus, 2009) in a wider social context of other actors, targets of action, and networked relationships in the environment (Auerswald & Branscomb, 2008; Johannisson, 2004). As collective identity answers to the questions of what does the group stand for and where it is going (Albert et al., 2000) and guides further commitment and action (Ashforth et al., 2011) that is congruent with the identity (Ashforth & Mael, 1989), we believe that collective identity construction contributes to the development of the collective opportunity. We suggest that a group in process of collective identification and definition is likely to develop a sense of themselves and their action that enables (and on the other hand may constrain) the emergence of a specific collective opportunity that cannot be detached from the group's identity. For example, collective identity is usually clarified by referring to and situating the group in an established field of interest or expertise (Wry et al., 2011). If the group members together feel that "we are (seen by the social environment as) social media-enthusiasts who enjoy and know about game applications" they probably engage in identification with the field of expertise and sharing knowledge, ideas, and feelings around that field developing a collective identity that encourages the creation of a commercial application. Thus, the "we-ness" situates the group in the environment in a way that enables the emergence of the specific collective opportunity.

Third, labeling some circumstances as an opportunity by the group members together entails that the collective opportunity should be shared and owned by all of the group members together not only in cognitive and emotional sense but in legal and economic terms. As the collective opportunity bases on the group interactions and the collective identity of the group is a core component of the collective opportunity, it loses collectiveness if owned by an individual or only by some of the group members. Fourth, as the collective opportunity develops in the merger of information and cognitive properties of the group members via a process of context-based dialectic among specific group members, it gets lost or transforms if changes in group membership or dynamics occur. This might mean that a specific collective opportunity can only be exploited by the specific collective as a whole.

Finally, because group formation is always embedded in and constructed in relation to the environment (e.g., affecting the basic assumptions that the actors face [Druskat & Pescosolido, 2002], the interpretations that the group and the others make of the group, and the possible social identities and the necessary changes in them [Albert et al., 2000]), the emergence of the collective opportunity is moderated by the social environment. In addition, the degree of a collectivistic value orientation has a boundary condition role because collectivism represents a value construct that refers to the degree to which the individuals within a social system prefer to act alone or in a group (Hofstede, 1991; Pierce & Jussila, 2011; Tiessen, 1997). As collectivistic values guide individuals

towards collectively shared goals, actions, and thinking (Tiessen, 1997) and individuals with collectivistic values are more likely to take part in group action with the other members than individualistically oriented people (Pierce & Jussila, 2010, 2011), a collective opportunity is more likely to emerge in groups where individuals have collectivistic values and where collectivism exists at the group level. Also, group size serves as a boundary condition for the emergence of the collective opportunity because it affects the group formation interactions by all of the members together (e.g., Ellemers et al., 2004; Wry et al., 2011). The collective opportunity is more likely to emerge in groups with a number of members less than ten in order to allow the group formation interactions by all of the individual members (see Morgeson & Hofmann, 1999).

Proposition 1a: The tighter the group as for interdependence, collective identity, group cohesion, and trust, the more likely a collective opportunity emerges moderated by social environment, collectivistic values, and group size.

Proposition 1b: The more all of the actors engage in interactions that contribute to the degree of their interdependence, collective identity, coherence, and trust along time, the more likely a collective opportunity emerges moderated by social environment, collectivistic values, and group size..

Proposition 1c: Development of interdependency, collective identity, coherence, and trust between group members affect the development of a collective opportunity that is specific for the particular group moderated by social environment, collectivistic values, and group size.

Proposition 1d: Development of interdependency, collective identity, coherence, and trust between group members affect the development of a collective opportunity that is consistent with the group as a social unit moderated by social environment, collectivistic values, and group size.

Collective Opportunity Exploitation in Shared Entrepreneurial Action

At the stage of collective opportunity emergence, any collective level phenomenon becomes entrepreneurial (cf. Cha & Bae, 2010; Shepherd & Krueger, 2002). The actors and their actions meet in a specific context (space and time) which limits the range of potential interactions (Morgeson & Hofmann, 1999). When the collective opportunity has emerged, the entrepreneurs must decide to act on it weighting the costs and the value of the opportunity (Shane & Venkataraman, 2000). That is, there is a transition from exploration to exploitation (Short et al., 2010). CE researchers have understood that CE is stimulated by mechanisms that relate to

management or leadership practices that encourage a collective spirit or atmosphere (Comeche & Loras, 2010; Ribeiro Soriano & Comeche Martínez, 2007; Ribeiro-Soriano & Urbano, 2010; Toledano et al., 2010). For example, Reich (1989) puts forward that CE entails close relationships between actors of a common process and a specific organizational structure that does not rely on traditional hierarchy and rules but where work tasks are intertwined and interdependent requiring extensive communication. CE is further understood within the entrepreneurial action context of opportunity realization (e.g., decision-making, managing) where some actions are more dependent on time and space than others, that is, they are not usual on-goings but critical events (Morgeson & Hofmann, 1999) that represent reflection points for the group members.

The opportunity-related joint action enables and is enabled by (see Giddens, 1984) the group becoming aware of its purposeful existence. The group members carry out the entrepreneurial roles and tasks, and collectively understand the group and their (the individual members' and the group's as a whole) action (see Pierce & Jussila, 2010; West, 2007) in a way that enables more concrete entrepreneurial outcomes, such as organizations, products, or services (see Berger & Luckmann, 1967). As the shared understanding unfolds in the interrelations and interactions of the group members (Berger & Luckmann, 1967; Gibson, 2001; Klimoski & Mohammed, 1994; Weick & Roberts, 1993) and is likely to be in constant flux (Druskat & Pescosolido, 2002), the entrepreneurial action enables the emergence of the joint understanding to different degrees depending on the kind of interaction between the group members.

Proposition 2: The degree of CE varies from loose to tight depending on the entrepreneurial action conditions that enable the emergence of the joint understanding through interactions among the members of the collective entrepreneur along time as on-goings and reflection points.

Shared recognition and pursuit of the collective opportunity. Because new collective opportunities become social reality through interpretation and collective decision-making, the group members need to come to an integrated decision and collective understanding about the pursuit of the opportunity although they may have conflicting personal perceptions about the situation (Ensley & Pearce, 2001; West, 2007). We suggest that the recognition and the consequent pursuit of the collective opportunity by all of the group members together represent a critical event of CE that serves as a reflection point for the group members' understanding of their group and action⁶ in a way that enhances the visibility of the collective opportunity for all of the group members. The

⁶ considering the definition of action as behavior or activity with a degree of intentionality or awareness carrying meaning to the agents as opposed to mere thinking (Care & Landesman, 1968)

shared recognition does not mean that the members should have a consensus all the time. Rather, the shared recognition emerges in multi-voiced dialectics where multiple visions compete for the attention of the collective and the final shared understanding represents a delicate compromise with which every member can agree at that point of time.

Proposition 3: The more all of the group members together engage in recognition and pursuit of a collective opportunity, the more likely the joint understanding and tight degrees of CE are to emerge.

Development of shared visions, goals, roles, and outcomes. When the actors label some circumstances as an opportunity, the situation advances (Weick et al., 2005) as the collective understanding on the opportunity guides key decisions and further actions (West, 2007). Applying the thoughts of Wry and colleagues (2011), CE develops in internal and external communications that contribute to awareness among a group of actors that they are engaged in the collective endeavor that includes a set of mutual objectives, interests, accountability, roles, tasks, distinguished practices, and outcomes (see also Gibson, 2001; Wijen & Ansari, 2007). Socially outlining and carrying out the group's visions and goals including strategies, instruments, and practices (by stating who they are, what and how do they do things, and where do they want to go) the group members and the others strengthen the sense of the group as a social unit (Wry et al., 2011). Thus, the mutually recognized understanding on the collective opportunity increases awareness and intentionality through development and communication of shared visions, goals, roles, and outcomes as a critical event of CE emergence.

Proposition 4: The more all of the group members together take part in development and communication of shared visions, goals, roles, and outcomes, the more likely the joint understanding and tight degrees of CE are to emerge.

Democratic and equal ownership, control, effort, and coordination. Because economic and legal ownership and management express the possibility of the entrepreneurs to use control over their endeavor (Rantanen & Jussila, 2011), we perceive that traditional hierarchy limits the interactional dynamics and the emergence of CE (e.g., by enhancing the identity of the lead entrepreneur [see Ashforth et al., 2011]). The emergence of a shared understanding requires collectively recognized shared control over the target as an on-going action (see Pierce & Jussila, 2010). To exploit the collective opportunity, the group members should be all entrepreneurs mainly to the same degree (as a collective entrepreneur) and have approximately equal responsibility

although they most probably have different roles in carrying out their collective opportunity. Otherwise the collective opportunity might lose some collectiveness. Shared ownership and management entail an equal opportunity for all of the group members to put effort in the exploitation of the collective opportunity. Blatt (2009) states that entrepreneurial group settings “work best when members make significant investments of time, energy, and expertise in the relationship” (p. 540; see also Lounsbury, 1998; Reich, 1987). The development of a socially constructed cognitive and affective structure thus demands that the group members put effort mainly to the same degree (although not in the same way) both physically and emotionally as an ongoing (e.g., daily work efforts) but also as a critical event depending on the time and space context of entrepreneurial action (e.g., critical intellectual or financial investments). In addition, the members of the collective should be able to control a whole effort instead of a single piece (Pierce & Jussila, 2011) and the coordination of activities should not lie in authority (i.e., there is not a solo person who controls the others) but in joint communication (Ferrary & Granovetter, 2009).

Democratic and equal ownership and control, decentralized coordination, and joint effort are moderated by task, goal, feedback, and outcome interdependence (see Johannisson, 2004; Pierce & Jussila, 2010; Reich, 1989; Schjoedt & Kraus, 2009) because interdependence in regard to effectively complete tasks and goals, get feedback, and bring about aspired outcomes strengthens the group members’ need, will, and desire to be part of the group and enables communication between all of the members. Task interdependence refers to the dependence of one actor on the others for the accomplishment of a given task and varies from pooled to sequential and reciprocal task interdependence (Thompson, 1967; for a summary see Hatch, 1997: 164). Researchers understand that high task interdependence is typical of collective action (Bridoux, Coeurderoy, & Durand, 2011) and entrepreneurial action that entails non-routine situations and interrupts of the status-quo through creative processes (Schumpeter, 1934). We believe that CE is characterized by reciprocal task interdependence (e.g., typical of intensive technologies requiring coordinated expert work) which reflects tasks that cannot be carried out by one individual alone but there is a need to exchange information between actors during the performance of *their* task (Hatch, 1997) and where the absence of one actor weakens the efficiency of the entity (Ferrary & Granovetter, 2009). Also, goal, feedback, and outcome interdependence refer to the sharing of a common target and high degrees of the interdependence will help group members focus on their joint work and direction. The collective structure is more likely to occur when goals, feedback, and outcomes of the members of the group are linked to the other members and the group as a whole and when the goals, feedback, and outcomes include information about the whole group’s effort (see Pierce & Jussila, 2010, 2011).

Proposition 5a: The greater democracy and equality as for ownership and control moderated by task, goal, outcome, and feedback interdependence, the greater the likelihood that a joint understanding will emerge and the tighter the degree of CE.

Proposition 5b: The greater the mutual effort moderated by task, goal, outcome, and feedback interdependence, the greater the likelihood that a joint understanding will emerge and the tighter the degree of CE.

Proposition 5c: The greater the decentralization of coordination moderated by task, goal, outcome, and feedback interdependence, the greater the likelihood that a joint understanding will emerge and the tighter the degree of CE.

DISCUSSION AND CONCLUSION

In this paper, we offer a CE process model that addresses the collective entrepreneur and the developmental aspects of CE. We propose that CE is characterized by the becoming together of multiple actors as one collective entrepreneur where entrepreneurial action contributes to the emergence of the joint understanding. Our model suggests that the emergence (and the performance) of group endeavors might be linked to the joint understanding of the group members, not separated characteristics of actors as such but the coming together of and forming the collective understanding by all of the members together. For example, we believe that the actors need not to be similar with each other when it comes to their characteristics (although people tend to associate with people similar to them [Ferrary & Granovetter, 2009]) but they should share a common target of action in which they are mutually engaged. Importantly, we suggest that the members can play different roles and contribute in many ways (Ferrary & Granovetter, 2009) but they should have a sufficient unanimity when it comes to the group and its action. Also, we believe that the group members are likely to know the skills and tasks of each other because it helps to form a common understanding of their action and to take action by all of the members. That is, we highlight the formation of the collective in the entrepreneurial action context, not the individual or individualistic actions, nor calculated or formal transactions. Our perspective offers a shift in thinking about CE where CE varies from loose to tight according to the mechanisms of action and different multi-actor phenomena reflect CE to the degree of the entrepreneurial activities.

We believe that CE and IE have different roles in realizing different kinds of opportunities. Collective opportunities emerge in group formation interactions and are exploited through group interactions. The idea clarifies why some opportunities only come alive in collective action while others can be created and exploited by an individual alone. Also, we suggest that the group formation affects the kinds of collective opportunities that emerge because collective

opportunities are expected to reflect the particular group as a social unit with a characteristic collective identity and other group dynamics aspects. Interestingly, the idea illustrates why groups facing similar circumstances develop different kinds of opportunities that are not imitable by other groups. These unique collective opportunities might reflect why group-level entrepreneurship has been seen more successful than solo entrepreneurship.

The interest towards CE reflects prevalent insights from practice. Many entrepreneurial ventures are established by groups or teams (Francis & Sandberg, 2000; Kamm et al., 1990) and team-based enterprises are often assessed to have more potential than individual-based enterprises by venture capitalists (Kamm et al., 1990). Also, the use of teams in established organizations has increased rapidly due to the need for continuous innovation and entrepreneurial perspectives, and the complexity of work tasks (Ribeiro Soriano & Comeche Martínez, 2007). At the level of the general social environment, the world becomes increasingly interactional where networking and continuous communications (often with the help of information technology) play a central role in business and every-day life. Due to the challenges and trends of the current societies, we believe that emerging organizations will increasingly reflect CE. For example, co-operatives can be seen as a salient collective business model that apply the principles of democratic and equal ownership and control in action (Johannisson, 2004). Also, corporate entrepreneurship (or intrapreneurship) often entails self-organized and managed groups that reflect workplace democracy (Johannisson, 2004) which may contribute to CE emergence. In addition, we believe that CE may be more frequent among family members (see Rantanen & Jussila, 2011), friends (see Toledano et al., 2010), and former colleagues who have the opportunity for strong social contact and identification. CE may also include several different actors of the business environment (e.g., entrepreneurs, investors, organizations). For example, CE requires and enables an essential role and participation of investors (e.g., venture capitalists) in development of a new endeavor (e.g., a startup) that requires major investments of both financial and human capital. The idea, however, puts forward some critical risks and reflection points in cases of changes in membership because they might critically affect the shifts from the collective to the individual level and vice versa. In addition, CE is a significant concept considering group dynamics and shared leadership in management and board teams (e.g., Vandewaerde, Voordeckers, Lambrechts, & Bammens, 2011) and other organizational teams (e.g., Bergman, Brentsch, Small, Davenport, & Bergman, 2012). Because we believe that some opportunities are only realized through CE, environments that support social contact and interaction may serve to enable those opportunities. We also see that the adoption of shared action will help in realizing the collective opportunities.

In this paper, we are able to study the “what” and the “how”-questions of CE. However, a complete theory needs to answer questions related to motivations and consequences

too. We encourage theoretical and empirical papers on *why* CE might develop and *what consequences* it may have. We encourage deepening of our ideas through in-depth qualitative studies. Our paper also provides an initial basis for developing a measure of CE which encourages quantitative studies to test our propositions in the future (see Morgeson & Hofmann, 1999; Klimoski & Mohammed, 1994). We believe that individual and group-level empirical material and data will help in developing the CE model further.

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