EVOLUTION, CHALLENGES, AND FUTURE DIRECTION IN ENTREPRENEURSHIP EDUCATION – INSIGHTS FROM SCHOLARS

Lappeenranta–Lahti University of Technology LUT

Master's programme in International Business and Entrepreneurship

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Examiner(s):

1st Supervisor: Professor Tanja Leppäaho

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ABSTRACT

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Evolution, Challenges, and Future Directions in Entrepreneurship Education: Insights from Scholars

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The field of entrepreneurship education (EE) has evolved significantly over the past few decades, yet divergent perspectives regarding its focus and fragmentation persist. This study aims to explore the varying viewpoints of scholars in the field to inform future development. A qualitative and exploratory approach was taken, employing semi-structured interviews with prominent scholars and educators in entrepreneurship education. The data were analyzed using thematic coding to identify both commonalities and divergent perspectives. The findings align with the current literature stream while revealing two distinct camps of scholars in EE: those who emphasize the importance of context in shaping the knowledge taught in EE, and those who stress how context influences pedagogical methods.

This study contributes to the understanding of entrepreneurship education by offering a framework for understanding the spectrum of perspectives from synthesizing insights from educators and researchers in EE, thus suggesting important avenues for future research and development in the field for both educators and practitioners.

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When I arrived at LUT, I never envisioned that LUT would change me the way it changed me the past two years. I made lifelong connections, broadened my horizons, and took small steps towards a career in academia. LUT has challenged me to be a better person, both personally and professionally.

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1 Introduction

The question of whether entrepreneurship has a role in economic growth and development has been extensively recognized and discussed in both policy making and literature. Venkataraman (1997) posits that entrepreneurship is especially beneficial for social welfare when entrepreneurs, while pursuing self-interests, simultaneously augment social wealth through the creation of new markets, industries, technologies, institutional frameworks, employment opportunities, and overall increases in real productivity. The relationship between the pursuit of individual gain and the generation of social wealth establishes a unique and valid domain for the field of entrepreneurship. Notwithstanding the endeavors of policymakers, the level of entrepreneurial activity and objectives remains insufficient and greater attention should be devoted to the education of entrepreneurship. Prior research has examined entrepreneurial education to some extent (e.g. Wilson et al., 2007; Van Auken et al., 2006), however, further investigation is needed to enhance the quality of education in this field.

Entrepreneurship education (EE), despite being a relatively new field, has experienced significant growth in the last two decades (Kuratko, 2005). The formal beginning of its existence in the academic field may be traced back to the 1980s when the first graduate degree programs were introduced (Katz, 2003; McMullan & Gillin, 1998). This early phase marked the commencement of a more profound scholarly engagement, particularly from the late 2010s onwards (Fellnhofer, 2019). As entrepreneurship gained more importance in global economic discussions, there was also an increased academic effort to analyze, comprehend, and improve its educational intricacies. Nevertheless, the field did have its critics. The significance and credibility of EE have been subject to criticism and scrutiny from its inception (Fiet, 2001). Some members of the academic community regarded it as a discipline with low theoretical barriers, criticizing its early stage of development and apparent lack of theoretical complexity (Fayolle, 2013).

1.1 Research Gap

Although there is growing interest in the topic, the theoretical foundations still have some level of ambiguity (Moberg, 2014; Fayolle, 2013). An example of this is the flexible use of the terms 'entrepreneurship' and 'entrepreneurial'. The former is usually associated with the formation of new business ventures, whereas the latter encompasses a wide range of entrepreneurial mindset and skills, regardless of whether they are related to business or not. These seemingly insignificant overlaps can really hide the fundamental nature of important concepts, particularly when academic papers fail to provide precise definitions and do not explain their choice of terminology (Moberg, 2014).

In recent years, there has been an emergence of conceptual frameworks (Neck & Greene, 2011; Pittaway & Cope, 2007a; Béchard & Grégoire, 2005; Fayolle & Gailly, 2008), indicating a growth in academic understanding in the field. As researchers dived further into the subject, the field developed into separate areas of study (Gabrielsson et al., 2020; Fellnhofer, 2019) that are simultaneously characterized by a strong emphasis on individualism and a certain degree of fragmentation (Landström et al., 2022a). Nevertheless, the majority of literature focuses on analyzing the results, particularly the immediate effects and influences of entrepreneurship education. This includes evaluating entrepreneurial intentions, entrepreneurial self-efficacy, and entrepreneurial mindset (Nabi et al., 2017; Shabbir et al., 2022; Tiberius & Weyland, 2023). The impact of teaching approaches, curricular choices, and pedagogical advances has been extensively debated, with a focus on the immediate implications at the course level. The wider and lasting effects, particularly at a programmatic level, are inadequately discussed (Nabi et al., 2017). Moreover, the complex interactions between certain teaching methods and their resulting impacts on entrepreneurship are yet largely unexplored (Tiberius & Weyland, 2023).

Given the widespread presence of schools worldwide that provide graduate programs in entrepreneurship (Fayolle et al. 2016), it would be reasonable to anticipate a certain level of agreement regarding the structure and organization of these programs. However, the actuality presents a contrasting depiction. These programs, however varied, provide a glimpse into the immense scope of the entrepreneurship landscape (Hytti & O'Gorman, 2004). Nevertheless, progress has been made in defining pedagogical models (Nabi et al.,

2017; Béchard & Grégoire, 2007) and suggesting classifications (Anderson & Jack, 2008; Hoppe et al., 2017) and taxonomies (Zaring et al., 2021).

1.2 Research Questions

The aim of this study is to dive deeper into the flourishing field of entrepreneurship education (EE) and understand the various perspectives that scholars hold regarding its current state and future direction, given that throughout its evolution different gaps and perspectives have arisen (Fayolle, 2013). As the field continues to grow and evolve, it becomes essential to gather insights from those deeply embedded in it and exploring these perspectives, we can better inform future developments, both in practice and in academic research.

Thus, the following research question guides this study:

RQ: How do scholars in the field perceive the current state, challenges, and future opportunities of entrepreneurship education?

1.3 Key Concepts

Entrepreneurship

Entrepreneurship can be defined in various ways, and not all entrepreneurship is similar. However, one of the more common definitions of entrepreneurship in general and as a field of research is coined by Shane and Venkataraman (2000, 218), which is the following:

> "The field of entrepreneurship [is] the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited (Venkataraman, 1997). Consequently, the field involves the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them."

Entrepreneurship Education (EE)

From the literature reviews, there is a lack of academic consensus on the definition of EE (Lackeus, 2015; Mwasalwiba, 2010; Fayolle, 2013). However, for the sake of clarity, this

paper will employ the following definition of entrepreneurship education synthesized by Mwasalwiba (2010, 25) from their literature review of EE, where the author identified the main concepts commonly found among definitions used by scholars in the field:

> "Educational (or training) process that is aimed at influencing individuals' attitudes, behaviour, values or intentions towards entrepreneurship either as a possible career or to enhance among them an appreciation of its role in the community (i.e. creating an entrepreneurial society)."

1.4 Research Methodology

The study comprises both a theoretical and an empirical component. The theoretical section comprises an extensive literature study of several scholarly works pertaining to Entrepreneurship Education (EE), pedagogical methodologies, and the discrepancies between EE practices and existing literature. It creates a robust knowledge foundation that supports the entire study activity.

The empirical section of this study is founded on the theoretical framework utilizing data acquired from qualitative semi-structured interviews. The interviews were done with educators and academics engaged in entrepreneurship education within higher education. The outcomes of these interviews were subsequently classified and examined according to themes recognized in the preceding literature analysis. The research approach utilized in this study is delineated in Section 3.

1.5 Structure of the Study

This research comprises two primary sections: the theoretical and the empirical components, and is organized into five principal chapters. The initial chapter presents the reader with the practical and theoretical context of the topic, the research objective, and the formulated research questions. The introduction encompasses the key concepts, terminology, and research methods. The organization of this thesis is illustrated in Figure 1 below.

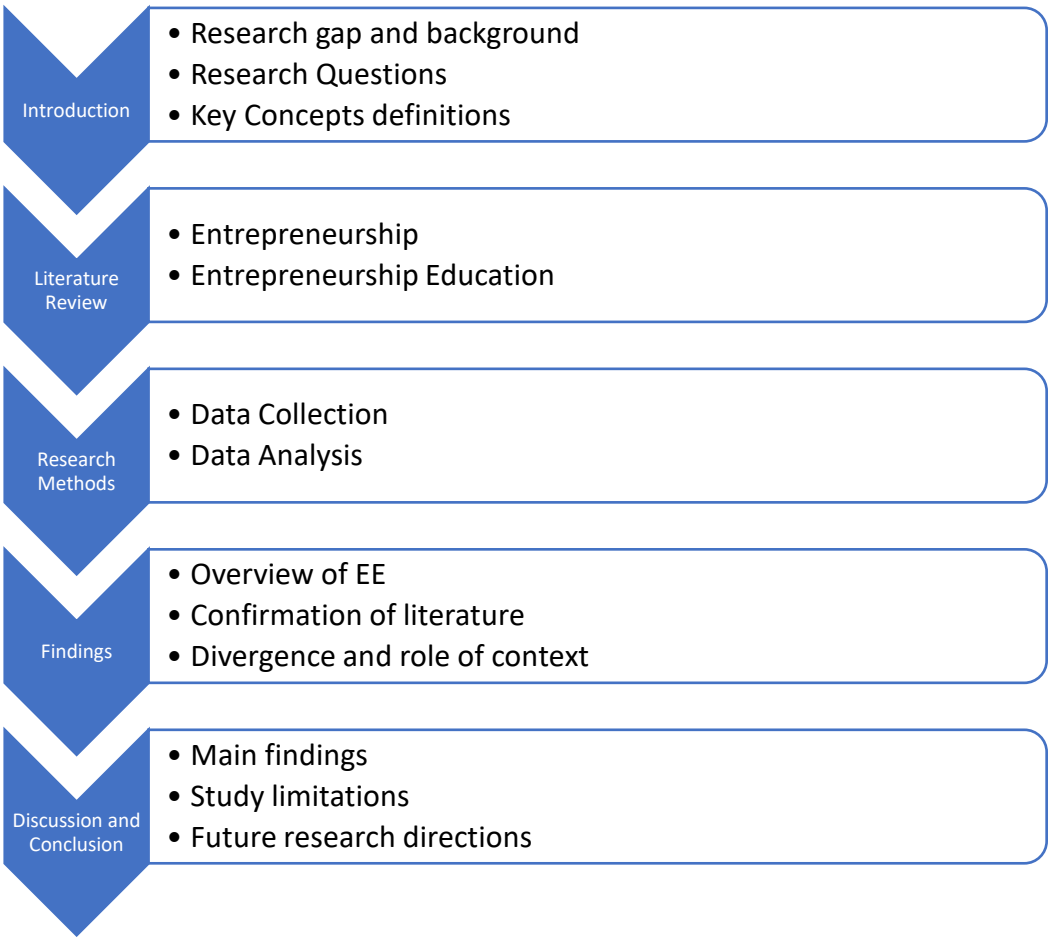

Figure 1. Structure of the thesis

The second chapter constitutes the theoretical component of the research. The theory encompasses scholarly literature on several theoretical issues and concepts pertinent to the objectives of this research where entrepreneurship is briefly introduced, followed by a more extensive discussion of entrepreneurship education. Chapter three subsequently addresses the research design and technique. The third chapter initially outlines the research context, followed by a discussion of the data gathering and analytic methodologies. This chapter assesses the reliability and validity of the study. The fourth chapter thereafter gives detailed findings from the qualitative research. Chapter five of the research focuses on the debate and findings, as well as addressing the research questions. The final chapter presents the theoretical and managerial contributions, along with limitations and ideas for future research.

2 Literature Review

This chapter will begin by presenting different definitions of entrepreneurship and entrepreneurship education. It will then go into the evolution of the entrepreneurship education (EE) field. The study will examine the historical background of EE, its theoretical underpinnings, and the different instructional methods used with an aim to determine the existing level of understanding, emphasize important areas that lack sufficient knowledge, and establish the foundation for the empirical inquiry that will be presented in the following chapters.

2.1 Entrepreneurship as a research field

In order to gain a comprehensive understanding of entrepreneurship education, the concept of entrepreneurship will be briefly introduced. There exist numerous diverse perspectives about the practical definition of entrepreneurship; however, one of the more prominent definitions about the field of entrepreneurship research and entrepreneurship in genreal is one employed by Shane and Venkataraman (2000), which is the following:

> "The field of entrepreneurship [is] the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited (Venkataraman, 1997). Consequently, the field involves the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them."

The field of entrepreneurship is growing rapidly and has a substantial impact on a country's economic and social well-being. It became increasingly popular in academic circles during the 1970s and 1980s, and saw a notable increase in popularity in the early 2000s (Landström, 2020; Meyer et al., 2014).

The exponential expansion of literature can be ascribed to a multitude of institutional factors, such as the existence of networking mechanisms, enhanced prospects for online/digital publication, collaborative mentoring and traineeship, a surge in funds, awards, and

scholarship opportunities, and the escalating process of globalization (Aldrich, 2012). Throughout history, multiple theories on entrepreneurs have been formulated, interconnected, and scrutinized within the fields of economics, psychology, sociology, and other academic areas. The field has been defined and described by theorists using ideas such as uncertainty, innovation, risk, decision-making, action, profit, management, and other related terms. Manalel and Cherukara (2011) argue that the concept of entrepreneurship cannot be comprehensively elucidated by a single theory. According to their argument, a comprehensive understanding of entrepreneurship necessitates a cooperative endeavor including multiple disciplines within the realm of social sciences.

Nevertheless, innovation, a crucial measure of entrepreneurship, has been developed and influenced numerous businesses through technological advancements. Research indicates that these developments were a direct outcome of identifying and capitalizing on possibilities, hence fostering innovation (Woolley, 2010). Entrepreneurs play a vital role in promoting innovative advancements by promoting collaboration between academics, who are responsible for generating new ideas, and themselves, as they are responsible for converting these findings into marketable technologies (Minniti and Lévesque, 2008). Moreover, literature focuses on the importance of promoting entrepreneurial initiatives in the economy, specifically in relation to new business ventures; hence, the development of entrepreneurship as a separate field of study has resulted in enhancements in the formulation of institutional policies with the goal of fostering economic expansion. Entrepreneurs have a crucial impact on the economy, and their performance serves as a pivotal indicator of economic success or failure. Entrepreneurs have played a leading role in adapting conventional business methods, as stated in the literature (Minniti and Lévesque, 2008).

Entrepreneurship has undoubtedly fostered the business ecosystem, leading to the creation of companies and the growth of employment opportunities due to increased competition while also promoting the sharing of information among individuals in organizations and enterprises, resulting in greater diversity within firms. These elements serve as markers of economic progress, which is why governments implement policies that encourage entrepreneurship (Toma et al., 2014) with its importance growing annually. It has proven its capacity to produce resolutions for client issues and worldwide needs, leading to substantial and continuous social transformations (Daskalaki et al., 2015). Entrepreneurs have been motivated by the proven social influence of their activities to utilize innovation and

entrepreneurial action in addressing societal grand challenges, with the aim of establishing a society that is both sustainable and equitable (Fernhaber and Zou, 2022).

Entrepreneurship has been instructed in business schools, engineering schools, and colleges for more than sixty years (Katz, 2003; Solomon, 2007; Vesper & Gartner, 1997). It has become an essential element of various institutions globally. Throughout the years, the instruction of entrepreneurship has developed into a discipline referred to as entrepreneurship education (Fayolle, 2013). This research domain focuses on understanding the aims, methodologies, and target audience for entrepreneurship education (Neck & Green, 2011). The article analyzes the expected results of these programs (Fayolle et al., 2016a; Pittaway and Cope, 2007b), the methods and factors affecting business development (e.g., Bischoff et al., 2020), and the international standards that curricula must adhere to (e.g., Katz et al., 2016). Multiple studies have investigated the evolution and legitimacy of entrepreneurial education as an academic discipline (Fayolle et al., 2016a; Katz, 2008; Kuratko, 2005), thereby fostering the emergence of a community focused on entrepreneurship education (Landström et al., 2022b).

2.2 History and development of EE as a field

Katz (2003) created the most extensive timeline of entrepreneurship education. Although he incorporated economic and agricultural writings and experiences from 1876, and others have examined the Harvard courses from 1947, the true emergence of entrepreneurship education as a significant element in business schools commenced in the early 1970s.

By the early 1980s, more than 300 universities offered courses in entrepreneurship and small business, and by the 1990s, this figure increased to 1,050 institutions (Solomon et al., 1994). Consequently, the first instances of entrepreneurial education occurred in the 1980s.

Since then, entrepreneurship education and training has rapidly increased in popularity over the past decades, attracting scholarly research to assess its impact on the quantity and quality of entrepreneurship overall (Martin et al., 2013).

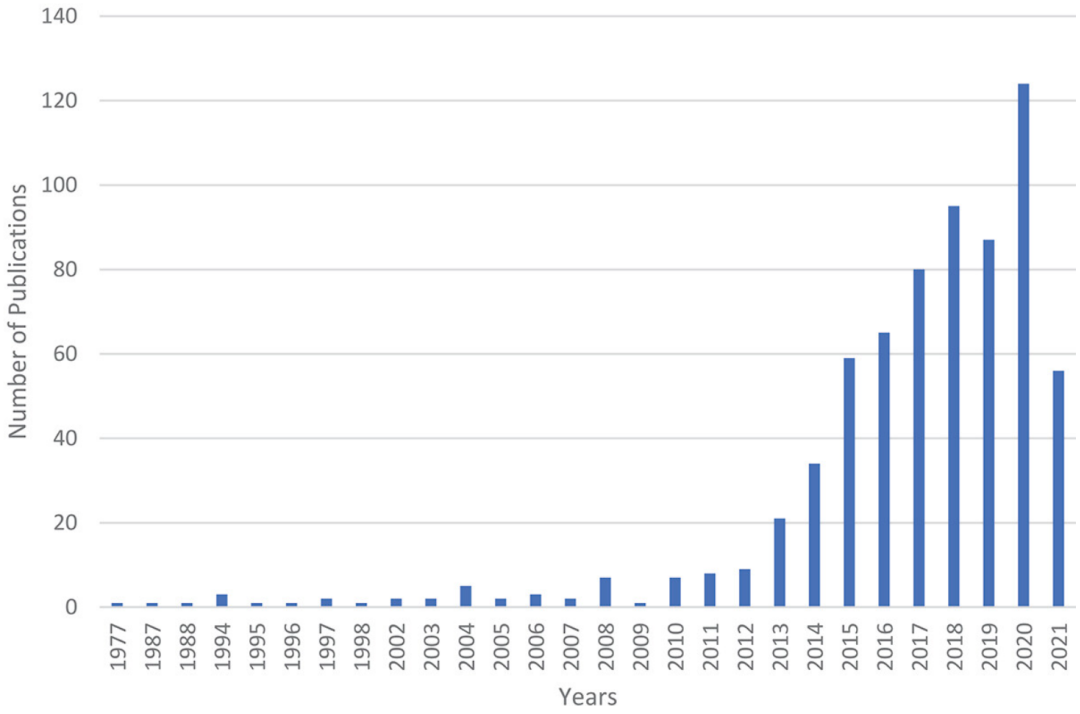

Figure 2. Annual development of EE publications, 1977 to mid-2021 (Tiberius and Weyland, 2023)

The study of entrepreneurship education has expanded significantly (Fellnhofer, 2019). The predominant focus of research pertains to the effects of entrepreneurship education (Tiberius and Weyland, 2023), including the establishment or enhancement of entrepreneurial attitudes (Iyortsuun et al., 2021; Fayolle and Gailly, 2015), entrepreneurial motivation (Oosterbeek et al., 2010), entrepreneurial intention or volition (Bae et al., 2014; Fayolle and Gailly, 2015; Maresch et al., 2016), and entrepreneurial competencies or skills (Aly et al., 2021; Hahn et al., 2020; Jardim et al., 2021; Oosterbeek et al., 2010). Both education and entrepreneurship academics have significantly contributed to the subject, resulting in an exponential increase in EE papers and citations, particularly during the past decade (Figure 2).

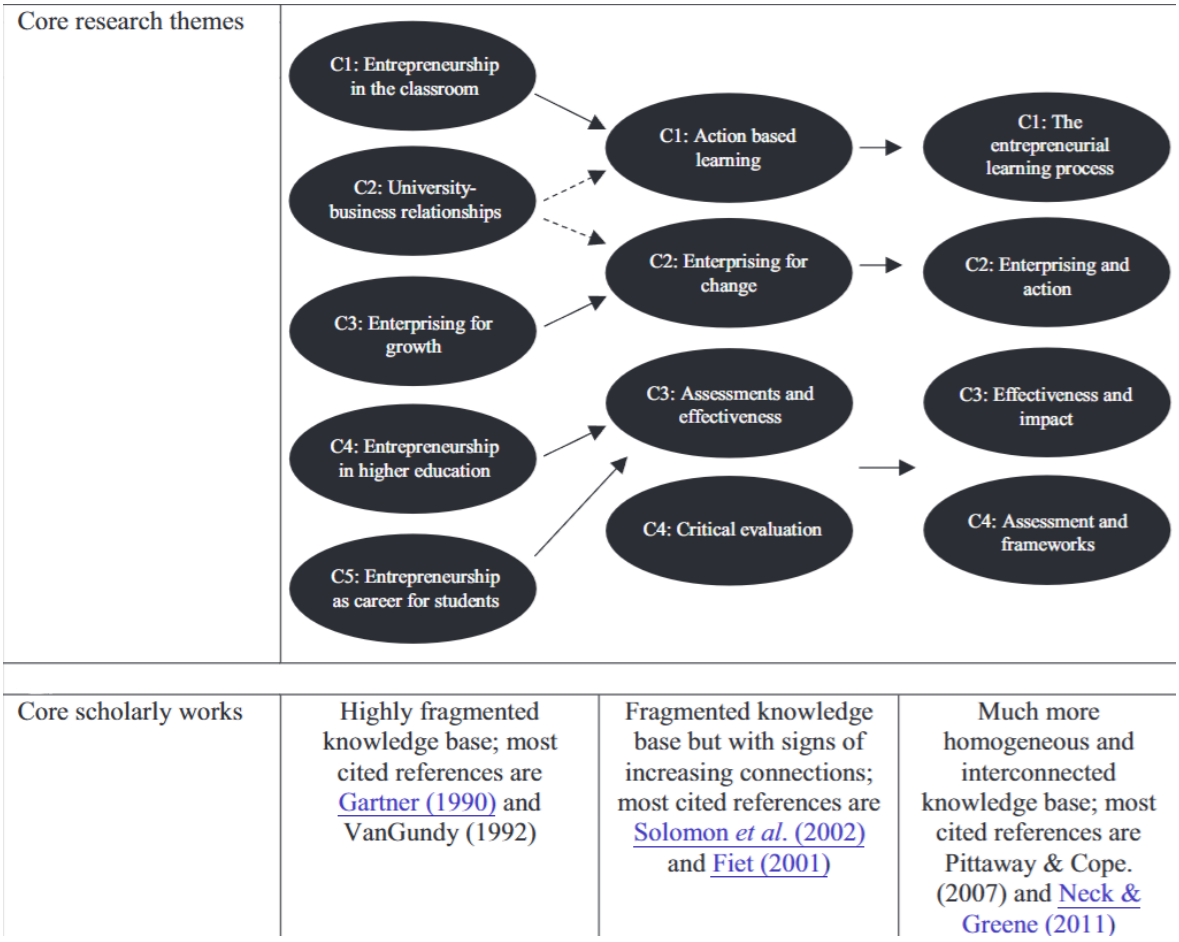

Figure 3. Evolution of EE from 1995 to 2018 (Gabrielsson et al., 2020)

A literature review by Gabrielsson et al. (2020) reveals the evolution of entrepreneurship education (EE) over time, demonstrating that research focused on pedagogy in this field has matured into a separate and cohesive research issue over the previous decade. The patterns observed over the three decades indicate a progression from fragmented scholarly discourse to a robust knowledge foundation and a pronounced research orientation for journal publications, thematic domains, and principal references (Figure 3).

2.3 Pedagogical approaches in EE

Various approaches and techniques exist for teaching entrepreneurship and developing entrepreneurial programs (Jones & Matlay, 2011). Researchers have discovered that to cultivate various types of innovative enterprises and entrepreneurship, such as social entrepreneurship, educational institutions must modify their curriculum accordingly (Politis et al. 2016). Mwasalwiha (2010) proposed that EE programs had to be structured to align

with the desired attributes of its graduates.

Mwasalwiha's (2010) study indicated that the nature of EE is significantly influenced by the target audience. University business students were identified as the most popular group, followed by entrepreneurs, small business owners, and employees. The educational objectives of each group are distinctly divergent; for instance, university students may seek knowledge to become entrepreneurs or to acquire subject-specific information, while entrepreneurs and small business owners aim to obtain resources for managing and expanding their existing enterprises. The analysis found significant variations in the curriculum of entrepreneurship programs across different educational institutions. Notably, several parallels emerged; the predominant subjects within EE appeared to be resource and financial management, marketing and sales, concept and opportunity identification, business planning, and growth management. The curricula encompassed a diverse array of themes outside these subjects. Mavlutova et al. (2020) investigated experiential education from the perspective of students, focusing on their perceived essential learning outcomes. The three most prevalent subjects were: (1) securing financial resources, (2) verifying company concepts, and (3) mentoring and consulting.

Jamieson (1984) outlined three basic areas concerning entrepreneurship education: educating about entrepreneurship, for entrepreneurship, and via entrepreneurship (Chaker & Jarraya, 2021). Kirby (2004), after studying 205 distinct entrepreneurial programs, concluded that there are three overarching kinds of entrepreneurship education (EE). (1) Programs emphasizing general understanding of entrepreneurship, (2) Programs cultivating abilities intended to facilitate an entrepreneurial career, and (3) Programs structured to encourage venture formation. The primary emphasis of EE appears to be on instructing individuals about entrepreneurship and small business management, rather than employing entrepreneurship as a pedagogical method. Hytti and O'Gorman (2004) conducted research that sought to synthesize the three forms of entrepreneurship education previously mentioned, as depicted in Figure 4:

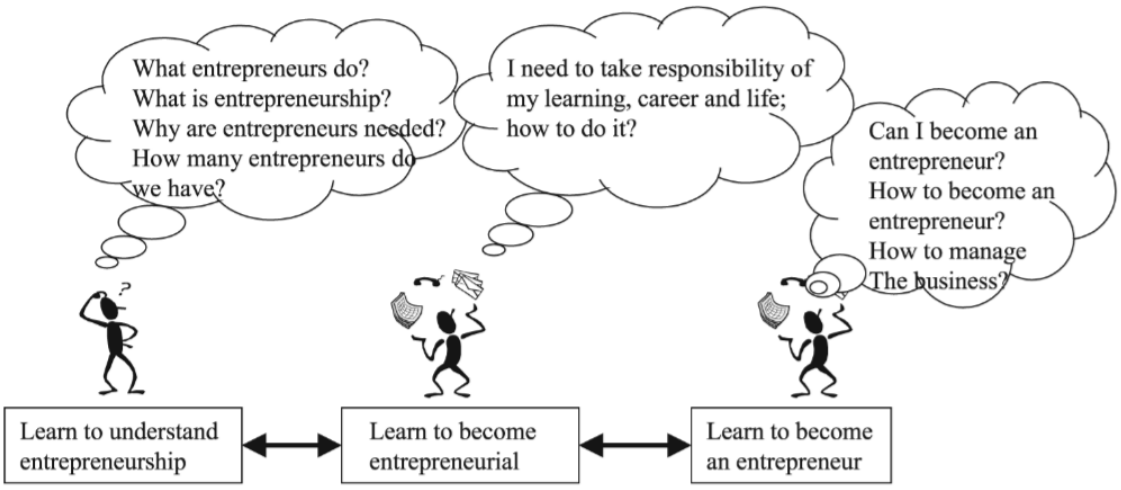

Figure 4. Three categories of entrepreneurship education. (Hytti and O'Gorman, 2004)

Bechard and Gregoire (2005) examine this issue by delineating three "archetypical" teaching models in higher education: the supply model, the demand model, and the competence model, as depicted in Figure 5. The supply model emphasizes teaching techniques rooted in a behaviorist paradigm, concerning the transmission and replication of knowledge and the application of processes, imparted through more traditional means such as lectures and reading academic sources (Bechard & Gregoire, 2005). The demand model emphasizes teaching approaches that follows a subjectivist paradigm, incorporating individualized meaning through engagement in inquiry, discussion, and experimentation (Bechard & Gregoire, 2005), in other words demand model involves more experiential learning.

Analytical Framework: Three Teaching Models in Higher Education

		The supply model	The demand model	The competence model
Ontological level	**Philosophical paradigm**	Objectivist	Subjectivist	Interactionist
	Theoretical bases	Behavioral psychology Reproduction theory (in sociology of education)	Humanistic psychology Human capital (in economy of education) Social and personality psychology	Cognitive psychology Socio-historical psychology Situated cognition theory
	Educator's conceptions about teaching	To teach is to impart information Teaching as telling a story Egocentrism	To teach is to assure the appropriation of knowledge Teaching as organizing students' activities Aliocentrism	To teach is to converse with the students about the knowledge Teaching as making learning possible Systemocentrism
	Educators' conceptions about themselves and the students	A teacher is a presenter Students are passive recipients	A teacher is a facilitator and tutor Students are participants	A teacher is a coach / developer Students are active participants in the co-construction of their knowledge
	Educators' conceptions about the knowledge to be taught	Content is primarily defined by scholarly research in the relevant discipline(s)	Content is primarily defined by students' needs, with respect to a given domain of activity	Content is primarily defined by the problems to be solved by competent actors in real-life situations
Operational level	**Teaching goals**	To remember (retrieve from memory To apply (solve simple problems)	To understand (give meaning) To analyze (organize knowledge)	To evaluate (conclude / criticize) To create (reorganize knowl. to act)
	Knowledge emphasized	Theoretical (decontextualized) Declarative and procedural	Personalized Declarative, procedural and affective	Competences to mobilize the relevant learning resources (knowl. + networks)
	Pedagogical methods and means	Methods and means emphasizing the transmission and reproduction of knowledge and application of procedures (e.g. lectures; reading print material; watching / listening audio-visual documents, DVD, etc.)	Methods and means emphasizing exploration, discussion, experimentation (e.g. library, web or other interactive searches, labs, field trips, simulations)	Methods and means emphasizing communication and discussion (e.g., seminar, presentations, debates, on-line exchanges, etc.) and production (e.g. essays, animation, modeling, portfolios, etc.)
	Forms of evaluation	Summative	Formative and summative	Performance in authentic situations

Figure 5. Three Teaching Models in EE (Bechard & Gregoire, 2005)

In competence model, teaching is seen as a strategic intervention to enable and influence how students organize the resources they have (e.g., knowledge, abilities) into competences that can be mobilized for action, which emphasizes pedagogical methods and an interactionist theoretical paradigm in terms of active problem solving in real-life situations (Bechard & Gregoire, 2005). Seminars, presentations, and debates are examples of methods that emphasize communication and discussion within this model while essays, models, and portfolios are examples of methods that emphasize knowledge production.

2.4 Research gap in EE

Despite the burgeoning interest, the theoretical underpinnings of the field still exhibit a degree of ambiguity (Moberg, 2014; Fayolle, 2013). A case in point is the fluid usage of "entrepreneurship" and "entrepreneurial", and in cases even "enterprise".

The literature review conducted by Mwasalwiba (2010) indicates that a limited number of authors have attempted to explicitly define entrepreneurship education. Even among those who have attempted it, there is still no universally accepted definition of entrepreneurship, and practitioners often find themselves entangled in competing entrepreneurship

philosophies (Sexton and Bowman, 1985). Examples of terms that have sparked disagreement among EE scholars include "entrepreneurship education" and "enterprise education" (Garavan and O'Cinneide, 1994a, b), and "entrepreneurship education" substituted for "enterprise education" (Jones and English, 2004). Enterprise education aims to foster opportunity-seeking personalities, while entrepreneurship education fosters an attitude of self-reliance, according to Garavan and O'Cinneide (1994a, b). However, there are many who, like Gibb (1993), believe that the two concepts are synonymous in theory but contextually distinct. The phrase "enterprise education" is more commonly used in the United Kingdom and Ireland, whereas "entrepreneurship education" is more commonly used in the United States and Canada (Gibb, 1993).

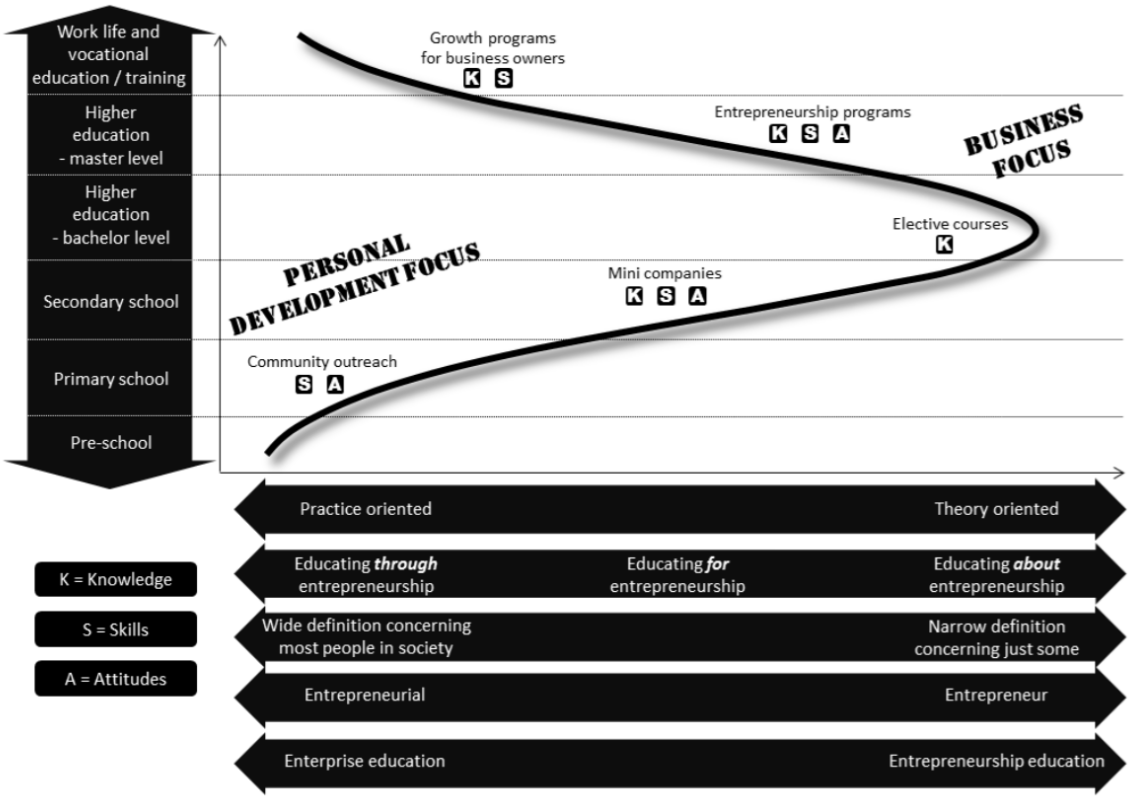

Figure 6. Narrow and wide definitions in EE (Lackeus, 2015)

Lackeus (2015) recognizes that the potential for uncertainty and misunderstanding is considerable, and any discourse on entrepreneurial education must commence with a clarification of the definition employed (Figure 6). The narrow definition of entrepreneurship encompasses opportunity identification, business development, self-employment, venture formation, and growth, essentially defining the process of becoming an entrepreneur (Fayolle and Gailly, 2008). Entrepreneurship, in its broadest sense,

encompasses personal development, creativity, self-reliance, initiative, and action orientation, hence fostering an entrepreneurial mindset. The definition and methodology employed significantly influence educational objectives, target demographics, course material development, pedagogical methods, and student evaluation processes, resulting in a broad spectrum of methodologies (Mwasalwiba, 2010).

Moreover, the numerous definitions of entrepreneurship render entrepreneurial education challenging for many researchers and educators to comprehend. To reduce ambiguity, many taxonomies delineating teaching and learning objectives across different educational tiers have been suggested. Examples of prominent taxonomies in the sector include the Danish Taxonomy of Entrepreneurship Education (Rasmussen et al., 2015), the British QAA for university education (Penaluna and Penaluna, 2021), and the EntreComp framework (Bacigalupo et al., 2016). While these taxonomies delineate key areas of attention, numerous competencies are challenging to codify, rendering them difficult to teach and evaluate using conventional approaches (Moberg, 2014). Numerous competencies are cultivated through the methodology of instruction rather than the content being delivered (Neck & Greene, 2011). Due to the ambiguity of the area and educators' overall lack of experience with pedagogical methods, it is essential to enhance our comprehension of the impact various teaching styles exert on diverse student populations (Rideout & Gray, 2013).

Notwithstanding the acknowledged significance of EE, evidenced by extensive discourse on its potential effects and rapid expansion, its pedagogy remains mostly opaque. A possible explanation for this could be that EE is, in reality, less developed than asserted by Katz (2008). The persistent emphasis on outcomes might be perceived as a means of gaining legitimacy, evident in the nascent phases of emerging scientific disciplines. For EE to evolve into a fully developed sub-discipline of education, it is essential to elucidate its complexities and address its fundamental inquiries with greater rigor.

Ultimately, a recognized limitation of the subject is its predominant emphasis on effect analysis. Despite the surge in entrepreneurship and enterprise education in recent years, the expanding literature indicates a necessity for strong intellectual foundations at both theoretical and methodological levels (Pittaway and Cope, 2007a). Pedagogies are often delineated; nonetheless, there exists a deficiency in conceptual and methodological underpinnings that insufficiently characterize the nature of treatments and adopt a critically

unpersuasive viewpoint (Fayolle et al., 2016). The existing studies predominantly have a descriptive character. Consequently, they fail to clarify whether the pedagogical methods and strategies are tailored to diverse learner types and anticipated outcomes, or which contextual factors enhance effectiveness (Fayolle et al., 2016), potentially elucidating the contradictory results observed in numerous EE impact studies (Nabi et al., 2017).

3 Research Methods

The primary objective of this thesis is to comprehend the field of EE from the viewpoints of its scholars. Semi-structured interviews were selected as the research methodology to accomplish this. The study aimed to gather a wide array of scholars operating within the field of EE; however, due to resource constraints, the convenience-based method was employed to identify the interviewees, from which qualitative data was collected and subsequently analyzed using coding. The subsequent sections will provide a more comprehensive examination of the chosen research methodology. The initial section will address the data acquisition method that was selected, including the rationale behind its selection and the procedures that were implemented during the preparation phase. The data analysis and data formatting process will be the subject of the second section. The data quality, reliability, and validity will be the subject of the final section.

3.1 Data Collection

This study's data was gathered via qualitative semi-structured interviews with academics and instructors in entrepreneurship education. Semi-structured interviews provide sufficient framework to tackle the research issue while allowing participants to contribute additional insights and viewpoints (Galletta, 2013). Semi-structured interviews facilitate reciprocity between the interviewer and interviewee (Galletta, 2013), enabling the interviewer to formulate questions informed by the interviewee's responses (Kallio, Pietilä, Johnson, and Kangasniemi, 2016). Semi-structured interviews were identified as the most suitable research approach for this study due to their flexibility and capacity to tackle complicated issues (Kallio et al., 2016).

A qualitative method was used due to its emphasis on constructing comprehensive explanations of phenomena (Dubois and Araujo, 2007; Eriksson and Kovalainen, 2008), which are critically required in this domain. The execution of semi-structured interviews encompassed several processes, including the selection of interviewees, the preparation of the interview guide, and the facilitation of the interviews. The subsequent parts will delineate this method comprehensively.

The participants for this study were chosen by a convenience sample method, which Eriksson and Kovalainen (2008) identify as a valid approach in qualitative business research. The availability of appropriate study participants is typically regarded as a more significant concern than systematic sampling in this sort of research. The interviewed scholars are all within the field of EE and/or in adjacent fields coming from different national backgrounds. Overview about the interviews is illustrated in Table 1 below.

Interviewee	Main research fields	Country	Interview length
Interviewee 1	Entrepreneurship Education	Finland	38 minutes
Interviewee 2	Entrepreneurship Education	Finland	33 minutes
Interviewee 3	International Marketing and Entrepreneurship	Finland	35 minutes
Interviewee 4	Entrepreneurship	France	41 minutes
Interviewee 5	International Business, Entrepreneurship, and Development	Vietnam	35 minutes
Interviewee 6	Entrepreneurship Education	Vietnam	30 minutes
Interviewee 7	Entrepreneurship	USA	47 minutes

Table 1. Overview of interviewed scholars

If the interview questions are carefully prepared and designed, semi-structured interviews can produce meaningful findings (Galletta, 2013). Therefore, it was imperative to develop an interview guide that would effectively address the research problem, taking into account time and resource constraints. Kallio et al. (2016) propose a five-phase approach for developing a semi-structured interview guide. This methodology was utilized in the development of the interview guide for this study.

Finding the right circumstances to use semi-structured interviews and building on existing knowledge make up the first two stages of the framework. The previously mentioned steps were addressed in Sections 3.1 and 2, respectively. The third component entails the creation

of the preliminary semi-structured interview guide. Kallio et al. (2016) characterize an interview guide as a collection of questions that steers the conversation during the interview towards the research topic. The quality of the interview guide can influence both the conduct of the interview and the analysis of the data.

The literature review in section 2 was the primary source of the interview guide for this research. Relevant questions were developed in accordance with the most recent findings and developments in the field of EE. Supplementary questions were integrated into the interview guide to clarify key topics and/or to serve as preliminary inquiries for the interviewees.

All interviews were conducted virtually via Microsoft Teams, Google Meet, and Zoom from August 2023 to June 2024. Virtual interviews represented the most convenient method for both interviewees and the interviewer. Each interview endured approximately 30 to 60 minutes. The interviews were conducted in English. The responders effectively expressed their opinions and viewpoints. The discussions were documented and automatically transcribed by Microsoft Teams with the interviewees' approval. The interviewer further documented handwritten notes during the interviews.

All of the interviews followed the predetermined format of the guide. The interviewer would rephrase questions as needed to aid the interviewee and would also make follow-up inquiries to clarify particular topics. The interviewer's handwritten notes served as a framework for the conversation and facilitated summary.

3.2 Data Analysis

After concluding the interviews, the researcher examined the video recordings and validated the automatically produced transcripts to ensure their accuracy in reflecting the spoken content of the interviews. The researcher would meticulously edit the transcripts upon identifying discrepancies.

Subsequently, the researcher conducted an analysis of the transcripts to identify pertinent quotations and recurring themes that were germane to the study. The data was methodically classified by coding, which involves identifying significant portions within the text and assigning a code to each segment. A code is a phrase or expression that designates a

characteristic to the selected data. The codes were initially established by a deductive coding approach, wherein a predetermined set of codes was created prior to the initiation of coding. These codes originate from themes and concepts examined in previous writings on the topic. (Skjott Linneberg & Korsgaard, 2019)

Throughout the data processing procedure, the pre-established codes were modified as required. The researcher implemented a hybrid methodology for the coding process. This method incorporates both inductive coding, which involves the direct derivation of codes from qualitative data, and deductive coding. The inductive approach is suitable for exploratory studies, while the deductive approach maintains coding concentration on significant issues within existing literature. This hybrid approach was chosen for this study because it enables researchers to reevaluate established theories and facilitates a versatile theoretical framework, both of which are essential in this developing research domain. (Skjott Linneberg & Korsgaard, 2019)

A simple color-coding technique was employed to systematically categorize the interview data into codes. For smaller initiatives with a restricted data set, this methodology is advantageous (Skjott Linneberg and Korsgaard, 2019). The interview data was categorized by the researcher into two phases. The data was categorized according to the predetermined identifiers during the initial cycle. During the second cycle, these codes were refined to create more precise categories that were derived from emergent motifs in the data. The results of this coding procedure are outlined in Section 4.

Manual color-coding of themes and concepts (Burnard, 1991; Creswell, 2009) was employed to extract pertinent sections of text, thereby capturing the diverse perspectives and viewpoints of the EE scholars and contrasting them to the most pertinent literature. Colored highlighting of texts was employed to identify texts, and each transcript was analyzed and organized into themes and sub-themes. These were subsequently extracted and pasted onto sheets with the corresponding theme/sub-theme headings. To ensure that the context of the selected sections was noted, complete copies of the transcripts were kept close at hand during the analysis.

3.3 Reliability and Validity

The classic evaluation criteria in qualitative research are reliability and validity, as noted by Eriksson and Kovalainen (2008). A procedure or measure's reliability is demonstrated by its ability to consistently produce the same outcome across multiple trials. Validity assesses the extent to which research findings accurately reflect the phenomenon under investigation. Eriksson and Kovalainen (2008) observe that qualitative researchers are divided when it comes to the accuracy of evaluating interview data using the conventional reliability and validity frameworks.

The authors observe that there are additional frameworks that can be employed to evaluate qualitative research. The concept of "trustworthiness" is one such framework, which encompasses the four primary components of dependability, conformability, transferability, and credibility. Dependability evaluates the research process, including its logicality and the extent to which it has been documented. Eriksson and Kovalainen (2008) The reliability of this study is attributed to its plain and logical research process, which is based on the literature on qualitative research design, as delineated in the preceding sections. It was guaranteed that the inquiries are formulated in a manner that facilitates the receipt of more general responses, particularly those that are based on definitions and concepts. In order to prevent biases and the dissemination of inaccurate information, the questions were exclusively founded on the interviewees' opinions, expertise, and experience.

The subsequent aspect is conformability, which is concerned with the objective connection between the study findings and the original data (Eriksson and Kovalainen, 2008). This study is conformable in that it employs raw data to substantiate its findings and ultimate conclusions. This raw data was meticulously documented through transcripts and video recordings and organized using a systematic classification method.

In terms of transferability, this aspect pertains to the degree of similarity between the study and other research (Eriksson and Kovalainen, 2008). The connections between this study and other studies are further elaborated upon in Section 5.

Finally, credibility refers to the extent to which the findings correspond to the study's reality (Eriksson and Kovalainen, 2008). The credibility of this study is derived from its examination of the data from a variety of perspectives. The data is verified and compared to

the findings of other studies using a variety of sources. Section 5 contains this analysis. In general, this investigation is regarded as reliable due to its objective nature, the inclusion of a variety of viewpoints, the similarity to other studies, and the clarity of its procedures.

4 Findings

The following sections present the key findings from the interviews conducted with scholars and educators in the field of entrepreneurship education. These findings were derived from analysis and coding of the qualitative data. The first section outlines the general themes that emerged, focusing on the shared perspectives regarding the current state of entrepreneurship education, the role of context, and the importance of pedagogical research. This will provide a foundation for understanding the subsequent section, which explores the diverging perspectives on the focus of entrepreneurship education—whether it should prioritize the development of knowledge or the refinement of pedagogical approaches, the two distinct camps that emerged from the interviews and their differing views on the the field and its future direction.

4.1 Evaluation of current state of EE

Across the interviews, there was universal agreement that entrepreneurship education (EE) has made significant progress since its inception. Scholars interviewed consistently emphasized how EE has evolved and agreed on how it is becoming a more integral part of the academic landscape. Tabulation of interview quotes are presented in Figure 2.

Interviewee	Quote
Interviewee 1	Well, I think [EE] has evolved a lot and into many, many directions, so clearly there is the strong focus still that looks at it as a kind of business process, contributing to the birth and development of new entrepreneurial businesses.
Interviewee 2	The field of EE has evolved significantly but not uniformly… we have seen considerable progress in integrating EE at all levels of education, including K-12
Interviewee 3	Entrepreneurship is seen as important element of the growth of the societies and their country economies at large… that of course means that it's been taken very much into the university curriculum… I noticed that there's lots of innovation and many schools and universities teach

	in rather different ways. So, there's variety and variance how it's been done…
Interviewee 4	In the 1980s, it was very much United States-centered. And today, [EE] has become much more global, and regional differences are being recognized… It's much more mature than it was, but there's much more to do…
Interviewee 5	Entrepreneurship Education has seen considerable growth globally. Here in Vietnam, it has transitioned from optional courses to a central theme in many business programs.
Interviewee 6	The field has evolved from being merely a theoretical concept to a more structured educational initiative within our universities…
Interviewee 7	[EE] has definitely evolved from its inception a few decades ago, and for a relatively new field in academia, it has made progress.

Table 2. Interviewee response on the current state of EE

This consensus among interviewees aligns with and confirms the broader literature, which acknowledges that EE has come a long way since its early days in the 1980s. Scholars such as Gabrielsson et al. (2020) have noted that EE has matured and diversified, while Fayolle (2013) emphasized its growing global presence. These findings confirm that, despite regional and institutional variations, the field of EE has seen substantial growth and is recognized as an essential component in fostering entrepreneurial skills and societal development.

Some scholars also gave more detailed responses on how the field has developed in certain geographical areas, for example Interviewee 1 explained the direction of EE being developed in Finland, or Interviewee 6 elaborated on how EE has taken root in the context of developing countries, particularly Vietnam:

> "But then I would argue that there's also, and has been for quite a long time, especially in countries like Finland, a focus on the individual side of looking at entrepreneurship education as something that will emancipate individuals to harness their initiative and unleash their kind of initiative and kind of creativity and be entrepreneurial in any context, in their lives as employees, [and] in their own lives."

> "In Vietnam, given the current booms in economic growth, entrepreneurship is the topic. It is everywhere, on the street, in the classroom, and even here in Vietnamese burgeoning academia."

Furthermore, when it comes to judging the maturity of the field, it was also rather universally recognised that the field is still far from being mature, and a lot of work still needs to be done, with every interviewee being able to identify some common gap found in the literature. This is in line with the current literature (Gabrielsson et al., 2020), and with the current judgments from scholars, if we applies the framework from Edmondson and Mcmanus (2007) regarding the archetypes of research field, it appears that EE is no longer on the Nascent Theory, but is already on the Intermediate Theory moving forward to maturity.

Interviewee	Quote
Interviewee 1	Everybody in entrepreneurship, as they are also teachers, they also do research in entrepreneurship education. So, it has kind of developed as its own little niche… Fayolle has been saying for a long, long time, it has lost its kind of rooting to the educational theory and to the pedagogical [method]… what we understand from educational research on pedagogy.
Interviewee 2	The focus remains overly narrow—predominantly on fostering entrepreneurial intentions rather than comprehensive entrepreneurial capabilities. My concern is that we are not doing enough to prepare students for the real challenges of entrepreneurship.
Interviewee 3	I agree, probably that [EE] still lacks certain sophistication [because] We kind of have lots of places teaching entrepreneurship, but it's still done to certain [extent] in a very different ways of using different methods.
Interviewee 4	I think we're still failing to understand cultural differences. What is the way forward for the field? I think we have to have education that's relevant to cultures. We can't take a Babson model that's perfect for Babson area and transpose it to a country where religious beliefs, culture, regulatory environment, infrastructural environment are not the same.

Interviewee 5	The biggest gap we face is the lack of a localized theoretical base. Most EE frameworks we use are borrowed from Western contexts and often don't consider the unique entrepreneurial challenges in developing economies.

Table 3. Interviewee response on the current gap of EE

4.2 Different perspectives

As the interviews progressed and discussions shifted towards the gaps and future developments within the field of EE, clear differences in perspectives began to surface among the scholars. While there was consensus on the field's growth and current state, it became evident that when addressing the challenges and areas requiring further research, scholars diverged in their views. These differences primarily revolve around the role of context in entrepreneurship education, the importance of knowledge versus pedagogy in EE, and attitudes towards the current development of the field.

The following sections will explore these diverging perspectives throughout each theme as coded from interview data: Varying Terminology, Impact of Pedagogical Methods, Field Fragmentation, and Role of Context.

4.2.1 Varying Terminology

As highlighted in the literature review, the terminology used within the field of entrepreneurship education (EE) has been a source of confusion, with conflicting understandings of key terms like entrepreneurship education, enterprise education, and entrepreneurial education. Only some of the scholars interviewed were aware of the historical origins of these terms, such as the UK-based distinction of enterprise education as outlined by Gibb (1993). These scholars were able to trace the development of terminology in the field, while others operated with their own interpretations, often unaware of these historical distinctions. These responses are detailed in Table 4 below.

Interviewee	Quote
Interviewee 1	I think the enterprise education as a term has its roots in the UK. So, … it was Alan Gibb and some of these kinds of pioneers of enterprise education who kind of started to focus on this kind of the individual aspect of it and… they developed these pedagogical models that we also adopted in the early 2000s here. However, as you point out, the use of this vocabulary has not been very consistent. And I also have noticed that the concept entrepreneurial education has sometimes been used, but I don't really know, you know, what is the core?
Interviewee 2	'Entrepreneurship education' typically encompasses the broader scope of creating new ventures, 'entrepreneurial education' focuses more on mindset and skillsets applicable in various life contexts… I think it is important that educators clearly define their objectives and align their curricula to those definitions based on the context in which they are teaching.
Interviewee 4	I use them as three different categories, because when I teach entrepreneurship education, I teach people how to be an entrepreneur, how to start new ventures, and I teach them how other people engage in entrepreneurship. The class need not be entrepreneurial, but I teach entrepreneurship. So, I see entrepreneurship and entrepreneurial is very different. Entrepreneurship relates to something to do with entrepreneurs. Entrepreneurial is an adjective that describes something as being out of the box.
Interviewee 5	Each term subtly frames the field differently. 'Entrepreneurship education' often refers to the broader concept of creating and managing ventures, 'entrepreneurial education' seems to focus more on the mindset, and 'enterprise education' might lean towards the operational skills in running a business from what I understand, although I am still unsure myself since there are overlaps between these terms.

Table 4. Interviewee response on EE terminology

This finding highlights the consequences of lacking common terminology in EE. It creates layers of ambiguity that can complicate academic discourse and practical application, particularly when authors do not explicitly define the terms they use. The varied usage of these terms, without clarification, can impede the field's clarity, making it difficult for educators, scholars, and practitioners to communicate effectively across contexts.

However, an interesting divergence emerged in the interviews when scholars were asked whether the varying definitions of EE posed an obstacle to the field's development. Not everyone agreed that convergence on a common framework was necessary with some scholars arguing that the lack of standardized terminology is not an issue, citing that in management and business studies, it is common to have multiple definitions for similar concepts. From their perspective, this is a normal occurrence and does not hinder the field's progression which reflects a more pragmatic view, where flexibility in definitions allows for adaptability across diverse academic and institutional contexts. For example, Interviewee 3 drew upon examples from the term “branding” in the field of marketing.

> “All management studies and business studies and we tend to have not just a signal to describing rather similar thing even think about the marketing evening and branding. So, we had the brand Equity brand, love brand, status, and brand loyalty. Brand trust is a rather similar item used to measure satisfaction sometimes as well. So as you see, it [is] very difficult to say that we have a single unified term for everything.”

Conversely, other scholars interviewed raised concerns about the risks posed by such terminological ambiguity, especially when terms are used interchangeably without clarification. This sentiment echoes concerns in the literature, such as those expressed by Lackeus (2015) and Moberg (2014), who argue that inconsistent terminology can hinder the development of a cohesive theoretical framework in EE. These scholars advocate for clearer, more consistent usage of terms to avoid confusion and ensure that readers and practitioners understand the context in which the terms are being applied. For example, Intervieweed 5 summarized their view on this topic as follows, citing concerns over future development of EE in developing countries:

> “These confusing uses of terminology are rather large obstacles to future research, especially so in non-Western countries. There are both the language

barrier and conceptual barrier that scholars from developing countries, Vietnam for example, have to navigate around if they are to do research in EE. In a way it also make things harder if scholars are to communicate their work outside of academia, how can the public know which terms means which?"

4.2.2 Impact of pedagogical methods

One of the most prominent themes that emerged in this study is the need to address the "pedagogical black box" in entrepreneurship education (EE). Some scholars pointed out that while the impact of EE on student outcomes has been widely studied, there is insufficient focus on understanding how entrepreneurship is taught and how specific pedagogical methods influence those outcomes. This lack of transparency around teaching practices leaves a critical gap in the field, as the varied pedagogical models—ranging from experiential learning to more traditional lecture-based approaches—are often not sufficiently examined or reported in impact studies. Without a deeper understanding of the teaching methods used, it becomes difficult to draw meaningful conclusions about what works in EE. Some of these concerns are detailed in Table 5 below.

Interviewee	Quote
Interviewee 1	I think ... that we have tended to take the entrepreneurship education, the pedagogical models, as kind of a black box. And then, you know, looking at [EE and] the impact without understanding that the content, or the programmes can be very experiential on one hand, or kind of lecture based on the other, somewhere in between. So, yeah, definitely, we need to do research into what is happening in the courses and in the classrooms. And actually, perhaps we, here, we also need ... methodological innovations in order to [understand] what is happening in the classroom?
Interviewee 2	The biggest gap I see is the lack of longitudinal studies that follow learners beyond the classroom to see how EE impacts [the students'] actual entrepreneurial journeys... More research on pedagogy is critical. We need to understand not only what we teach but how we teach it.

Interviewee 6	There has not been enough focus on pedagogical research in my opinion This is a vital area that needs more focus. Understanding the effectiveness of different teaching methods in EE is essential, particularly as we aim to align our educational practices [in Vietnam] with international standards.
Interviewee 7	The focus on only analyzing impact is everywhere, and not enough work is being done to link those impacts with pedagogy. Like, a lot of papers I come across when doing literature review only mention that the course unit analyzed is an EE program, yet they don't provide any information on how the course is taught while doing all these outcome analyses.

Table 5. Interviewee response on EE pedagogical methods

Several interviewees emphasized the need for more comprehensive and innovative research on pedagogy. There is a call for studies that not only track outcomes but also scrutinize the teaching processes themselves, exploring how different methods impact student learning and entrepreneurial outcomes over time, which aligns with some views discussed earlier in the literature review (Tiberius and Weyland, 2023). Some scholars specifically highlighted the necessity for longitudinal studies that follow students beyond the classroom, offering insight into how educational experiences influence their entrepreneurial journeys in the long term.

Yet from our interview data, among other scholars, assessing pedagogical impact might not be as high on the agenda. Some interviewed scholars cited that there are too many external variables and contextual factors at play, thus rendering any attempt at measuring the impact of pedagogical methods irrelevant. This opinion is reflected in parts of the literature where it is hard to measure the nature and context of pedagogical intervention, leading to some cases where the outcomes of EE programs yield contradictory results (Solomon et al., 2008; Fayolle, 2013). However, this refusal to link the impact with pedagogical methods in EE partially contradicts the current call for actions and future research direction from a majority of EE scholars (Tiberius and Weyland, 2023; Nabi et al., 2017; Hägg and Gabrielsson, 2020). Interviewee 4 insight is summarized as follows to provide insights into the topic, drawing from their own experience as an entrepreneurship educator in Singapore:

> "Well, for some years I taught in Singapore at Nanyang and at INSEAD. And I used to have 800 entrepreneurship students in each class, and I had quite a few classes...

> So ... I was teaching entrepreneurship to thousands of students. And then we decided to have a follow-up and see how many of the students were becoming entrepreneurs. And say you teach 5,000 people how to have a new venture.
>
> How many of 5,000 students would have a venture after they graduate? We had two out of 5,000 started their company. Two people. Not even 1%...
>
> Because the environment in Singapore, when they finish INSEAD or NTU in the 1990s, they could get a job with a large multinational with weeks of paid holiday and lots of benefits and income tax 3% and $10,000 a month. So [the] question [is], would you rather be 22 making $10,000 a month with a long holiday and paying 3% tax or would you rather start a new venture?"

4.2.3 Field Fragmentation

Regarding the social structure of the field of EE based on findings from Landström et al. (2022a), which reveal a dichotomy within the field, comprising a limited cohort of scholars who regard entrepreneurship education as their principal area of research, contrasted with a more extensive group who view it as a secondary focus, primarily engaging in studies on entrepreneurship while occasionally addressing entrepreneurship education. This is also interesting as other literature (Gabrielsson et al., 2020) identified that the field has been getting more homogenous, this however can be interpreted that while the knowledge base in the field of EE has been growing to be more homogenous, the scholars working in the field are still more or less fragmented with different research clusters.

Some interviewed scholars identified this as an issue and that bridges need to be built to cross the gap between the two, citing that such gap could be detrimental to the advancement of EE as a field and potentially bring entrepreneurship research further away from the classroom. These views are presented in Table 6.

Interviewee	Quote
Interviewee 1	Between entrepreneurship education and entrepreneurship research, yes, I do think that it is problematic if entrepreneurship education becomes like its own subfield that has lost its connections to education or to

	entrepreneurship research. So, I think it should be kind of bridges and links that should be cultivated.
Interviewee 2	Absolutely, and bridging this gap is essential for the field's advancement. We need to ensure that research in entrepreneurship informs education practices and that insights from educational research feedback into the entrepreneurial field. Collaboration between these areas can drive innovations in EE that are both theoretically robust and practically applicable.
Interviewee 6	Yes, the gap is quite evident and it's problematic because it creates a divide between theory and practice, some EE scholars have lost some connection back to the entrepreneurship root, while entrepreneurship scholars have lack of incentives to investigate in educational practice. In Vietnam, this gap means that educational programs may not fully prepare students for the real challenges of starting and running a business.

Table 6. Interviewee negative response on fragmentation in the EE field

However, there is not a majority agreement to said view, and some scholars advocate for such even, as they view it a form of specialization in the fields to elevate it further and that it is normal and bound to happen in academic research, these views are summarized in Table 7.

Interviewee	Quote
Interviewee 3	They're like two sides of the coin. A lot of scholars have to ask themselves; where do you position yourself in the bigger domain? And how do you want to cut our own niche? As it is very normal to have a domain within the broader domain. Whether [scholars] want to operate in the, in the wider domain. I think that's, of course [their] choice.
Interviewee 4	No. And let's say if they go too much into different directions? Then it's specialization. It's like somebody learns to be a dentist and somebody learns to be a cardiologist. They're a little bit related, but they're very different. And I much prefer that my dentist went to dentistry school rather than he went to medical school and he makes pretend to fix my teeth.

	And likewise, I don't want my cardiologist to be a dentist who doesn't know anything about the heart. And so, I think that there is a gap and there should be a gap and maybe the gap should be even further apart to allow for specialization. I'm considered to have studied entrepreneurship very well, but I never specialized in entrepreneurship education. I see entrepreneurship education as being a field of education and entrepreneurship is the adjective describing the education. In other words, it's education about entrepreneurship.
Interviewee 6	I do see the gap in scholars' focus, and despite being someone who operates in different fields, like IB, Entrepreneurship, and Development studies, I do not think it is an issue. Scholars identify themselves and work in different domains according to their interest, that is also how they elevate the fields further, by specializing.

Table 7. Interviewee negative response on fragmentation in the EE field

This divergence in perspectives highlights a debate within the field of EE: whether integration or specialization serves the field's progression better. It is interesting to see how scholars position themselves on these issues, as this has been scarcely studied before in the literature (Landström et al., 2022a,b).

4.2.4 Role of Context

Regarding the role of context in EE, there were three different streams of opinion from scholars interviewed. These perspectives centered on how context influences either the content of what is taught, the pedagogy behind how it is taught, or both.

The first group of scholars emphasized that context is important in shaping the knowledge imparted in entrepreneurship programs. They argued that the content of EE should be tailored to the specific entrepreneurial environment, including regional, cultural, and institutional factors. For these scholars, context influences the type of entrepreneurial knowledge that should be prioritized, ensuring relevance and applicability to the students' future business environments, for example when entrepreneurship is taught in a specific

country, there should be emphasis on the context and environment of said countries. The views are presented in Table 8.

Interviewee	Quote
Interviewee 3	The the clear the context matters but uh you know, are we talking about that industry context? Are we talking about like the which industry you'll be entrepreneur of and uh and some programs clearly probably have that kind of focus. Like I've seen [EE] programs sometimes with a focus on HealthTech or HighTech for example. Other contexts are clearly about the local instance setting, which [may] influence how to get support? Where to get help? How to apply for funding and other things? For example, in a course at University of Manchester, they they we had run the program with a Thai University. We were able to select the best startups from university spin-offs and the idea was to help them to get into the British market. Our job is to tell them what they need to know about the British market and how to file for papers and approach British support providers.
Interviewee 4	In my opinion, what's very important is to consider the context, to understand the culture, the religion, the regulatory environment, and the infrastructural limitations that all affect entrepreneurship. If you want to teach people to do something, you've got to teach them to do it where it can be done. [For example] we can't go to a country like Laos and make the assumptions that we're going to have the San Diego Freeway and the I-95 for transportation. I gave the example earlier about in 1986 when Pepsi-Cola was being introduced to Nepal. Pepsi-Cola realized that they couldn't take the 13-meter trucks because of the street layout of Kathmandu.

	I'm very amused when I speak to people who [have] master's in education and in entrepreneurship, and they assume that country X is going to be like country Y. And there's some great people out there, and they're really good at country X, but they're not interested in country Y... And so, I guess being trained as a sociologist, I find it very important to understand the context

Table 8. Interviewee response on context role in shaping knowledge

The second group of scholars highlighted that context is crucial in shaping the pedagogy used in EE and plays a significant role in determining the effectiveness of various teaching methods, as they believe that how students learn is heavily dependent on the micro-level context, such as classroom dynamics, individual student needs, and the learning environment. Hence, understanding and adapting pedagogy to fit the context is key to delivering impactful entrepreneurship education. It is important to note that their views also reflect what has been identified as neglected gaps in EE and should be taken into account in future research, such as the role of teachers as a contextual factor (Ruskovaara and Pihkala, 2013), the application of different pedagogical models in different contexts (Nabi et al., 2017), and the shifting focus to student-centered learning (Robinson et al., 2016). Their views are summarized in Table 9.

Interviewee	Quote
Interviewee 2	There is a growing recognition of the importance of context, that said I think there is much remains to be done. My research indicates significant differences in how EE is perceived and implemented across various educational levels, and I found that there has been a general lacking on how context shapes what happens in the classroom. While EE is instrinsically a contextual phenomenon, relatively little research results have been available on the EE practices of teachers as a shaping contextual factor.
Interviewee 6	While there's an awareness that context is important, I believe we still have a lot to learn about how specific educational, cultural, and economic contexts influence the effectiveness of EE, as in how it is in the classroom and what outcomes our student come out with. Say for example in Vietnam there is still a dominant focus on supply model

	where learners are more passive, which can be attributed to Confucianism influences. That alone is a context that has been rarely studied in EE pedagogical methods.
Interviewee 7	Context has a crucial role in shaping how we approach EE, especially when we consider the diversity of students, institutions, and regions involved. It's not just about what is being taught but more about how it's being taught with said context at play. I believe that entrepreneurship education should be more student-centered and allow students to connect the content to their own experiences and environments. This means embracing different learning theories and methodologies depending on the context.

Table 9. Interviewee response on context role in shaping pedagogy

The final group of scholars advocated for both perspectives, suggesting that context shapes not only what is taught but also how it is taught equally and they argued that for EE to be truly effective, it must address both the knowledge and pedagogical aspects, with both being carefully adapted to the relevant context. The views can be seen in Table 10.

Interviewee	Quote
Interviewee 1	So, you have the pedagogical options on one hand, but then the programme design perhaps could cover these kinds of [context]: Who are the students? In which context is it run? What are the stakeholders? What kind of pedagogical approaches? What kind of content? ... Yeah, I mean, this is of great importance, [for example] so when establishing a program in Laos, of course, they would have to know, you know, what is the context like, where will the graduates be going to, what kind of entrepreneurial opportunities, what kind of jobs, what kind of things, who can they work with, what kind of business environment is there that they can use in the education, what kind of resources these students have or do not have, what is the policy structure, what is the support structure. So I think the importance of context, I mean, we see some work on this, but I think this definitely merits further attention in the future. Not just assuming, like it's sometimes assumed that, you

	know, entrepreneurship is kind of a level playing field that everybody can if they want, they can do it. But then we know that questions like gender, race, financial resources, a lot of things, you know, matter. So, for that purpose, I think we should develop this further.
Interviewee 5	Our understanding is still superficial. Most of the current research generalizes findings that might not hold true across different contexts, particularly in developing countries like Vietnam. We need to dive deeper into how specific educational, cultural, and economic contexts affect the teaching and outcomes of EE to truly tailor our approaches to the needs of our students. One thing I would like to emphasize here is that context, uhm, applies to both what is being taught, for example how is business done in different countries, and how it is taught, like what are the dynamics between teachers and students in class. I have seen studies pertaining to either of those, but rarely both.

Table 10. Interviewee response on context role in both

4.3 Summary of findings

The findings from the study continue to confirm the literature on the growing maturity of EE as a field (Gabrielsson et al,., 2020), but also highlight key differences in how scholars identify gaps, challenges, and opportunities within EE, which has been understudied (Landström et al., 2022a,b). Most interviewees agreed that the field, even though not yet fully mature, has come a long way from its nascent stages and start to develop more homogeneous knowledge base, which is well on its path to maturity. This data is illustrated in Table 11.

When we cross analyse these indicators in EE using the three archetypes of State of Prior Theory and Research, which are Nascent, Intermediate, and Mature, as coined by Edmondson and Mcmanus (2007), we found that EE can be characterized as an Intermediate field moving towards Maturity, as by their definition (Edmondson and Mcmanus, 2007, 1158) Intermediate theory are “positioned between mature and nascent, presents provisional

explanations of phenomena, often introducing a new construct and proposing relationships between it and established constructs"; however, as seen from both the EE literature (Gabrielsson, et al., 2020; Weyland and Tiberius, 2023) and interview data, the field of EE is moving from that stage towards more developed models and theories.

In terms of identified gaps, a recurring theme among the scholars was the role of context in shaping entrepreneurship education, though perspectives diverged on whether this primarily affects pedagogy or knowledge. When addressing gaps in the field, two main approaches emerged. Some scholars advocated for future research aimed at opening the pedagogical black box—that is, understanding how specific teaching methods impact learning and entrepreneurial outcomes. Meanwhile, another group saw specialization and contextualized knowledge as a necessary path for improving EE, emphasizing the need for education that is tailored to specific entrepreneurial environments and ecosystems. These two divergent views form the base opinions for the two perspectives to be discussed.

	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5	Interviewee 6	Interviewee 7
Field maturity	Intermediate Theory, toward Maturity	Intermediate Theory	Intermediate Theory, toward Maturity	Intermediate Theory, toward Maturity	Intermediate Theory, toward Maturity	Intermediate Theory, toward Maturity	Intermediate Theory, toward Maturity
Identified Gaps	Role of Context in EE	Role of Context in EE	Role of Context in EE	Role of Context in EE	Role of Context in EE	Role of Context in EE	Role of Context in EE
Approach to address Gaps	Context in shaping pedagogy and knowledge	Context in shaping pedagogy	Context in shaping knowledge	Context in shaping knowledge	Context in shaping pedagogy and knowledge	Context in shaping pedagogy	Context in shaping pedagogy
Opportunities	Future research on opening pedagogical black box	Future research on opening pedagogical black box	Specialization Contextualized knowledge in EE	Specialization Contextualized knowledge in EE	Specialization Contextualized knowledge in EE	Future research on opening pedagogical black box	Future research on opening pedagogical black box
Challenges	Confusing terminology Field fragmentation	Confusing terminology Field fragmentation	Unable to measure pedagogical impact	Unable to measure pedagogical impact	Confusing terminology Unable to measure pedagogical impact	Confusing terminology Field fragmentation	Confusing terminology Field fragmentation

Table 11. Summary and classification of findings

From the data, two primary perspectives can be identified among the scholars interviewed, with each group, interestingly, identify an opportunity for future research while the other seeing a challenge for EE as a field. The first group of scholars, namely Interviewee 3 and 4, views context as primarily shaping knowledge and believes that field fragmentation offers beneficial specialization. These scholars tend to focus more on the content of

entrepreneurship education, emphasizing regional and cultural factors that should inform what is taught. The second group (Interviewee 2, 6, and 7) prioritizes pedagogy, arguing that context shapes how students should be taught and that pedagogical methods must be more closely linked to measurable outcomes. These scholars generally see field fragmentation as detrimental to the field's coherence. However, a subset of scholars expressed more integrative views, recognizing that context shapes both knowledge and pedagogy, blending elements from both of the two identified perspectives (Interviewee 1 and 5).

5 Discussion and Conclusion

The findings from this study confirm much of the existing literature on entrepreneurship education (EE), reinforcing the notion that the field has seen significant growth (Katz, 2008) and has become more homogenous knowledge base over time (Gabrielsson et al., 2020), as scholars have widely acknowledged. Despite this, conceptual ambiguity remains a challenge, particularly in the use of varying definitions and terminology. This lack of clarity is consistent with what has been highlighted in previous research (Lackeus, 2015; Moberg, 2014), where some scholars point out that inconsistent terminology can complicate both academic discourse and practical applications of EE.

Beyond the general agreement on the state of the field, several insights from the interviews echo smaller, understudied topics that should be further explored in future research. For instance, some interviewees emphasized the role of teachers as a contextual factor in shaping entrepreneurship education, a theme that aligns with Ruskovaara and Pihkala's (2013) findings, but remains underdeveloped in the literature. Similarly, the application of different pedagogical models in various contexts is another area that requires more investigation, as previously suggested by Nabi et al. (2017). Finally, the growing shift towards student-centered learning in EE was mentioned by several scholars, which resonates with Robinson et al.'s (2016) argument that EE should focus more on the experiential and existential learning needs of students.

However, there was also conflict with some of the mainstream literature on entrepreneurship education, particularly regarding research that connects pedagogical methods to measurable impact. Many scholars in the field advocate for opening the so-called "pedagogical black box", which involves exploring how specific teaching methods directly influence student outcomes. While this remains a key focus in the literature (e.g., Nabi et al., 2017), some interviewees expressed skepticism about the feasibility of such connections, indicating that the measurement of impact might be more complex than the literature suggests, and thus should be lower in priority.

Finally, to answer the research question as identified from the beginning:

RQ: How do scholars in the field perceive the current state, challenges, and future opportunities of entrepreneurship education?

The key finding from the analysis of the interview data is the identification of two distinct perspectives among scholars in the field of entrepreneurship education (EE). Although all scholars identified the same gap and gave similar assessment on the field as a whole, these perspectives reflect opposing views on various aspects of EE, including terminology, the impact of pedagogical methods, field fragmentation, and the role of context. What one perspective views as an opportunity, the other perceives as a challenge.

For instance, Knowledge-Centric Scholars see fragmentation and varying terminology as opportunities for specialization, allowing the field to address the diverse needs of different contexts. Conversely, Pedagogy-Centric Scholars view these same factors as a challenge, creating inconsistencies and weakening the theoretical coherence of the field. Similarly, while Knowledge-Centric Scholars focus on the difficulty of measuring pedagogical impacts and argue for prioritizing content, Pedagogy-Centric Scholars see the measurement of pedagogical methods as a critical opportunity to further understand and optimize teaching approaches. This divergence in perspectives is summarized in Table 12.

Themes	**Perspective 1: Knowledge-Centric Scholars**	**Perspective 2: Pedagogy-Centric Scholars**
Field evaluation	Intermediate Theory, toward Maturity	
Identified Gaps	Lack of context in EE	
Approach to address Gap in EE	Context is important in shaping the **knowledge** imparted in entrepreneurship programs (what is taught).	Context is important in shaping **pedagogy** (how entrepreneurship is taught) and determining the effectiveness of methods.
Opportunities for new research	Fragmentation and different terminology are viewed as specializations that enhance the field by addressing different contexts and needs. Future research should focus on contextualized knowledge employed in EE.	Pedagogical methods are measurable and future research can open the pedagogical black box. Future research should focus on homogenizing the theoretical base, especially on pedagogy.
Challenges in the field	Difficult to measure impacts of pedagogical methods due to external factors; more focus should be on content rather than pedagogy.	Fragmentation and different terminology are viewed as disconnects from core theory, which weakens the link between entrepreneurship and pedagogy.

Table 12. Conceptualization of two perspectives of scholars in EE

This study contributes to the literature on entrepreneurship education (EE) by uncovering and categorizing the differing perspectives among scholars regarding the current state, challenges, and future direction of the field. By identifying two distinct camps—Knowledge-Centric Scholars and Pedagogy-Centric Scholars—this research adds nuance to our understanding of how entrepreneurship education is conceptualized. These insights build on existing literature, such as Gabrielsson et al. (2020), who suggest that EE is maturing into research clusters, while also supporting Fayolle's (2013) argument that more theoretical and methodological work is required to fully develop the field.

By categorizing these perspectives, this paper not only maps the existing scholarly landscape but also highlights the tensions and areas of agreement that will shape the future of EE research, answering the call from Landström et al. (2022a,b), as studies about the social structure of the field has been scarce (Landström et al., 2022a). The identification of these two camps presents a new framework for understanding how scholars position themselves within the field and can be used as a foundation for more targeted future studies that examine specific gaps in knowledge and pedagogy in EE.

5.1 Future research direction

These perspectives open new avenues for research. For the Knowledge-Centric Scholars, future research could explore how varying regional, institutional, and cultural contexts shape the content of EE programs in different HEIs. This could lead to the development of more nuanced theoretical frameworks that account for the role of context in shaping entrepreneurial knowledge. Furthermore, by embracing the view that fragmentation allows for specialization, scholars can investigate how this fragmentation influences the evolution of entrepreneurship education in different parts of the world.

For the Pedagogy-Centric Scholars, the emphasis should be on addressing the "pedagogical black box" by conducting empirical studies that link specific pedagogical approaches to student outcomes. Future research can examine which teaching methods are most effective in fostering entrepreneurial mindsets and behaviors in students, taking into account the context in which these methods are applied. This perspective suggests a need for more longitudinal studies that track the long-term impacts of entrepreneurship education on students' entrepreneurial success and innovation.

Furthermore, one suggestion that could also prove valuable, is that for the field of EE to become a Mature research field (Edmondson and Mcmanus, 2007), it is crucial to employ both perspectives moving forward, as each address a different smaller gap in EE; Knowledge-Centric research can push the boundaries in contextualizing EE field with different specializations, while Pedagogy-Centric research would help to refine the theoretical pedagogical models within the field to be more precise in addressing different pedagogical context, both of which are required in developing EE further into Maturity.

5.2 Limitation

While this study provides valuable insights into the differing perspectives within entrepreneurship education (EE), several limitations must be acknowledged.

First, the sample size and geographical scope of this study were limited, as the interviewees were still dominantly scholars from Western countries, even though there were voices from developing countries such as Vietnam. As a result, the findings may not fully represent the global or regional diversity of perspectives on entrepreneurship education. Furthermore, this also results the lack of sufficient data to confirm the middle perspective—scholars who view context as shaping both knowledge and pedagogy—limits the ability to fully validate this viewpoint. Although some interviewees touched on this integrative perspective, the number of responses supporting it was not large enough to draw definitive conclusions. Further research with a more geographically and culturally diverse sample could help provide a more comprehensive understanding of the field.

Second, while the interview questions were informed by existing literature, they were not developed as part of a systematic or exhaustive methodology, meaning that they may not have fully captured the complexity of the field as a whole. This approach may have inadvertently missed key areas of discussion or overemphasized certain themes, thus leaving gaps in the data regarding certain aspects of entrepreneurship education. Lastly, response bias may have played a role in the interviews, as scholars with stronger opinions or more extreme views on certain issues may have been more likely to express their perspectives in detail, potentially skewing the balance of responses. These limitations suggest that future research should adopt a more systematic approach, incorporating broader sampling and more rigorous question design to validate and expand on the findings of this study.

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Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research: An Editor's Perspective. In J. Katz & R. Brockhaus (Eds.), Advances in entrepreneurship, firm emergence, and growth (Vol. 3, pp. 119–138).

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship: Theory and Practice*, *31*(3), 387–406. https://doi.org/10.1111/j.1540-6520.2007.00179.x

Woolley, J. (2010). Technology emergence through entrepreneurship across multiple industries. *Strategic Entrepreneurship Journal*, *4*(1), 1–21. https://doi.org/10.1002/sej.80

Zaring, O., Gifford, E., & McKelvey, M. (2021). Strategic choices in the design of entrepreneurship education: an explorative study of Swedish higher education institutions. Studies in Higher Education, 46(2), 343–358. https://doi.org/10.1080/03075079.2019.1637841

Appendix 1. Interview Questions

The questions are presented with the literature it is based on.

State of EE as a field:

1. How do you evaluate the current state of EE? How has the field evolved?

Neergaard, H., Gartner, W. B., Hytti, U., Politis, D., & Rae, D. (2020, August 3). Editorial. *International Journal of Entrepreneurial Behaviour and Research*. Emerald Group Holdings Ltd. https://doi.org/10.1108/IJEBR-08-2020-828

2. In 2020, Gabrielsson et al. suggested that EE has matured with distinct homogeneous research clusters. What is your take on this? Do you agree?

Gabrielsson, J., Hägg, G., Landström, H., & Politis, D. (2020). Connecting the past with the present: the development of research on pedagogy in entrepreneurial education. *Education and Training*, *62*(9), 1061–1086. https://doi.org/10.1108/ET-11-2019-0265

3. However, Fayolle (2013) pointed out that EE is still immature and needs more theoretical and methodological sophistication (low entry field). What do you identify as the current biggest gap in the field of entrepreneurship education? What is the way forward for the field?

Fayolle, A. (2013). Personal views on the future of entrepreneurship education. *Entrepreneurship and Regional Development*, *25*(7–8), 692–701. https://doi.org/10.1080/08985626.2013.821318

Gap and avenue for future development in EE:

4. Furthermore, from our preliminary literature review, we came across slightly varying terminology that are used interchangeably, such as entrepreneurship, entrepreneurial, and enterprise education. How do you understand the differences? Should the field converge on a common vocabulary?

5. In addition, our preliminary research revealed that many (prominent) scholars identify themselves as belonging to either entrepreneurship or entrepreneurship education, but not both. Do you see a gap between the two fields that should be closely connected to each other? If such a gap exists, then what are the implications for practitioners and what can be done for the two to converge?

Landström, H., Gabrielsson, J., Politis, D., Sørheim, R., & Djupdal, K. (2022). THE SOCIAL STRUCTURE OF ENTREPRENEURIAL EDUCATION AS A SCIENTIFIC FIELD. *Academy of Management Learning and Education*, *21*(1), 61–81. https://doi.org/10.5465/amle.2020.0140

6. There has been a call for more research on pedagogy of EE since most of the more influential papers have been focusing on analyzing impact. What is your opinion on this?

Tiberius, V., & Weyland, M. (2023). Entrepreneurship education or entrepreneurship education? A bibliometric analysis. *Journal of Further and Higher Education*, *47*(1), 134–149. https://doi.org/10.1080/0309877X.2022.2100692

7. How important do you think the need for more research linking specific pedagogical methods to certain outcomes/impact (especially long-term ones) in EE is? If so, then how can such research be carried out?

Nabi, G., LiñáN, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017, June 1). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning and Education*. George Washington University. https://doi.org/10.5465/amle.2015.0026

8. The last influential paper discussing program design in EE (specifically master's degree program) was back in 1998. What is your opinion on this lack of development? Should there be more research discussing/benchmarking EE program in HEIs? Why, why not?

McMullan, W. E., & Gillin, L. M. (1998). Industrial Viewpoint - Entrepreneurship Education: Developing technological start-up entrepreneurs: A case study of a graduate entrepreneurship programme at Swinburne University. *Technovation*, *18*(4), 275–286. https://doi.org/10.1016/S0166-4972(97)00119-3

9. From your past research and involvement in various educational programs in entrepreneurship, how would you define the essence of entrepreneurship education that is universally present in these programs?

10. Through the literature review, there was discussion about the role of context in entrepreneurship education. At this point do you think we understand how context matters in entrepreneurship education?