



Linnæus University

Sweden

Bachelor's thesis

Access to entrepreneurship education in India

*— a study in both formal and informal ways for youths and young adults to acquire
entrepreneurship skills and knowledge.*



Author: Alexander Zahari

Examiner: Frederic Bill

Term: Autumn 2022

Subject: Business Administration, organisation

Level: Undergraduate

Course code: 2FE78E



Linnæus University
Sweden



Abstract

This thesis investigates the accessibility of formal and informal entrepreneurship education for youths and young adults in India. The study uncovers crucial patterns and indications, emphasising the need for accessible and comprehensive entrepreneurship education. It also highlights the limitations and weaknesses of the research, such as potential biases, small sample size, and challenges in online survey methodology. The existing literature in the field is discussed, noting its limitations in methodology, presentation, and argumentation. The research underscores the pressing need for comprehensive entrepreneurship education that bridges the gap between formal and informal channels. It addresses the heavy reliance on formal education, which has left many students and graduates without the necessary skills to combat high youth unemployment. Informal channels play a significant role but suffer from limited access to resources and quality education, leading to a skill gap among young adults. The findings call for blended learning approaches that integrate formal and informal entrepreneurship education, leveraging technological advancements. By adopting a holistic and inclusive approach, India can unlock its vast entrepreneurial potential, promote job creation, and stimulate economic growth. The thesis underscores the importance of critically evaluating the effectiveness of entrepreneurship education despite substantial investments in this area.

In conclusion, enhancing the accessibility of entrepreneurship education for Indian youths and young adults requires addressing barriers, leveraging technology, and fostering a supportive environment. The study acknowledges the limitations and challenges faced in conducting research on this topic but emphasises the significance of striving for high-quality research to inform stakeholders and support the improvement of entrepreneurship in India.

Keywords

Entrepreneurship, youth entrepreneurship, entrepreneurship education, entrepreneurship learning, access to entrepreneurship education, youth unemployment, India, entrepreneurship in India, youth entrepreneurship in India, Indian youth unemployment, formal entrepreneurship education, informal entrepreneurship education, formal entrepreneurship learning, informal entrepreneurship learning



Linnæus University
Sweden



Acknowledgements

Many people have given their input, feedback and shared their opinion throughout the work on this thesis. Their support and guidance were instrumental, starting from the early days of planning the field study in Sweden, during the data collection phase on-site in India, and through to the analysis and writing stages back in Sweden.

Thanks to...

- First and foremost, my mum — for putting up with all my dreams, adventures and unconventional ways of doing things;
- Melissa Alex, for providing me with a home, new friends and a social circle in Bangalore;
- Love Sarin, for supporting me and my study before going to India as well as for showing me around Pune and providing support with data collection, feedback and insights to this study;
- Ankita Shah, for helping me with the study before going to India and for the data collection, as well as for making my first week in India a smooth transition;
- Dr Aparna Rao, for helping me with the data collection as well as with feedback throughout the writing process;
- all new startup friends and connections throughout India;
- Junior Achievement, for instilling this passion for entrepreneurship in me over 10 years back, a fire that still keeps burning;
- the International Office at Linnaeus University, for offering me this opportunity to go on this funded field study, and in extension to the Swedish International Development Agency (SIDA) for offering the Minor Field Study programme;
- and of course, ALL survey participants who took a few minutes out of their day to respond to all questions of the survey, as well as to all the people at the organisations I met with who helped out in sharing the survey and shared their views on the entrepreneurial ecosystem in India.



Table of contents

1. Introduction	1
1.1. Background	2
1.2. Purpose	3
1.3. Research questions	4
1.4. Previous research and theory	4
1.5. Methodology and definitions	6
1.6. Ethical considerations	7
2. Theory	8
2.1. What is entrepreneurship?	8
<i>2.1.1. Can entrepreneurship be taught?</i>	<i>10</i>
2.2. What is entrepreneurship education?	13
2.3. Previous research on entrepreneurship education in India	14
2.4. Entrepreneurship and education in today's India	18
3. Results	21
4. Discussion	24
4.1. Theme A: Ability and social mobility	25
4.2. Theme B: Ambition and agency	31
5. Conclusion	37
5.1. Key findings	37
<i>5.1.1. Main Research Question</i>	<i>37</i>
<i>5.1.2. Secondary Research Question 1</i>	<i>38</i>
<i>5.1.3. Secondary Research Question 2</i>	<i>39</i>
5.2. Methodology, limitations and implications	40
5.3. For future research	43
6. References	45

Appendices

Appendix A - Survey questionnaire



1. Introduction

India is the world's second most populous country after the People's Republic of China (PRC) and is poised to overtake the PRC as the world's most populous country in 2023 (UNDESA, 2022). Among the 1.4 billion people living in India, some 375 million people are 28 years old or younger, making it the largest population of youths and young adults on the planet (Chattopadhyay 2022; Sharma 2022). In light of India's developing economy, serving the growing needs of its many citizens poses many tough challenges. One major challenge is youth unemployment and underemployment. The Indian youth unemployment rate hovers at 28.26% and has been rising continuously for over a decade (Statista, 2022). The already known effects of unemployment are devastating, not only to the individual but also to a country's economy and potential growth. It increases the chances of long-lasting negative effects on both a person's mental and physical health (Linn et al, 1985), as well as their ability to financially provide for themselves and secure a safe and successful future. Unemployment among youths and young adults is even more devastating and has longer-lasting effects than unemployment among adults, and close to one in every five employable youth, globally, currently go unemployed (ILO 2023; Statista 2022). Entrepreneurship has repeatedly demonstrated its efficacy and is a crucial part of the solution in addressing the challenges of underemployment and unemployment (Audretsch et al, 2001).

Entrepreneurship is widely recognised as a key driver of economic growth and job creation (World Bank 2013; Roy and Das 2020; Gielnik and Frese 2013; Kuratko 2005; Mead and Liedholm 1998). According to Volery et al. (2013), who reference Bécharde and Grégoire (2005), Pittaway and Cope (2007), and Solomon, Duffy, and Tarabishy (2002), a critical aspect of promoting entrepreneurship is to inspire individuals to embrace entrepreneurship and provide them with the skills and knowledge necessary to convert opportunities into successful ventures. In India, increasing access to entrepreneurship education has been identified as a major potential driver to the development of a robust and sustainable entrepreneurial ecosystem and economy (Dwivedi 2017). Despite the growing importance of entrepreneurship in India, access to education and training remains a major challenge, particularly for marginalised and underprivileged communities.



Sharma (2021) highlights a significant concern in the Indian economy, specifically the abundance of young people lacking essential employability skills. She mentions that only 46% of young people are considered employable (Ibid) while Ravi (2019) points out that Indian states with a low ranking in 'ease of doing business' also show a higher-than-average youth unemployment rate, with the highest recorded rate being 36%. Meanwhile, every third youth in India has entrepreneurial intentions, according to the Global Entrepreneurship Monitor (GEM), a number that is expected to continue to grow (Shukla et al., 2021; Guelich and Bosma, 2018).

There is a substantial body of previous research supporting the notion that receiving entrepreneurship education has a positive impact on both the intention ("*I will*") and perceived capability ("*I can*") to effectively start and develop a business. However, a vast majority of the previous research has narrowed in on best practices, applications of entrepreneurship education and/or outcomes alone. Also, a big proportion of said research has exclusively targeted higher education environments which offer a more formal and theoretical form of entrepreneurship education, leaving other forms of entrepreneurship education largely unexplored. This shows the importance of increasing the understanding of how access to entrepreneurship education affects prospective entrepreneurs, as well as how they compensate for the lack of access to it.

1.1. Background

Before and parallel to my studies, I have been involved in early-stage entrepreneurship environments for almost a decade. The insights I have drawn during these years, academic and non-academic, have steered my interest towards issues revolving around entrepreneurship education, mainly due to the repeatedly reported insufficient quality and quantity in this domain (Bosma et al., 2020). This study will build on fragmented and disparate existing research that focuses on access to entrepreneurship education. Few studies have been supportive to find relevant data for this field study. However, the lack of previous research on access to entrepreneurship education further highlights the academic relevance of this study.

This study builds on the potential entrepreneurship has to combat youth unemployment on a large scale. However, if youths lack access to



entrepreneurship education, or if only a select few have access to it, this will seriously impact the potential and scale that entrepreneurship can offer younger generations to self-employment and thus, self-sufficiency. Not only is this relevant for India alone or other developing economies, but for all economies.

Considering the growing interest in entrepreneurship in India, combined with the high level of youth unemployment, these trends show interesting data that hold a lot of potential as well as challenges. This study aims to find some answers that might help younger generations in gaining increased access to entrepreneurship education and, as a consequence, hopefully, be able to access more opportunities for self-sufficiency through entrepreneurship. Hopefully, this study will also provide more knowledge and insights into a largely unexplored aspect of entrepreneurship education for policymakers and other stakeholders.

This study was made possible thanks to the support from the Swedish International Development Agency (SIDA) through their Minor Field Study grant. In connection with this, the thesis was made to address the United Nation's Sustainability Development Goals 4, Quality Education, and 8, Decent Work and Economic Growth, with respective targets 4.4 ("to substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship"), and 8.6 ("to substantially reduce the proportion of youth not in employment, education or training").

1.2. Purpose

This study will focus on exploring access to entrepreneurship education for prospective and budding entrepreneurs in India and contribute to filling the gap that exists in previous research.

To enable a greater number of individuals to sustain themselves through entrepreneurship, it is crucial to expand access to prospective entrepreneurs and empower them to recognise and seize these opportunities. There is a need to better understand what is holding people back from taking "the leap" into entrepreneurial ventures, and the lack of entrepreneurship education is perceived as one underlying reason for this. It is even more important to understand the challenges young entrepreneurs face, to more easily and early on in their careers to



foster entrepreneurial skill sets needed for the 21st century and grow entrepreneurs that can help provide jobs for their communities, now and in the future.

The study aims to shed light on patterns between demographic and socioeconomic factors and access to entrepreneurship education, as well as to shine some light on the difference in accessibility between formal and informal entrepreneurship education through the lens of the same demographic and socioeconomic factors. Another aim is to contribute to the research on entrepreneurship education that does not focus on outcomes, best practices or applications of entrepreneurship education, which currently represents the vast majority of the existing research within this field.

1.3. Research questions

Given the importance of increasing the understanding of how access to entrepreneurship education affects prospective entrepreneurs, as well as how they compensate for the lack of access to it, the main research question of this study was formulated:

- *“How accessible is both formal and informal entrepreneurship education for youths and young adults in India?”*

To give more nuance to the main, and very broad, research question, the following two sub-questions were explored:

- *What socioeconomic factors impact the access to entrepreneurship education and are there different kinds of accessible entrepreneurship education?*
- *How do budding entrepreneurs compensate for the lack of entrepreneurship education opportunities?*

1.4. Previous research and theory

Despite the growing importance of entrepreneurship education, there remains a notable gap in the existing research literature regarding access to such education in India. However, valuable insights from related fields, such as new venture creation, entrepreneurship education efficiency, and entrepreneurship motivation in India, as well as other countries, can provide an initial framework to explore the factors influencing access to entrepreneurship education.



Sontsele (2020) researched the impact entrepreneurship education had on entrepreneurial activity in the South African province of Gauteng and found that a significant number of the participants that received entrepreneurship education did not access it through higher education institutions, but instead through government programmes, independent incubators or other informal options. Shukla et al. (2021) found that 79% of prospective entrepreneurs surveyed in India are motivated to run a business because they want to continue their family tradition, which suggests that a large portion of entrepreneurship education in India is vocational and informal, as skills and knowledge are passed on from generation to generation. Findings from both studies show that a significant number of prospective and budding entrepreneurs receive their education and training in entrepreneurship informally, which raised some interesting suggestions to be explored for this study.

Rideout and Gray (2013) conducted a study to explore the impact of entrepreneurship education on entrepreneurial activity. Their findings revealed that the vastness of the field and the diverse needs it addresses make it challenging to establish a direct relationship between entrepreneurship education and entrepreneurial outcomes. An important observation they made was that entrepreneurial intentions may decline over time, regardless of gender. This decline is particularly noteworthy among women, indicating that traditional entrepreneurship education may have limited effectiveness in sustaining intention levels for all individuals. Bhatia and Levina (2020) question the legitimacy of entrepreneurship education as a discipline on the very simple, but fundamental, basis that entrepreneurship is disruptive by nature, meaning that some business and management fundamentals being taught might not even be relevant or useful for people receiving entrepreneurship education.

Previous research has shown that a significant number of individuals access entrepreneurship education through informal channels, such as government programmes, independent incubators, and family traditions. Establishing a direct relationship between entrepreneurship education and outcomes is challenging due to the diverse needs of the field. However, the decline in entrepreneurial intentions over time, especially among women, and the fact that some scholars question the relevance of certain fundamentals taught in entrepreneurship education, suggest the need for more effective and accessible approaches to entrepreneurship education.



1.5. Methodology and definitions

This study aimed to explore access to entrepreneurship education among youths and young adults in India using a qualitative methodology, specifically thematic and discourse analysis. This was particularly relevant as the data collection for this study was conducted through an online survey, with the majority of the responses consisting of text, multiple choice, single choice, Likert scale, and other types of responses (Bell et al. 2019). The choice of analysis was also deemed most relevant as the survey had a small sample size. The data analysis followed a two-step process, where each question was analysed individually using thematic and discourse analysis methods, which helped identify some core questions that formed a backbone in the analysis, and then paired with core questions for further analysis. Questions about data such as gender and annual household income were not subjected to thematic analysis but were instead analysed in combination with core questions.

A thematic and discourse analysis was preferred over, for example, a correlational analysis, because it is better suited for text-based data, can reveal important insights about the content and meaning of the responses, and allows for a more exploratory, creative and flexible approach to the analysis process, especially when having a small sample size. A thematic and discourse analysis can reveal important insights about the opinions, attitudes, and experiences of the respondents, which may not be immediately apparent from a numerical analysis (Clark et al. 2021). The survey was conducted virtually between mid-October to mid-December 2022, with a total of 86 respondents. Non-probability sampling was implemented to access the right population, with a snowball sample also utilised to further distribute the survey. Participants were mostly accessed through LinkedIn and referrals. Although the goal before starting the data collection was to reach around 250 participants, the final sample size was 85 respondents, however with a response rate of 98.84%.

This study follows the United Nations' definition of "youth" as individuals between the ages of 15 and 24 years, and the commonly used definition of "young adult" for individuals between the ages of 25 to 34 years. The study researched the access to entrepreneurship education, both formal and informal, for prospective and budding entrepreneurs limited to the two earliest stages of the



entrepreneurship process, which Baron (2007) refers to as the "prelaunch" and "launch" phases, and managed to reach this target group successfully.

The majority of participants in this study were young adults and students, either undergraduates or at upper secondary. Vanevenhoven and Liguori (2013) mention "*the use of student samples to investigate entrepreneurial intent and self-efficacy is frequently employed because undergraduate students as a self-selected group show a higher propensity toward venture creation than the general population (Liñán and Santos 2007), while samples of upper-level students provide real-time insights into individual vocational preferences during a period of time that individuals are making career decisions (Krueger et al. 2000). Thus, whereas in some situations student samples are viewed as a deficiency or limitation, in this instance where we look at entrepreneurship education, the students of that education are the appropriate focal population*", which is true even for this study.

1.6. Ethical considerations

When conducting online surveys, it is essential to prioritise informed consent as a fundamental ethical consideration (Clark et al., 2021). Participants should be fully informed about the purpose of the survey and their involvement and given the option to opt-out at any time. Ensuring voluntary participation is also crucial, allowing individuals to freely choose whether or not to take part while taking measures to minimise bias in survey design, sample selection, and data analysis. Privacy and confidentiality are other crucial ethical considerations that should be taken into account. Participants should have the option to remain anonymous, and any personally identifiable information collected should be kept confidential and solely used for the intended purpose (Bell et al., 2022).

Cultural sensitivity is particularly important when conducting surveys across different cultural settings. Surveys should be culturally sensitive and respectful, considering participants' cultural backgrounds to ensure inclusivity (Clark et al., 2021). Additionally, respondent fatigue should also be taken into account, as lengthy surveys or excessive questionnaires may burden participants and compromise data quality. By adhering to these ethical considerations, researchers can conduct online surveys that respect participants' rights and produce high-quality data (Bell et al., 2022).



2. Theory

To understand the context and the background of this thesis, a solid foundation needs to be provided to understand the research questions and the approach of this study. Also, to enable the findings of this study and make it accessible to people who are not well understood with the subject of entrepreneurship education, was of key importance. To provide this, the theory section contains four categories — an introduction to what entrepreneurship is and how it is defined in this study, what entrepreneurship education is and if entrepreneurship can be taught, along with contextual background on entrepreneurship and education in modern India.

2.1. What is entrepreneurship?

It is challenging to provide a single, comprehensive definition of entrepreneurship due to its complexity and multifaceted nature. However, in the interest of contextual clarity for the reader, this study offers a brief examination of some perspectives and definitions.

The World Bank (2013) recognises entrepreneurship as a widely recognised phenomenon that lacks a clear definition. The World Bank (Ibid) mention various perspectives on entrepreneurship, including Schumpeter's (1934) emphasis on its role in promoting innovation and change in an economy, Kirzner's (1973) definition as a process of discovery, and definitions such as those proposed by Schoof (2006) that link entrepreneurship to specific economic activities. Additionally, the report highlights the practical understanding of entrepreneurship as a process of creating new wealth, as described by Klapper et al. (2010). The World Bank (2013) acknowledges the need for a definition that encompasses both formal and informal economic activities, including self-employment.

According to Kuratko (2005), entrepreneurship can be described as a multifaceted, energetic process that encompasses vision, innovation, and execution. Successful entrepreneurs possess the willingness to take calculated risks with their time, finances, and careers, and have the ability to assemble a competent venture team and creatively obtain the necessary resources. Additionally, they possess a strong business acumen, allowing them to develop sound business plans, and the



foresight to see opportunities amidst seemingly chaotic, conflicting, and confusing circumstances.

Gartner (1990) conducted a study on the concept of entrepreneurship, exploring various themes and dimensions of this dynamic process. These themes serve to shed light on the multifaceted nature of entrepreneurship and highlight the various skills and characteristics necessary for success in this field and can be deemed highly accurate even in today's context. In his research, Gartner identified the following key elements of entrepreneurship: the first theme, the *Entrepreneur*, which posits that individuals with specific personality traits and capabilities are more likely to engage in entrepreneurship. The second theme, *Innovation*, highlights the need for entrepreneurs to bring something new to the market, whether it be an idea, product, service, market, or technology. The third theme, *Organisation Creation*, emphasises the actions and behaviours involved in establishing a new business venture. The fourth theme, *Creating Value*, highlights the role of entrepreneurship in generating value for the entrepreneur and society. The *profit/nonprofit* theme, fifth on the list, deals with the question of whether entrepreneurship is limited to profit-making organisations or if it also includes nonprofits. The sixth theme, *Growth*, emphasises the significance of growth as a hallmark of entrepreneurship. Finally, the *Uniqueness* theme suggests that entrepreneurship must entail a unique aspect, while the *Owner-Manager* theme highlights the importance of individuals who serve as both owners and managers of their businesses.

Building on this broader definition of entrepreneurship, Baron (2007) further divides the process into three phases: pre-launch, launch, and post-launch. The *pre-launch* phase entails recognising opportunities, evaluating the identified opportunities, and later acquiring the resources needed to act upon the identified opportunity, for example, human and financial resources. The *launch* phase begins once enough resources have been acquired, and the entrepreneur becomes more practical, for example by setting up a legal structure for the business and developing a business strategy. The third and final phase, the *post-launch* phase, is focused more on actual implementation and operating a business than ideating and planning around the business.



2.1.1. Can entrepreneurship be taught?

The World Bank (2013) highlights an ongoing debate in the literature surrounding the extent to which entrepreneurship can be learned and/or taught. While some research suggests that certain aspects of entrepreneurship can be learned through education and training (Isaacs et al. 2007; Timmons and Spinelli 2004; Henry, Hill, and Leitch 2005; Kuratko 2005), others argue against this viewpoint (Haase and Lautenschläger 2011), while Basu (2014) simply states that the question is still very much up for debate. Akola and Heinonen (2006) further differentiate between the "art" and "science" of entrepreneurship, with the former being primarily developed through practical experience and the latter being teachable through education and training. Despite these differing perspectives, the World Bank (2013) supports the idea that incorporating creative and entrepreneurial skills into teaching methodologies can transmit the mindsets and skills closely tied to the "art" of entrepreneurship.

Entrepreneurship education is mostly prevalent in the two initial phases of Baron's process theory (2007), the *pre-launch* and *launch phases*. While business school programmes provide entrepreneurship initiatives like coursework, startup competitions, and incubators, there is uncertainty about the effectiveness of academia to teach entrepreneurship in a classroom setting (Bhatia and Levina, 2020).

Another aspect of whether entrepreneurship can be taught is the more intangible side to it. The approach to entrepreneurship known as "*effectuation*" involves utilising one's existing knowledge, connections, and personal traits to take action, which is a more informal approach. This approach is not commonly taught in business schools, which tend to emphasise the calculation of risks and returns, which is a more formal approach. That said, plenty of successful entrepreneurs have not attended business school or even completed college. Some important entrepreneurial skills, such as imagination, disruption, and counterintuitive action, do not align with the typical business school curriculum based on analytical models and calculations (Ibid).

A study by Sontsele (2020) on entrepreneurial activity in the South African province of Gauteng showed that the majority of the respondents had received some form of entrepreneurship education either before or after starting their businesses and that a significant portion of the respondents did not access



entrepreneurship education from any of the well-known institutions mentioned in the surveyed area, such as universities of technology, private universities, FET (Further Education and Training) colleges, SETA (Sector Education and Training Authority), government development agencies, and private colleges. Instead, these individuals responded that they had received entrepreneurship education in other ways. These findings by Sontsele (2020) suggest that early exposure to entrepreneurship education can increase the likelihood of entrepreneurs exploring and successfully starting new ventures and that entrepreneurship education might be as efficient from an informal source, than from more formal, esteemed sources. Regardless of whether the entrepreneurship education is acquired formally or informally, it can still be taught.

Based on their review of previous research, Volery et al. (2013) acknowledge the positive impact that entrepreneurship education has on entrepreneurial outcome measures, while also recognising the potential limitations in the methodologies utilised. The authors conducted a study to examine the impact of entrepreneurship education on students in vocational, technical, or commercial schools at the upper-secondary level. The focus was on understanding the influence of such education on individuals' entrepreneurial intentions, through changes in their personality traits, beliefs, knowledge, and competencies. The results showed that some personality traits and beliefs can have a positive impact on entrepreneurial intention and that entrepreneurship education had a positive, although limited, impact on aspects such as beliefs (perceived feasibility and desirability), the capacity to exploit an opportunity and entrepreneurial knowledge. The authors concluded that while some components of entrepreneurship can be taught, it is incorrect to assume that dedicated programmes will automatically lead to higher entrepreneurial intention or start-up rates. Instead, such programmes may help students make informed choices about a career in entrepreneurship and may provide a platform for self-realisation and learning more about themselves (Ibid).

The authors (Ibid) further mention that, despite the significant resources invested in entrepreneurship education and training, there is limited evidence to support its effectiveness. Although various studies have proposed that entrepreneurship education can positively impact entrepreneurial behaviour and intentions (the authors refer to previous studies by Hansemark, 1998; Liao and Gartner, 2008; Wilson, Kickul, and Marlino, 2007), the authors also mention that there has been some uncertainty surrounding the effectiveness of entrepreneurship



education (the authors reference Peterman and Kennedy, 2003; Martin, McNally, and Kay, 2013; Oosterbeek, Van Praag, and Ijsselstein, 2010), as there is a lack of rigorous research in the field. This trend is characterised by a scarcity of studies incorporating pre- and post-intervention measures and control-group comparisons, leading to questions about the methodological rigour of entrepreneurship education research. Moreover, the majority of entrepreneurship education impact studies have been conducted at the tertiary level, leaving out the vast majority of young adults at the secondary and vocational school levels. Volery et al. (2013) mention having found only five studies that analysed the impact of entrepreneurship programmes at these secondary education levels (Athayde, 2009; Cheung, 2008; Kourilsky and Esfandiari, 1997; Oosterbeek, Praag, and Ijsselstein, 2010; Peterman and Kennedy, 2003).

Another important factor in the discussion of whether entrepreneurship can be taught or not is that of social class. Social class has been a growing focus in entrepreneurship research due to its impact on entrepreneurial opportunities and outcomes. Research has shown that individuals from lower social classes face greater difficulty in identifying and pursuing entrepreneurial ventures and are therefore less likely to pursue and succeed as entrepreneurs compared to those from more privileged groups. Ge et al. (2022) studied the relationship between social class and entrepreneurship, and their findings challenge the popular view that having resources (like money or education) is the only thing that determines whether or not someone will be a successful entrepreneur. They found that entrepreneurs from lower social classes tend to perform worse than those from higher social classes and put forth that both material and cognitive challenges are key for lower-class entrepreneurs to succeed. An individual's social class not only affects their access to resources and opportunities but also shapes their thoughts and actions through socialisation into specific cognitive patterns and behaviours associated with that social class. These thought patterns and behaviours, often ingrained unconsciously, can influence future behaviour. This disparity can be explained by the differences in resources and opportunities available to individuals based on their social class, which create "opportunity gaps" that limit choices and impact important life outcomes, such as access to profitable entrepreneurial opportunities, development of influential social networks, and attainment of high-level managerial positions (Ibid).



The ongoing debate surrounding the teachability of entrepreneurship presents contrasting perspectives. Some studies propose that certain aspects of entrepreneurship can be acquired through education and training, while others disagree. However, it is crucial to consider the influence of social class, as it not only affects access to resources and opportunities but also shapes cognitive patterns and behaviours, leading to disparities in entrepreneurial outcomes. Despite the uncertainties and limitations associated with academia, there is evidence to support the notion that early exposure to entrepreneurship education increases the likelihood of exploring and successfully launching new ventures. Therefore, while the question of whether entrepreneurship can be taught remains open, it is apparent that specific elements of entrepreneurship can be cultivated and fostered through targeted educational efforts.

2.2. What is entrepreneurship education?

Truelove (1995) states that education, training, and development are interconnected and contribute to the progression of both individuals and organisations. Similarly, entrepreneurial education combines both formal and informal methods depending on the specific needs and characteristics of the budding entrepreneur. Hynes (1996) defines “enterprise education” as a process that involves a range of activities designed to equip individuals with a broad range of knowledge, skills, values, and understanding that enable them to define, analyse, and solve a wide range of problems. This entrepreneurship education can be either formal or informal. Education programmes focus on building knowledge and skills about and for entrepreneurship (World Bank, 2013) and emphasise the formal aspects of entrepreneurship education by providing theoretical and conceptual frameworks, mostly through lectures and readings (Hynes, 1996). Looking at the other end, training programmes focus on preparing individuals for starting or running a business (World Bank, 2013) and accentuate the informal aspects of entrepreneurship education by focusing on skills building, attribute development, and behavioural change, mostly through experiential learning (Hynes, 1996). Both formal and informal methods are, however, essential components of entrepreneurship education, as each method complements the other. Both aim to promote entrepreneurship but differ in their objectives and outcomes. Entrepreneurship education initiatives also vary in their target audience, with formal



education programmes usually targeting secondary and higher education students and informal training programmes targeting potential and practising entrepreneurs. The range of entrepreneurs targeted by training programmes varies from vulnerable individuals to high-growth potential enterprise owners (World Bank, 2013).

According to Mwasalwiba (2010), there is a gap between the goals set by educators and other stakeholders in entrepreneurship education and the applied pedagogical methods and success metrics. While there is no consensus on definitions related to entrepreneurship education, there is a general understanding of the goals of entrepreneurship education, which focus on promoting entrepreneurship and its positive effects on the economy.

The extent of entrepreneurship education initiatives interventions can vary based on the curriculum and scale of implementation (World Bank, 2013). Some programmes, such as the International Labor Organization's "Know About Business" and "Start and Improve Your Business" programmes, as well as Junior Achievement's programmes, are implemented on a global scale. On the other hand, entrepreneurship education initiatives can be specific to a single school or institution. Furthermore, entrepreneurship education initiatives can encompass a combination of global and local initiatives through partnerships between international brands and local educational institutions. Additionally, entrepreneurship education initiatives can involve a range of public and private stakeholders, including government, educational institutions, businesses, and non-governmental and international organisations, all of which may contribute to the development, financing, delivery, and evaluation of entrepreneurship education initiatives interventions (Ibid).

Akola and Heinonen's (2006) findings, mentioned in the World Bank report (2013), differentiate between the "art" and "science" of entrepreneurship, with the former being primarily developed through practical experience in an informally structured way, and the latter being teachable through formal, structured education and training, adding a deeper perspective of ways of learning [about] entrepreneurship.

2.3. Previous research on entrepreneurship education in India

India is known as a leading country among developing economies for its early start in various entrepreneurship education programmes (GEM, 2023 p.144;



Elahi, 2012). The 1956 Industrial Policy Resolution had a strong emphasis on self-employment and the SME sector, and as the economy shifted from being mainly agrarian to having significant contributions from other sectors, there was a need for education that would enable entrepreneurs to enter these emerging sectors. As a result, during the 1960s and 70s entrepreneurship education was mainly delivered through training programmes offered by government-supported institutions and financial institutions.

In the 1980s, entrepreneurship education continued to focus on training aspiring entrepreneurs to create self-employment ventures. This was also the time when entrepreneurship education made its way into technology and management institutions, such as the Indian Institute of Management (IIM) Ahmedabad, which started offering Achievement Motivation Training. Despite the efforts of these institutions, none emerged as a thought-leader in the field, and the government took action by setting up Science and Technology Parks (STEPs) and incubation centres in select technical institutions (Elahi, 2012).

As India became more economically liberalised in the 1990s, entrepreneurship was seen as a means of both employment and wealth creation, with success stories in the IT sector serving as inspiration. The growing interest in entrepreneurship was driven by factors such as the growth potential of the economy, changing social and cultural norms, the global success of some Indian firms, and the emergence of opportunities in different sectors, as well as the lower capital requirements in the IT and service sectors (Ibid).

Elahi (2012) writes that entrepreneurship education in India during the transition to the new millennium was primarily centred around conventional business courses and lacked specialised programmes to enrich students' entrepreneurial knowledge and experience. The cultural norms in India, difficulties in starting a business, incomplete entrepreneurship education, lack of standard framework, insufficient private-sector involvement and dependence on the government were identified as reasons for holding back the development of entrepreneurship education in the country.

These challenges remain today. Despite the existing policy-level encouragement for implementing entrepreneurship programmes at Indian universities, particularly in esteemed technology and management institutes like IITs and IIMs, Roy and Das (2020) argue for additional measures to enhance



entrepreneurship education in India. They emphasise the importance of considering entrepreneurship promotion as an institutional initiative, which entails introducing a wide range of training programmes, start-up building mechanisms, and other forms of vocational learning within the nation's leading educational institutions. However, change is coming as business schools are making efforts to boost entrepreneurship among their students. Institutes such as IIM Ahmedabad, IIM Bangalore, IIT Bombay and SPJIMR Mumbai among others, have revised their placement policies to provide "placement holidays" allowing students to pursue entrepreneurship ventures, with the option to return to campus for placement opportunities within two years of graduation if the student's attempt at a venture is unsuccessful (Elahi, 2012).

Previous literature indicates that, despite a comparatively strong inclination towards entrepreneurship in India, the educational support for its development remains limited, and Basu (2014) highlights previous findings by Raichaudhuri (2005) and Shankar (2012) that entrepreneurship has not yet gained popularity as a preferred course of study among management students in India, and is often only offered as an extracurricular or co-curricular program in most colleges and universities. In a conversation with Dr Aparna Rao (2023, personal communication, 14 May), a respected expert in the field of Indian entrepreneurship ecosystems, who has a PhD and more than 30 years of experience in the ecosystem, it was affirmed that though there are courses in entrepreneurship the ecosystem has still not picked up to its full potential. However, several tier II institutions have lately introduced entrepreneurship education. This assertion supports the notion that, even to this day, the situation remains largely unchanged despite some tier II institutions showing an increased interest in entrepreneurship.

Basu (2014) cites Shankar (2012) who identifies six major barriers to teaching entrepreneurship in India: i) lack of institutionalisation, ii) lack of homegrown experience, iii) lack of trained teachers, iv) short-term focus on results, v) limitations with pedagogy, and vi) the subject not being considered as core. Despite the efforts of top institutes in India to support student entrepreneurship through technical or management education programmes, the educational framework for promoting entrepreneurial spirit is still inadequate (Dutta, 2012). Promoting an entrepreneurial spirit is further complicated by the differences between developed and developing economies and the need for homegrown standards and relevant knowledge on socio-political governance, infrastructure,



unorganised competition, chronic shortages, and sensitivity to local culture (Bhardwaj and Sushil, 2012).

Basu (2014) highlights the importance of entrepreneurship in developing economies in general, as a key factor in promoting sustainable economic growth. Merely motivating the spirit of entrepreneurship is not enough and requires sound knowledge and innovative perspectives on the ways and means of doing business. In emerging economies such as India, there is a pressing need to establish effective home-grown entrepreneurship education systems. It is important to not only focus on the theoretical aspect of entrepreneurship but also to include contemporary practical knowledge to enhance the subject. Integrating entrepreneurship with other essential business management courses such as marketing will result in a more comprehensive and well-rounded learning experience. The development of a working framework for an entrepreneurship education ecosystem in India is considered necessary and requires a focus on knowledge creation to support the framework (Basu, 2014).

A study by Kumar et al. (2021) investigated the effects of entrepreneurship education and the university environment on entrepreneurship readiness among university students. The findings indicated a positive correlation between entrepreneurship education and entrepreneurship readiness, with students who took entrepreneurship courses exhibiting a higher level of readiness. However, the study found that the university environment did not support entrepreneurship readiness, suggesting a lack of proper infrastructure to spark interest in entrepreneurship among students. Previous studies have emphasised the importance of the university environment in fostering entrepreneurial behaviours and preparing individuals for starting new enterprises (Morris et al., 2013). However, solely relying on entrepreneurship education is not enough to equip individuals with the skills needed to start a business without university support (Gibb, 1996; Morris et al., 2013). To produce more entrepreneurs, universities need to strengthen their infrastructure and support, which can be achieved by creating a supportive and student-friendly environment that provides mentorship, university linkages, incubation support, financial support, and the freedom to start a business (Greene et al., 2010; Kumar, 2021).

The impact education has on entrepreneurial intentions is insignificant according to the research by Arafat et al. (2019). This could be due to



the focus on theoretical education in India, rather than practical exposure, which is necessary for the creation of new ventures. While some institutes like the National Institute for Entrepreneurship and Small Business Development (NIESBUD), the Indian Institute of Entrepreneurship (IIE), and the Entrepreneurship Development Institute of India (EDII) provide both theoretical and practical training for entrepreneurship, there is a need for more institutes that prioritise practical exposure. The current education system in India negatively affects entrepreneurial activities according to the authors (Ibid), highlighting the importance and need for training institutes.

On the other hand, entrepreneurial experience, such as owning and managing a firm, has a significant impact on entrepreneurial intentions. Individuals who have entrepreneurial and job experience are more likely to become entrepreneurs. The government should focus on existing entrepreneurs and employees to promote and recognise their entrepreneurial skills, which can encourage individuals to become entrepreneurs and create more opportunities for serial and portfolio entrepreneurs. Social recognition has a significant relationship with entrepreneurial intentions, and recognition of existing entrepreneurs will have a positive impact on the entrepreneurial ecosystem (Arafat et al., 2019).

2.4. Entrepreneurship and education in today's India

Sulin and Tiwari (2020) explain that in the past, entrepreneurship in India was primarily regarded to be for people from business families, and most individuals followed a traditional education and career path. However, in the last 5-10 years, more people from diverse backgrounds have started exploring their entrepreneurial ideas, encouraged by the success stories from people in their surroundings, as well as in the mainstream media, and the authors underline that entrepreneurship as a field has gained more respect in India overall.

The Global Entrepreneurship Monitor (GEM) Global Report 2022/23 country profile on India shows that the Covid-19 pandemic had a significant impact on India, with almost three in four adults reporting a reduction in household income in 2022. Furthermore, a report on women's entrepreneurship (GEM, 2022) showed that the Covid-19 pandemic had a more significant impact on men in India than on women, as women were 33% less likely than men to attribute the closure of their businesses to the pandemic. The pandemic has resulted in a drop in the proportion



of adults expecting to start their own business in the next three years, along with a decline in confidence in their ability to do so. However, the biggest motivators for new Indian entrepreneurs were “making a difference” and “earning a living due to job scarcity”, aligning with current global trends and can be seen as a response to adversity (Ibid, p.17-19).

India has the second-largest base of Micro, Small, and Medium Enterprises (MSMEs) in the world after the People’s Republic of China, with an estimated 63.05 million (6.305 crores) micro-businesses, 330,000 (33 lakhs) small businesses, and approximately 5,000 medium enterprises (Cyrill, 2022). The state of Uttar Pradesh has the highest number of estimated MSMEs, followed by West Bengal, Tamil Nadu, and Maharashtra (Ibid). These MSMEs contribute to approximately 36% of India's manufacturing output and play a vital role in the country's push for self-reliance, known as "*Atmanirbhar Bharat*" (Ibid), meaning "*self-reliant India*" in Hindi (Oxford Hindi Word of the Year, 2020).

The *Atmanirbhar Bharat* mission was launched in 2014 to create a modern and efficient infrastructure for businesses, particularly in manufacturing. As part of this mission, the *Make in India* campaign was launched in September 2014 to transform India into a global centre for design and manufacturing. The campaign appealed to citizens, business leaders, international partners, and investors to modernise outdated policies and procedures and centralise information about manufacturing opportunities in India, with the purpose to restore confidence in India's capabilities among potential partners, investors, the domestic business community, as well as the general public. The comprehensive plan included replacing outdated and obstructive frameworks with transparent and user-friendly systems, fostering investment, innovation, skill development, intellectual property protection, and building a manufacturing infrastructure of international standards (Jayanthi, 2019; Make in India, 2023).

In promotion of entrepreneurship, the *Startup India* initiative was launched among a series of high-level initiatives to promote private sector development, aiming to nurture and facilitate startups throughout their life cycle. Since its inception in January 2016, the initiative has supported a multitude of startups and entrepreneurs, and many efforts have been taken to facilitate this support. A fund of funds has been established to help startups gain access to funding, and *Startup India* aims to create an ecosystem that promotes innovation



and success for startups by removing barriers through learning programmes, patent filing facilitation, relaxed compliance and procurement norms, business incubator support, student innovation programmes, funding support, tax benefits, and addressing regulatory issues (Jayanthi, 2019). To further promote innovation and entrepreneurship in India, the Atal Innovation Mission (AIM) was established as the government's platform to encourage a culture of innovation, promote innovation hubs, grand challenges, startup businesses, and self-employment activities, particularly in technology-driven areas. An important part of the AIM programme is the Atal Incubation Centres (AICs), spread out all across India, which provide startups with business incubation facilities, access to capital, operating facilities, industry experts and partners, business mentoring and coaching, along with training opportunities (Jayanthi, 2019; Sulin and Tiwari, 2020).

The Indian government has also implemented policies and schemes to support women entrepreneurs, and research programmes are conducted to understand their needs. The Women Entrepreneurship Platform (WEP), an initiative by NITI Aayog, assists in the entrepreneurial journey and has contributed to the country's increased startup activity. However, although the Indian government has implemented various initiatives to support entrepreneurship which has gained significant attention from policymakers, Jayanthi (2019) points out that despite the attention gained from politicians over the last few years many policymakers still find it unclear what role entrepreneurship plays or can play in the continued development of India's economy.

Along with these major initiatives to reform India's economy and infrastructure, a new educational policy was introduced in 2020 to gradually replace the previous policy from 1986, with the aim set for the goals to be fully achieved in 2040. With the National Education Policy (NEP), India incorporated changes to promote entrepreneurship education across all levels of education, from primary to higher education. The policy encourages a more practical and experiential approach to learning, with an emphasis on developing problem-solving, critical thinking, and creative skills. The NEP is attempting to create a more flexible educational system, for example by allowing foreign top universities to set up campuses in India, attempting to bring foreign expertise into the higher education system in a broader way than was previously possible (Ministry of Human Resource Development, 2020). Another major change for students is the introduction of a credit transfer system, increasing the flexibility for entering and exiting at various stages of their



programmes, something that has not been allowed or possible under the current policy.

The NEP also emphasised establishing incubation centres, encouraging industry-academia collaboration, and providing mentorship and financial support to students and startups, something that is carried out by the Atal Innovation Centres (AICs). Additionally, the NEP promotes the development of entrepreneurship cells in educational institutions to foster an entrepreneurial culture and support startups. These changes reflect a recognition of the significant role that entrepreneurship can play in driving economic growth and development in India and a change in the perspectives among decision and policymakers. With the new policy, vocational and entrepreneurial skills along with practical learning have received a lot more attention, aligning with the focus to make India more “self-reliant” (Ministry of Human Resource Development, 2020; Aithal and Aithal, 2020; Kumar, 2021). However, India has long struggled with large numbers of dropouts, indicating serious issues in retaining children in the educational system. 90.9% of children were enrolled up to grade 8, but dropping to 79.3% in grades 9-10 and 56.5% in grades 11-12. This means that roughly 45% of pupils drop out before they reach the age of 18 (Ministry of Human Resource Development, 2020).

3. Results

The empirical data for this thesis was collected between 12th October and 13th December 2022. The survey was conducted online and distributed to various organisations and people within the entrepreneurship support ecosystem across India. Data was collected through a self-administered questionnaire.

Out of 86 respondents, 85 consented to participate in the survey. It is unclear how many potential respondents were exposed or invited to participate in the survey because of it being conducted online as well as reaching out to potential participants mostly online. However, it is safe to assume that the number of potential respondents was much higher than the number of participants.

50 respondents (58.8%) of respondents were male, while 34 respondents (40%) were female. One respondent (1.2%) preferred not to say. Out of these 85 respondents, five (5.9%) identified as a member of the LGBTQIA+ community, while 71 (83.5%) did not. Nine respondents (10.6%) preferred not to answer.



Considering the small sample size, the geographical representation of respondents was spread out quite evenly, having respondents from 15 out of India's 36 states and union territories (41.67%). Close to a quarter (24.7%) of respondents were based in the state of Maharashtra, with Karnataka (20%), Kerala 10.6%) and Tamil Nadu (9.4%) following.

Out of the 85 respondents, only one person (1.2%) stated that they had received a non-formal education, while 37 respondents (43.5%) had a Bachelor's degree, and 38 respondents (44.7%) had a Master's degree. Nine respondents (10.6%) claimed they had only completed secondary school (9-12th standard).

The income data was also spread out evenly among the participants. 12 respondents (14.1%) put themselves in the lowest bracket, having an annual household income of 5 lakhs (500,000) rupees or less. The second biggest segment in the survey was people in the bracket above, with 18 respondents (21.2%), having an annual household income of between 5-10 lakh (500,000 to 1,000,000) rupees. The biggest income group of the respondents put themselves in the 10-25 lakh (1-2.5 million) rupees bracket. 12 respondents (14.1%) had an annual household income of 25-50 lakh (2.5-5 million) rupees, and seven respondents (8.2%) stated an annual household income of 50 lakh (5 million) rupees or above. The remaining 14 respondents (16.5%) preferred not to answer this question.

When asking the respondents about their occupation, 26 respondents (30.6%) stated that they were self-employed. Out of the people who reported themselves to be employed, 12.9% claimed they were also pursuing a business idea parallel to their employment, while the other 25.9% of employed respondents did not pursue a business idea. 23 respondents (27%) were students, 11 of them (12.9%) did not pursue a business idea parallel to their studies, while 12 respondents (14.1%) did. Three respondents (3.5%) marked themselves as unemployed but actively looking for a job or starting a business.

Among the 85 respondents, 40 respondents (47%) reported having an active business, while 55 respondents (64.7%) reported having a business idea. Furthermore, 58 respondents (68.3%) felt confident in their skills and knowledge required to launch and run a business, while 75 respondents (88.3%) expressed an interest in acquiring more skills and knowledge for this purpose. 15 out of the 85 respondents (17.6%) indicated no entrepreneurial ambitions.



47 respondents (55.3%) had received any form of entrepreneurship education while 38 respondents (44.7%) had not. 60 respondents (70.6%) replied that they would like to receive [more] entrepreneurship education while only eight respondents (9.4%) said that they did not want more entrepreneurship education. 17 respondents (20%) were not sure and answered maybe.

58 respondents considered themselves “*to have the skills and knowledge to launch and run a business*” while 27 did not. 75 respondents claimed to “*have the interest to acquire [more] skills and knowledge to launch and run a business*” while ten respondents said they had no such interest.

The 47 respondents who had received entrepreneurship education were asked about the sources and methods through which they received entrepreneurship education (“*Where and how did you receive the type(s) of entrepreneurship education?*”). The most common source was self-contained material, such as Google, YouTube, and books, chosen by 26 respondents (55.3%). Formal education channels also played a significant role, with 15 respondents (31.9%) who received entrepreneurship education during their undergraduate studies, and 16 respondents (34%) during their master's degree or higher degree. 8 respondents (17%) received entrepreneurship education during their elementary school years and 12 respondents (25.5%) during their secondary school years. Additionally, respondents reported acquiring knowledge through passed-on knowledge from parents and/or relatives (20 respondents), participating in incubator/accelerator programmes (programme length of up to 1 month: 11 respondents, 1-3 months: 10 respondents, 3 months or more: 7 respondents), engaging with independent coaching (14 respondents), and being part of a network/community (22 respondents). A small proportion of respondents (6) selected the "Other" option, indicating the existence of alternative sources of entrepreneurship education.



4. Discussion

This study aimed to investigate the relationship between demographic and socioeconomic factors and access to entrepreneurship education, as well as to understand the accessibility of formal and informal entrepreneurship education through the lens of these factors. This study was explorative in nature, and as such, a thematic analysis was chosen as the method for analysing the collected data.

At the outset, the indication by the data was to form three themes, namely *ability*, *agency*, and *ambition*. However, as the analysis progressed, it became clear that the themes were not entirely distinct, and there was a significant amount of overlap between them, especially *agency* and *ambition*. Some of the keywords could, in one way or another, be applied to all themes, which posed a significant challenge in creating coherent and clear themes. To create further clarity, the themes were instead consolidated into two: *ability and social mobility* as the main theme, and *agency and ambition* as a second, smaller theme. Doing so, allowed for a more cohesive and clear approach to analysing the data, as the themes were better defined and did not overlap as much. Ultimately, this approach provided a clearer understanding of the relationships between the variables and enabled more meaningful conclusions from the research to be drawn, to hopefully provide valuable insights for policymakers, educators, entrepreneurs, and the overall entrepreneurship ecosystem.

To analyse the data, a thematic analysis was conducted on certain questions in combination with others, while some questions were analysed separately. The pivotal question that formed the foundation of this analysis, whether examined independently or in conjunction with other questions, was "*Have you received any form of entrepreneurship education?*". This question aimed to set a baseline in identifying different patterns among individuals who had and hadn't received entrepreneurship education, and it played a central role in addressing the research questions of this study. Given the study's objective, it is unsurprising that this question held significant importance.



4.1. Theme A: Ability and social mobility

The first theme that emerged did so based on keywords and patterns about knowledge, resources and other factors that could affect either ability and/or social mobility, such as income, education, and geographical location, to mention a few, since it is proven to have an impact on an individual's access to opportunities (Ge et al., 2022).

The analysis of the relationship between the questions "*Have you received any form of entrepreneurship education?*" and "*What is your highest level of completed education?*" did not require coding as it involved a simple analysis of "yes" or "no" responses. The purpose was to identify any socioeconomic disparities in formal education concerning entrepreneurship. The results indicate a strong trend of entrepreneurship education being predominantly accessible at the tertiary education level, with 91.5% of respondents who received entrepreneurship education having completed tertiary education. In contrast, only 44.4% (four out of nine respondents) who completed secondary education had received entrepreneurship education. Notably, among the nine respondents with secondary education, only one was a female participant and had not received entrepreneurship education. In this context, it is worth mentioning that women entrepreneurs in India are six times more likely than men to report not having a secondary education, as reported by the GEM 2022 study.

It is fascinating to observe the evolution of entrepreneurship education in India, from its early reliance on informal methods until the 80s, to its current dominance within tertiary education. Over time, this transition has led to a near-exclusive provision of entrepreneurship education through tertiary institutions today. While this shift has brought valuable structure and specialised programmes, this has also created a limited support system for aspiring entrepreneurs outside of academia. Considering the alarming dropout numbers in India, it is imperative to address the limited availability of entrepreneurship education at the secondary level and its potential impact on Indian youths. The current situation, where entrepreneurship education is predominantly accessible at the tertiary level, combined with high dropout rates until students even reach tertiary education, leaves only a fraction of eligible students able to access entrepreneurship education. According to the Ministry of Human Resource Development (2020), approximately 45% of pupils drop out before reaching the age of 18, meaning that a substantial



portion of young people in India is missing out on the opportunity to acquire the skills and knowledge required to start their businesses, provide for themselves and their families, as well as to contribute to the economy. Therefore, it is vital to make targeted efforts to provide entrepreneurship education at the secondary level, so that more youths will access entrepreneurship education before they drop out, while also working to reduce dropout rates to prevent pupils from dropping out at all. This way, a larger number of young people could benefit from this education and contribute to the growth of the country's economy. Not everyone is interested or destined to study at the tertiary level, but this should not deprive them of the opportunity to access education in entrepreneurship. The government, educational institutions, and other stakeholders must work together to create more accessible and comprehensive entrepreneurship education programmes at an earlier age, that can equip young people with the necessary skills and knowledge to start and run successful businesses.

The recent changes in the National Education Policy (NEP) have the potential to significantly impact entrepreneurship education in India, not only at the higher education level but also at the secondary level through a greater emphasis on practical learning. With a notable focus on entrepreneurship, the NEP presents a great opportunity to enhance entrepreneurship education. The policy changes allowing foreign universities to establish campuses in India could facilitate knowledge transfer from countries with well-established entrepreneurship education programmes and ecosystems, benefiting Indian students pursuing tertiary education. Moreover, the NEP's introduction of a credit transfer system and increased flexibility in switching between universities and programmes could encourage more individuals to pursue entrepreneurship education, contributing directly to the growth of the country's entrepreneurial ecosystem. As a result, we may witness the emergence of a more vibrant and diverse pool of Indian entrepreneurs equipped with the necessary skills and knowledge to navigate the complexities of the modern entrepreneurial landscape.

As most knowledge and practices in entrepreneurship education are offered at the tertiary level, there is the potential for it to gradually trickle down to secondary education. This can occur through curriculum development, teacher training, and the integration of practical entrepreneurship education approaches that can inspire and prepare secondary school students for entrepreneurial pursuits. By leveraging the advancements in tertiary entrepreneurship education, secondary



education can benefit from a more comprehensive and impactful approach to nurturing entrepreneurial mindsets and skills among students. Placing greater emphasis on secondary education is crucial to ensure that more potential entrepreneurs have early access to entrepreneurship education, allowing for the cultivation of entrepreneurial mindsets and skills at an earlier stage. Additionally, a more blended approach to learning, incorporating practical and experiential elements, is crucial at both secondary and tertiary levels to ensure a well-rounded entrepreneurship education that equips individuals with the necessary tools for success in the entrepreneurial landscape.

The questions *“Have you received any form of entrepreneurship education?”* and *“Did you pay for the entrepreneurship education you received?”* with *“What is your annual household income?”* formed a pairing that looked at the potential pattern if income was a factor to access (more) entrepreneurship education. This pairing was coded using letters A to E, where A represented respondents that had a high household income (defined as 10 lakhs or more) and paid for their entrepreneurship education with money, B represented a lower income (defined as up to 10 lakhs) and paid for entrepreneurship education with money, while C represented that respondents paid for entrepreneurship education in a non-monetary way, for example through equity in the company or by barter. D means they did not pay for their entrepreneurship education at all, and E means the income information was missing as some respondents did not want to state their income.

Out of 47 respondents who received entrepreneurship education, 12 were assigned A, while 14 respondents were assigned B, indicating that they paid for their education but had a lower income. Five respondents were assigned C, indicating they paid for their education in a non-monetary way. Eleven respondents were assigned D, indicating they did not pay for their education. Five respondents were assigned E, indicating that there was not enough information about their income. The pattern of entrepreneurship education and annual household income was less clear, as the sample population had diverse income levels. Only 29.8% of respondents with an annual income of 25 lakh rupees or higher had received any form of entrepreneurship education, while 51% of respondents with an annual income of 10 lakh rupees or higher had received entrepreneurship education. Interestingly, respondents who had completed secondary school and had received entrepreneurship education reported higher annual incomes, suggesting that



entrepreneurship education may positively impact income regardless of the length of formal schooling.

Overall, the discussion surrounding access to higher education can indeed be linked to the availability of financial resources. It is widely acknowledged that having more money increases the likelihood of accessing better education and schools, which, in turn, provides individuals with opportunities for networking and personal development. This connection becomes particularly relevant when discussing entrepreneurship education, as a significant portion of it is currently being offered at the tertiary level, and higher income levels often coincide with greater access to tertiary education. This implies that individuals with above-average income are more likely to have the resources and means to pursue higher education, and thus access entrepreneurship education. They may have had the advantage of attending prestigious institutions or accessing specialised entrepreneurship programmes that offer a comprehensive and well-rounded education in the field.

The pairing of “*Have you received any form of entrepreneurship education?*” and “*Which state or union territory do you live in?*” looked at the possible geographical implications of receiving access to entrepreneurship education. The data provides some indications for a pattern between receiving entrepreneurship education and the state in which an individual resides, however, this pattern only seems to be established in the two major states of Karnataka and Maharashtra, which have well-established entrepreneurship hubs in Bangalore and Mumbai, respectively. For the remaining states, the data suggest an equal representation of individuals who have received entrepreneurship education, which is not representable of a pattern, or indications thereto, of the populations in these states. For example, some of the states with a smaller actual population, such as Kerala, Manipur, and Assam, had a higher participation rate in this study than is representable to the population of the respective states in comparison with the other, more densely populated states. Furthermore, the states in the south, such as Kerala and Tamil Nadu, have a higher level of completed education, which could suggest a higher likelihood of individuals from these states having received entrepreneurship education, considering that entrepreneurship education is mostly accessed at tertiary educational levels. Similarly, the northeastern states of Assam and Manipur demonstrate a stronger-than-expected pattern of having received entrepreneurship education, which could be attributed to their participation rate in this study being



higher than representable of the actual population. Overall, the data shows a weak pattern that geography plays a role in whether individuals have received entrepreneurship education, particularly in the major states. However, more research is needed to determine whether this pattern holds true for the larger population.

When looking at the data specific to those who had received entrepreneurship education (“*Have you received any entrepreneurship education?*”), and what topics they had received entrepreneurship education in (“*Which topic(s) did you receive entrepreneurship education in?*”), the analysis made some interesting findings. Respondents who received education in multiple topics tended to have a mix of average and high knowledge levels across different topics and respondents who received education in only one topic rated their knowledge level evenly and across a broad range, from low to very high. This suggests that the availability of education across multiple topics may contribute to a more well-rounded understanding among individuals. Sales, Marketing, and Business economics/financials are the most commonly received entrepreneurship education topics among the respondents, while Sustainability and Legal are the least commonly received topics among the respondents. This implies potential gaps in access to specific areas of entrepreneurial knowledge, which may impact the overall effectiveness of entrepreneurship education. There is significant variation in self-assessed knowledge levels within some topics, most significantly in Fundraising and Legal. For example, some respondents rate their knowledge of Legal as “very low” while others rate it as “very high”, even though they have all received entrepreneurship education in that topic, indicating that the quality of entrepreneurship education may play a role in the varying levels of knowledge acquisition among individuals. Furthermore, a surprisingly high number of respondents have rated their knowledge level as “very low” or “low” in topics where they have received entrepreneurship education. This could indicate that the quality of the education received or the duration of the programmes may have been insufficient to adequately equip individuals with the necessary knowledge and abilities.

Interestingly, individuals who had not received entrepreneurship education tended to self-assess their skills on the higher ends and, while unexpected, this could be attributed to overconfidence and/or a lack of awareness regarding the specific knowledge and skills gained through entrepreneurship education. However, it is important to recognise that high self-assessment does not necessarily indicate



overestimation, as respondents may have acquired skills through alternative means outside their received entrepreneurship education.

The findings contribute to the ongoing discussion on the effectiveness of entrepreneurship education, highlighting the importance of improving the quality and coverage of entrepreneurship education programmes to enhance overall accessibility. Further research is necessary to understand the factors influencing the accessibility and effectiveness of entrepreneurship education, including the quality of education, coverage of specific topics, and individual factors such as confidence and self-awareness. Addressing these issues can ultimately benefit aspiring youths and young adults in India who wish to pursue entrepreneurship.

One interesting perspective in the discussion about access to entrepreneurship education in India highlights a significant gap between the formal, scientifically-oriented side of entrepreneurship education and the practical, experiential "art" side. According to Akola and Heinonen's (2006) definition, most Indian entrepreneurs are primarily exposed to the "science" aspect of entrepreneurship through tertiary education. However, it is notable that despite this formal education, many Indian entrepreneurs still resort to informal means to acquire practical knowledge and skills, defined as the "art" side of entrepreneurship according to Akola and Heinonen's (Ibid) definition. This raises further questions about the effectiveness and relevance of the formal, scientific approach to entrepreneurship education in meeting the needs and expectations of Indian entrepreneurs. The fact that Indian entrepreneurs actively seek informal avenues for learning entrepreneurship indicates a discrepancy between the type of education provided and the actual knowledge and skills required for entrepreneurial success. The strong emphasis on the "science" side of entrepreneurship education in India has led to a lack of emphasis on essential aspects such as resourcefulness, adaptability, networking, and intuition. These skills are often honed through real-world experiences and exposure to experienced entrepreneurs, which are aspects typically associated with the "art" side of entrepreneurship. By solely focusing on the scientific aspects, the formal entrepreneurship education majorly provided today is missing out on adequately equipping aspiring entrepreneurs with the practical tools and mindset needed to thrive in the competitive entrepreneurial landscape, and to help the Indian economy.



As the discussion on access to entrepreneurship education in India highlights the gap between the formal, scientifically-oriented side and the practical, experiential "art" side, the emergence of ChatGPT and other advanced language models presents a promising potential to enhance entrepreneurship education, not just in India but globally. By leveraging the capabilities of this advanced language model, and other advanced language models, individuals can access a wealth of information related to entrepreneurship, for example about best practices and real-world examples, to further their entrepreneurial journeys. This has the potential to dramatically increase access to entrepreneurship education. However, it is important to recognise that ChatGPT should complement, rather than replace, traditional forms of entrepreneurship education. Practical experiences, hands-on learning, and real-world networking remain vital components of a well-rounded entrepreneurial education. ChatGPT, and other language models, are based on patterns and training data that may contain biases or inaccuracies. While ChatGPT can serve as a valuable tool for self-directed learning, it cannot provide personalised feedback and practical experiences that are essential for comprehensive entrepreneurship education. Additionally, the model cannot replicate the networking and mentorship opportunities that traditional education settings can offer, as well as other soft skills that are needed to train well-rounded entrepreneurs. ChatGPT has the potential to enhance entrepreneurship education, but it is important to be aware of its limitations. By utilising ChatGPT alongside traditional methods, educators and learners can create a more balanced and comprehensive approach to entrepreneurship education that maximises the benefits of both technology and real-world engagement.

4.2. Theme B: Ambition and agency

The second theme emerged based on keywords geared towards dreams, desires and a wish of accomplishing things, as well as having the ability to act to pursue these desired accomplishments.

Most respondents showed strong entrepreneurial ambitions, with 70 out of the 85 respondents indicating that they have entrepreneurial ambitions. This suggests that entrepreneurship education is highly relevant or necessary for all individuals and that efforts to promote entrepreneurship education should be targeted towards those who are interested in starting and running a business, which



could then further enhance the entrepreneurs' ambitions. Finding these pockets of people with high entrepreneurial ambitions, therefore, becomes crucial. Adding to this, entrepreneurship education must also be made more accessible to people showing entrepreneurial ambitions, to not lose out on potential economic growth. Based on the findings of this study, most entrepreneurs access their entrepreneurship education late, in tertiary education, which only half of the Indian students complete (Ministry of Human Resource Development, 2020), suggesting a potentially large number of students that could become entrepreneurs, which are currently being left behind in secondary and primary education. This is a big loss for the Indian economy.

When asking the 47 respondents who had received entrepreneurship education about their experience (*"Have you received any form of entrepreneurship education?"* and *"Where and how did you receive the type(s) of entrepreneurship education?"*), data showed that those who had received entrepreneurship education at the tertiary level still relied heavily on informal means such as self-contained learning, independent coaches, and networks to acquire their entrepreneurship education. The data also revealed that many respondents had acquired their knowledge through passed-on knowledge from family and relatives, indicating a preference for informal education channels, which stands in contrast to the previous understanding that entrepreneurship education was mostly accessible through formal education channels such as tertiary education. The findings highlight the need for more accessible and comprehensive entrepreneurship education programmes in India, as budding entrepreneurs in the country are compensating for the lack of quality in formal education opportunities by seeking out informal channels. Addressing this gap in formal entrepreneurship education can help individuals develop the necessary skills to start and run successful businesses.

The focus on the quality of entrepreneurship education has been an ongoing topic of discussion. However, there is another important aspect that needs to be addressed - the expectations that entrepreneurs have when they enrol in such courses. Entrepreneurs may bring high expectations to the table, both in terms of their abilities and what education can do for them. It is important to acknowledge that entrepreneurship education can only provide a certain level of knowledge and skills. It cannot work miracles or turn anyone into a successful entrepreneur overnight. Entrepreneurs need to understand that they have to put in the effort and hard work to achieve their goals. Another issue is that entrepreneurs may not be



receptive or able to comprehend what is being taught to them. This could be due to various factors, such as a lack of prior knowledge, a language barrier, or simply not being interested in the subject matter. It is important for entrepreneurship education programmes to be designed to take these factors into account and address them accordingly.

To look at whether there is a desire to receive entrepreneurship education, whether or not one has received it before, the respondents were asked two questions (“*Have you received any form of entrepreneurship education?*” and “*Would you like to receive [more] entrepreneurship education?*”), where the answers to each question were coded in six different ways (“yes, yes”, “yes, no”, “no, yes”, “yes, maybe”, “no, maybe”, “no, no”). The data shows that the majority of the respondents (33 out of 85) have received entrepreneurship education in the past and would like to receive more of it in the future. This indicates a positive attitude towards entrepreneurship education among this group. 27 respondents had not received entrepreneurship education but would like to receive it in the future, which indicates the potential interest and demand for entrepreneurship education among individuals who have not yet had access to it. Furthermore, six respondents who had received entrepreneurship education in the past did not want to receive more of it in the future, indicating two possible directions: a) not all individuals who have had access to entrepreneurship education found it beneficial or relevant to their goals, or b) these respondents might have fulfilled their goals for which they received entrepreneurship education, making further entrepreneurship education superfluous. Furthermore, seven respondents had received entrepreneurship education in the past but were unsure if they want to receive more of it in the future, suggesting that while some individuals may find value in entrepreneurship education right away, others may not be fully convinced of its importance or effectiveness. Another reason for the hesitance of receiving more entrepreneurship education in the future could be because of bad or insufficient experiences with the entrepreneurship education they have received which made them sceptical to receive more. On the contrary, two respondents had not received entrepreneurship education and did not want to receive it in the future. Ten respondents who had not received entrepreneurship education were unsure if they want to receive it in the future. This suggests that there may be individuals who are open to entrepreneurship education, and entrepreneurship at large, but are uncertain about its potential



benefits, and for the ones who do not want to receive it the underlying reason could be the same, as well as having no entrepreneurial ambitions at all.

Looking at the reported entrepreneurial activity among respondents, 40 out of the 85 respondents indicated that they have an active business, while 45 indicated that they do not. Of the 85 respondents, 55 indicated that they have a business idea, while 30 indicated that they do not. This highlights the interest in, and potential for, entrepreneurship in India, as a significant proportion of respondents have ideas for starting a business. However, while respondents have a significant interest in entrepreneurship, actual entrepreneurial activity is relatively low. It is important to take into account that the sample size itself consisted of mostly active or budding entrepreneurs, so the entrepreneurial activity rate is skewed compared to the general public. To demonstrate this with data from the latest GEM Global Report (2023), the Total Entrepreneurship Activity (TEA) of India is at 11.5%, as compared to 47% for this study, which is a more representative number for the overall population of India. Data from this study confirm the data in the GEM Global Report (2023 p.144) and found that Indian entrepreneurs view themselves as having the skills and knowledge they need to launch and run a business. 58 out of 85 respondents (68.2%) stated that they had the skills and knowledge required to launch and run a business, against 27 out of 85 (31.8%) who stated the opposite, indicating that the majority of respondents are confident that they have the necessary skills and knowledge, which is a positive indication for entrepreneurship development and growth. The remaining 27 respondents who indicated that they do not have such skills would most likely benefit from entrepreneurship education and training programmes to enhance their entrepreneurial capabilities, but the question is also relevant whether they have any entrepreneurial ambitions in the first place.

Looking at the question (“*If you are considering starting a business, what is the main reason for this?*”), the respondents' motivations for starting a business are diverse, with the majority focused on social impact and job creation. The desire for autonomy was a less common but still significant reason for starting a business. The goal of building wealth or achieving a very high income was mentioned by a smaller proportion of respondents. A few respondents mentioned non-economic factors such as continuing a family tradition, while one respondent mentioned starting a business out of economic necessity due to a scarcity of jobs.



Having researched the motivation of entrepreneurs, Shukla et al. (2021) found that 79% of prospective entrepreneurs surveyed in India are motivated to run a business because they want to continue their family tradition. The data from this survey found something completely opposing this, instead showing that only 2.4% of entrepreneurs were motivated by carrying on the family business. This raises the question of whether the mindset among modern entrepreneurs is changing and if the big difference might be impacted by the rapid technological development that India is undergoing. However, the big discrepancy can also be because of the small sample size of this study, missing out on people with entrepreneurial ambitions that fell outside of the population for this study, probably because of this study being performed in English and not reaching a wide enough population. Instead, respondents mentioned “to make a difference in the world” (43.5%) as their main motivation, meaning their entrepreneurial endeavours must have a higher and/or deeper purpose than profit. Referring to the GEM Global Report (2023, p.144), 84.7% of recorded TEA emphasise that they “always consider social impact” while 74.2% “always consider environmental impact”, which is a noticeable difference to the data of this study, but still add to the undercurrent that purpose and impact, other than just profit, is very important for the Indian entrepreneur.

While 68.2% of respondents (58 out of 85) stated that they had the skills and knowledge to run a business, a resounding 88.2% (75 respondents) stated that they have an interest in acquiring more skills and knowledge to launch and run a business, while 11.8% (10 respondents) indicated that they do not have such an interest. This shows that even if entrepreneurs already feel comfortable with their knowledge, they still have a strong desire among respondents to learn more about entrepreneurship and acquire the necessary skills to start and run a business. Perhaps this speaks in a broader sense to the mindset of the Indian entrepreneur, especially considering how popular entrepreneurship has become over the last years, along with the highly competitive nature of the Indian entrepreneur.

The question pairing (“*Have you received any form of entrepreneurship education?*” and “*If you are NOT considering starting a business, what is the main barrier you face to not consider starting a business?*”) does in an indirect way address the topic of access to entrepreneurship education, and show some interesting findings in connection to the topic of access. The data was coded based on the answer if the respondents were not considering starting a business and grouped by whether or not respondents had received entrepreneurship education or



not. The findings suggest that fear of failure is a common barrier to starting a business, with respondents from both groups citing it as a reason for not considering entrepreneurship. Respondents who had received entrepreneurship education were more likely to report a lack of money and time as barriers to starting a business, while those without such education were more likely to report a lack of knowledge on how to launch and run a business. Respondents without entrepreneurship education were more likely to cite the execution of the business idea as a barrier, indicating a need for education and support around business planning and strategy. Those who had received entrepreneurship education expressed both confidence in starting a business but lacked the knowledge to execute it, as well as the reversed, as in having the knowledge to execute it but lacking the confidence to start a business. This suggests that having the necessary knowledge is not always enough to overcome the barrier of lack of confidence. Interestingly, respondents with entrepreneurship education were more likely to report lacking knowledge on how to launch and run a business despite having the confidence to start, while those without such education were more likely to report lacking the confidence to start despite having the necessary knowledge. Other challenges identified by respondents include unfavourable conditions for starting a business, difficulty executing business ideas, and fear of failure. Additionally, respondents across both groups expressed difficulty in finding time to dedicate to launching a business while managing other commitments, such as a job or family. These challenges may be more difficult to address, as they may be influenced by factors outside an individual's control, such as government policies, market conditions, personal relations and personal beliefs.



5. Conclusion

5.1. Key findings

5.1.1. Main Research Question

“How accessible is both formal and informal entrepreneurship education for youths and young adults in India?”

This study significantly contributes to the academic field by shedding light on an, up until now, overlooked aspect of entrepreneurship education in India. Despite its limited size and generalisability, the findings reveal crucial patterns and indications applicable on a broader scale, encompassing the entire country and its entrepreneurial ecosystem. The study underscores the pressing need for accessible and comprehensive entrepreneurship education for Indian youths and young adults. The heavy emphasis on formal entrepreneurship education through universities has left many students and graduates without the necessary education to combat high youth unemployment. The overwhelming focus on entrepreneurship education in tertiary institutions has led to a scarcity of secondary education institutions offering similar programmes, thereby restricting the availability of research opportunities in this domain, as illustrated by the findings of Volery et al (2013). Findings highlight a significant reliance on informal channels, coupled with a lack of quality formal education and limited access to resources, leading to a skill gap among young adults.

Addressing these challenges necessitates substantial improvements, particularly through the implementation of blended learning approaches. Informal entrepreneurship education, encompassing mentoring, networking, and experiential learning, deserves greater attention and integration into formal education. The dominance of formal entrepreneurship education has created a skill gap among university graduates, dropouts, and the labour market at large. Even students who receive entrepreneurship education often lack the necessary skills and tools to succeed as entrepreneurs. This is concerning, given entrepreneurship's vital role in economic growth and job creation. Based on the theory presented by Volery et al (2013), it is conceivable that entrepreneurs, drawing from their firsthand experiences, may question the efficacy of formal entrepreneurship education in providing the knowledge required for advancing their businesses and their business acumen. This perspective aligns with the findings of this study, underscoring the



need for a critical evaluation of the effectiveness of entrepreneurship education despite the substantial investments made in this area.

Secondary and tertiary institutions must adopt a holistic approach that combines formal and informal entrepreneurship education and embrace technological resources with a flexible mindset, to develop a comprehensive skill set among students. The introduction of the new National Education Policy (NEP) holds promise in fostering a flexible and entrepreneurial mindset and leveraging technology to bridge the gap between formal and informal entrepreneurship education, however, its efficiency in achieving this remains to be seen. By addressing these aspects, India can unlock its vast pool of entrepreneurial potential, promote job creation, and stimulate economic growth.

In conclusion, enhancing the accessibility of entrepreneurship education for Indian youths and young adults necessitates a comprehensive and inclusive approach. This includes combining formal and informal entrepreneurship education, leveraging technological advancements, managing expectations from both entrepreneurs and the ecosystem, and fostering a supportive and open environment. As the social recognition of entrepreneurship as a possible career path continue to increase, so will the interest in entrepreneurship education. Capitalising on this “entrepreneurial wave” is essential for the Indian economy in terms of both venture and job creation. In doing so, India can unlock the untapped potential of its youth, promote job creation, and contribute to sustainable economic development for its large population of young people.

5.1.2. Secondary Research Question 1

“What socioeconomic factors impact the access to entrepreneurship education and are there different kinds of accessible entrepreneurship education?”

In conclusion, this study demonstrates the substantial influence of socioeconomic factors on the accessibility of entrepreneurship education in India. Income level and education level emerge as primary determinants, with income level exerting a more distinct and significant impact. Although the extent of accessibility varies based on education levels, it is noteworthy that entrepreneurship education appears to be accessible across different income levels. Additionally, factors such as gender, LGBTQIA+ community membership, and geographic



location present barriers to accessing entrepreneurship education, but call for further research to fully comprehend their scope and implications.

The findings emphasise the demand for inclusive and accessible forms of entrepreneurship education, as expressed by respondents who desire further education despite prior knowledge. The presence of informal entrepreneurship education and learning opportunities outside formal institutions highlights the potential benefits of alternative educational pathways, as evidenced by respondents engaged in self-employment or pursuing entrepreneurial ventures alongside employment or studies.

In short, socioeconomic factors significantly impact access to entrepreneurship education in India. The presence of different kinds of accessible entrepreneurship education, along with the influence of networks and learning within the family, underscores the need for a comprehensive approach that addresses barriers and enables access to people without access to these kinds of informal ways of learning. By adopting an inclusive and holistic approach, India can cultivate an entrepreneurship education landscape that provides equitable opportunities for individuals from all socioeconomic backgrounds to pursue their entrepreneurial aspirations.

5.1.3. Secondary Research Question 2

“How do budding entrepreneurs compensate for the lack of entrepreneurship learning opportunities?”

The findings of this study shed light on the prevalent issue of limited access to formal entrepreneurship education in India, as well as issues with its quality, which has led aspiring entrepreneurs to seek out alternative learning avenues. The research highlights the prominence of informal channels such as self-learning, networking, independent coaching, and knowledge transmission within families as popular and accessible options for acquiring entrepreneurship skills and knowledge. These informal methods have emerged as compensatory strategies, filling the gaps left by the lack of formal education opportunities.

It is clear that budding entrepreneurs in India are willing to go the extra mile to acquire the knowledge they need to succeed, but it is also evident that this approach is not without its challenges. Informal education methods lack structure and may not provide the learner with a comprehensive understanding of



entrepreneurship concepts and practices. Informal education is also more haphazard or incomplete, as it may provide only a partial understanding of a subject or skill, leaving gaps in the learner's knowledge. Without a structured approach, learners may struggle to retain what they have learned or apply it in real-world situations. Therefore, the government and other stakeholders in India must invest in the development of more accessible and comprehensive entrepreneurship education programmes to address this gap in entrepreneurship education. Doing so can help aspiring entrepreneurs acquire the necessary knowledge and skills to launch and run successful businesses, ultimately contributing to the growth and development of the country's economy.

5.2. Methodology, limitations and implications

This study has identifiable limitations and weaknesses that restrict the implications and overall findings that can be drawn from it. However, this study did not aim to generalise or segment findings and draw firm conclusions. Instead, the study aimed to approach the research with an open mind and explore the outcomes without preconceived notions. The limitations of this study include potential biases arising from the sampling method and the likelihood of participants being more inclined to respond due to their interest in the topic. Furthermore, the small sample size of only 85 respondents is not representative of the entire population of India. As a result, the findings of this study may not apply to the broader population and may only pertain to the specific sample that was studied, despite the discovery of interesting patterns that could indicate generalisability for a larger population. India's vast and diverse nature, encompassing various cultural, linguistic, and socioeconomic differences across different regions and communities, presents challenges in adequately capturing this diversity with a small sample size. These differences contribute to the difficulty in reaching out to a more diverse population, even though the sample size of this study was relatively diverse considering its scale.

The method of data collection may be a contributing factor to the challenge of obtaining a larger sample size. While online surveys have gained popularity, they also have inherent weaknesses. Evans and Mathur (2018) highlight a major issue related to the distribution of online survey invitations. Due to the perception of such invitations as junk mail, a significant portion of them is classified



as spam, leading many individuals to ignore or automatically filter them out. Another weakness of online surveys is the sampling process, which can introduce biases based on the characteristics of the population. Factors such as respondents' lack of online experience or expertise, technological variations, unclear answering instructions, and poorly designed questionnaires can further impact the data quality. Low response rates, as experienced in this study, represent a significant weakness of online surveys, and these response rates have declined even further in recent years (Evans and Mathur, 2018).

Eynon et al. (2009) emphasise the impact of existing power structures on research direction and focus, which often results in favouring certain countries and research agendas over others. This is particularly relevant in the context of India, a diverse and unequal country. Online research has the potential to both exacerbate and address these inequalities. An example is the issue of internet connectivity, as highlighted by the authors (Eynon et al., 2009). Representing diverse groups in the online environment is a complex matter. While the internet offers opportunities to reach populations that may have been underrepresented in traditional research methods, such as those living in isolated areas, it also has the potential to exclude those same groups who lack internet access. This digital divide, described as the gap between individuals who have the resources to fully participate in contemporary society and those who do not (Chen and Wellman, 2004), significantly influences the representation of various populations in online research.

Online surveys provide an opportunity to address population imbalances by overcoming physical distance and conducting research on a global scale. However, a more global approach to research presents ethical challenges, as highlighted by Eynon et al. (2009), which necessitates considering contexts beyond researchers' jurisdictions. Methodological and ethical questions arise in online research, including the impact of cultural differences on research objects, participants, and researchers' goals and values (Jankowski and van Selm, 2005). Establishing a code of practice for online research ethics faces a key difficulty in respecting and incorporating various cultural practices, ethical governance, and legal frameworks (Ess, 2006). It is important to carefully consider the balance between privacy and freedom of expression, as values concerning privacy can vary between countries (Fry, 2006).



Using surveys as a data collection method presents several drawbacks, as encountered in this field study. One notable limitation was the low response rates relative to the number of potential respondents approached, making it challenging to accurately represent the entire population of interest. Surveys are susceptible to bias as they rely on self-reported responses that may not reflect participants' true opinions or experiences objectively. Additionally, surveys have limitations in the amount and type of information they can collect, depending on respondents' willingness and ability to provide detailed answers. Time constraints posed a significant challenge, with busy entrepreneurs and potential participants showing less willingness to engage in lengthy surveys. Even incubators faced difficulties in obtaining sufficient responses for their surveys, highlighting the challenge of reaching the desired number of participants as an external third party.

The language used for the survey also posed a limitation, as conducting it in English restricted the potential participant pool, for example in Tamil Nadu where business is predominantly conducted in Tamil. This language barrier resulted in a biased sample that primarily represented individuals with higher education, English proficiency, and internet access, mainly within the formal entrepreneurship education segment. Accessing the informal segment, consisting of individuals from less educated backgrounds who primarily speak local languages, proved challenging.

The study identified the issue of skewed data, with states having smaller populations exhibiting higher participation rates than what would be representative, while states with larger populations had lower participation rates. This disparity may be attributed to factors such as motivation levels, sense of responsibility, and ease of recruitment in sparsely populated states compared to densely populated ones. Additionally, states with higher population densities and greater diversity presented challenges in achieving a representative sample. Drawing more robust conclusions about the relationship between entrepreneurship education and participant distribution would require a larger sample size and more comprehensive data analysis. It is important to note that the study did not aim to generalise or make broad assumptions based on the data.

The existing literature in the field of entrepreneurship and entrepreneurship education in India also has its limitations, including methodological shortcomings, grammar and presentation flaws, weak



argumentation, and lack of cohesion, leading to inconclusive results. These limitations undermine the quality, credibility, and usefulness of the research in academic work.

In summary, while previous research has contributed to our understanding of entrepreneurship in India, it is essential to recognise and address its limitations and methodological challenges. By striving for high-quality research that captures the complexity of entrepreneurship in India, stakeholders such as policymakers, business leaders, and educational institutions can gain better knowledge and insights to support the improvement of entrepreneurship in the country

5.3. For future research

Future research should focus on addressing several key questions to enhance our understanding of entrepreneurship education in India. Firstly, it is essential to investigate whether the entrepreneurship education received by respondents had a perceived impact on their skills and knowledge acquisition, or if they relied on other sources to acquire their entrepreneurial competencies despite having received formal education. This exploration will provide valuable insights into the effectiveness and complementarity of entrepreneurship education.

Furthermore, future research should expand the sample size to include a more diverse and representative group of respondents. This broader perspective will enable a comprehensive exploration and understanding of the challenges and opportunities in accessing entrepreneurship education in India. Specifically, it is crucial to understand the extent of barriers related to gender, LGBTQIA+ community membership, and geographic location. By identifying these barriers, targeted efforts can be made to promote inclusivity and ensure equal access to entrepreneurship education for all individuals. Additionally, research should focus on bridging the gap in the distribution and accessibility of entrepreneurship education across different regions in India. By better understanding the disparities in availability and accessibility, targeted interventions can be designed to ensure that aspiring entrepreneurs from all regions have equal opportunities to access quality entrepreneurship education.

While this study has highlighted the popularity and accessibility of informal channels for entrepreneurship education, further research is needed to



investigate the prevalence, effectiveness, and equal accessibility of these alternative learning methods. Understanding the extent to which budding entrepreneurs in India rely on informal avenues, such as self-contained learning, networks, independent coaches, and knowledge passed on within families, will provide valuable insights into their impact and potential limitations. This research should also explore the factors that influence the ability of aspiring entrepreneurs to compensate for the lack of formal learning opportunities.

In conclusion, future research should strive to explore and address these important questions to enhance our understanding of entrepreneurship education in India. By conducting comprehensive studies with larger and more diverse samples, we can gain insights into the challenges, opportunities, and potential impacting factors in accessing entrepreneurship education. This knowledge will guide the development of more open, accessible and comprehensive entrepreneurship education, fostering a thriving entrepreneurial ecosystem in India.



6. References

Aithal, P.S. and Aithal, S., 2020. Analysis of the Indian National Education Policy 2020 towards achieving its objectives. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), pp.19-41.

Akola, E., and J. Heinonen., 2006. How to Support Learning of Entrepreneurs? A Study of Training Programmes for Entrepreneurs in Five European Countries. In: RENT XX Conference, *Research in Entrepreneurship and Small Business*. Brussels, Belgium, 22–24 November 2006.

Arafat, M.Y., Ahmad, M.J., Khan, A.M., Khan, M.S., Khan, M.M. and Dwivedi, A.K., 2019. Factors Influencing Women Entrepreneurship in India.

Athayde, R., 2009. Measuring enterprise potential in young people. *Entrepreneurship theory and practice*, 33(2), pp.481-500.

Audretsch, D.B., Carree, M.A. and Thurik, A.R., 2001. Does entrepreneurship reduce unemployment? (No. 01-074/3). Tinbergen Institute discussion paper.

Baron, R. and Shane, S., 2007. *Entrepreneurship: A process perspective*. Nelson Education.

Basu, R., 2014. Entrepreneurship education in India: A critical assessment and a proposed framework. *Technology Innovation Management Review*, 4(8).

Bell, E., Bryman, A. and Harley, B., 2019. *Business research methods*. Oxford university press.

Bhatia, A.K. and Levina, N., 2020. Diverse rationalities of entrepreneurship education: An epistemic stance perspective. *Academy of Management Learning & Education*, 19(3), pp.323-344.

Bhardwaj, B.R. and Sushil, 2012. Internal environment for corporate entrepreneurship: Assessing CEAI model for emerging economies. *Journal of Chinese Entrepreneurship*, 4(1), pp.70-87.

Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J. and Tarnawa, A., 2020. *Global entrepreneurship monitor 2019/20: Global report*.



Chattopadhyay, A., 2022. Survival of Indian market attractiveness amid dynamic youth population structure. *International Journal of Multidisciplinary*, 7(6), pp.18-26.

Cheung, C.K., 2008. An overview of entrepreneurship education programmes in Hong Kong. *Journal of Vocational Education and Training*, 60(3), pp.241-255.

Clark, T., Foster, L., Bryman, A. and Sloan, L., 2021. *Bryman's social research methods*. Oxford University Press.

Cyrill, M. 2022. Micro, Small, and Medium Enterprises in India - An Explainer. *India Briefing*.

Dutta, S., 2012. Entrepreneurship & global competitiveness: a study on India. *Indian Journal of Industrial Relations*, pp.617-633.

Dwivedi, A.K., 2017. *Distance and online entrepreneurship education in India*. Retrieved 8 February 2023. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2992018]

Elahi, Y.A., 2012. Entrepreneurship Education in India-Scope, challenges and Role of B-schools in Promoting Entrepreneurship Education. *International Journal of Engineering and Management Research (IJEMR)*, 2(5), pp.5-14.

Gartner, W.B., 1990. What are we talking about when we talk about entrepreneurship? *Journal of Business venturing*, 5(1), pp.15-28.

Gartner, W.B., Shaver, K.G. and Liao, J., 2008. Opportunities as attributions: Categorizing strategic issues from an attributional perspective. *Strategic Entrepreneurship Journal*, 2(4), pp.301-315.

Ge, J., Li, J.M., Zhao, E.Y. and Yang, F., 2022. Rags to riches? Entrepreneurs' social classes, resourceful time allocation, and venture performance. *Journal of Business Venturing*, 37(5), p.106248.

GEM (Global Entrepreneurship Monitor), 2023. *Global Entrepreneurship Monitor 2022/2023 Global Report: Adapting to a "New Normal"*. London: GEM.

GEM (Global Entrepreneurship Monitor), 2022. *Global Entrepreneurship Monitor 2021/22 Women's Entrepreneurship Report: From Crisis to Opportunity*. London: GEM.



Government of India, 2023. *Make in India*. [online] Available at: <https://www.makeinindia.com/> [Accessed 7 January 2023].

Government of India, 2023. *Startup India*. [online] Available at: <https://www.startupindia.gov.in/content/sih/en/about-startup-india-initiative.html> [Accessed 11 January 2023].

Gielnik, M.M. and Frese, M., 2013. *Entrepreneurship and poverty reduction: Applying I/O psychology to microbusiness and entrepreneurship in developing countries*.

Guelich, U. and Bosma, N., 2018. Youth Entrepreneurship in Asia-Pacific. *UNDP Youth Co:lab, GEM*.

Haase, H. and Lautenschläger, A. 2011. The teachability dilemma of entrepreneurship. *International Entrepreneurship Management Journal*, 7, 145-162

Hansemark, O.C., 1998. The effects of an entrepreneurship programme on need for achievement and locus of control of reinforcement. *International Journal of Entrepreneurial Behavior & Research*, 4(1), pp.28-50.

Henry, C., Hill, F. and Leitch, C., 2005. Entrepreneurship education and training: can entrepreneurship be taught? Part I. *Education+Training*, 47(2), pp.98-111.

Hynes, B., 1996. *Entrepreneurship education and training-introducing entrepreneurship into non-business disciplines*. *Journal of European industrial training*, 20(8), pp.10-17.

International Labour Organization, 2023. *World Employment and Social Outlook: Trends*. Geneva.

Isaacs, E., Visser, K., Friedrich, C. and Brijlal, P., 2007. Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. *South African journal of education*, 27(4), pp.613-629.

Kirzner, I.M., 1978. *Competition and Entrepreneurship*. *University of Chicago Press*.

Klapper, L., Amit, R. and Guillén, M.F., 2010. Entrepreneurship and firm formation across countries. *International differences in entrepreneurship*, pp. 129-158. University of Chicago Press.

Kourilsky, M.L. and Esfandiari, M., 1997. Entrepreneurship education and lower socioeconomic black youth: An empirical investigation. *The Urban Review*, 29(3), pp.205-215.



Kumar, A., 2021. New education policy (NEP) 2020: A roadmap for India 2.0. *University of South Florida M3 Center Publishing*, 3(2021), p.36.

Kuratko, D.F., (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship theory and practice*, 29(5), pp.577-597.

Linn, M.W., Sandifer, R. and Stein, S., 1985. Effects of unemployment on mental and physical health. *American Journal of public health*, 75(5), pp.502-506.

Martin, B.C., McNally, J.J. and Kay, M.J., 2013. Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of business venturing*, 28(2), pp.211-224.

Mead, D.C. and Liedholm, C., 1998. The dynamics of micro and small enterprises in developing countries. *World development*, 26(1), pp.61-74.

Ministry of Human Resource Development, 2020. *National Education Policy 2020*. [online] Available at: https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English.pdf [Accessed 1 January 2023]

Government of India, 2022. *NITI Aayog, About WEP (Women Entrepreneurship Platform)*. Available at: <https://wep.gov.in/about-wep> [Accessed 2 April 2023]

Oosterbeek, H., Van Praag, M. and Ijsselstein, A., 2010. The impact of entrepreneurship education on entrepreneurship skills and motivation. *European economic review*, 54(3), pp.442-454.

Oxford Languages, 2020. *Oxford Hindi Word of the Year 2020*. [online] Available at: languages.oup.com/word-of-the-year/hindi-word-of-the-year-2020-en [Accessed 1 January 2023]

Peterman, N.E. and Kennedy, J., 2003. Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship theory and practice*, 28(2), pp.129-144.

Raichaudhuri, A., 2005. Issues in Entrepreneurship Education. *Decision (0304-0941)*, 32(2): 73-84

Ravi, S., 2019. *The truth about jobs in India*. [online] Available at: <https://www.bloomberg.com/opinion/articles/2019-04-16/debate-over-jobs-in-india-is-missing-the-point> [Accessed 1 January 2023]



Rideout, E.C. and Gray, D.O., 2013. Does entrepreneurship education really work? A review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of small business management*, 51(3), pp.329-351.

Roy, R. and Das, N., 2020. Exploring entrepreneurial intention among engineering students in India: a multiple basket approach. *International Journal of Technology and Design Education*, pp.1-30.

Schoof, U., 2006. *Stimulating Youth Entrepreneurship: Barriers and incentives to enterprise start-ups by young people*. International Labour Organization.

Schumpeter, J.A., 1934. *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Shankar, R. 2012. *Entrepreneurship: Theory and Practice*. India: Tata McGraw Hill

Sharma, A., 2021. *Why India lags behind in imparting skills to its workforce* [online]. Available at: <https://www.dw.com/en/india-youth-lack-skills/a-56879385> [Accessed 1 January 2023]

Sharma, A.N., 2022. Youth employment and unemployment in India: Issues and challenges. *The Indian Journal of Labour Economics*, 65(2), pp.237-267.

Shukla, S., Tanuku, K., Bharti, P. and Dwivedi, A., 2021. *Global entrepreneurship monitor 2019/20: India report*.

Sontsele, N., 2020. *The influence of entrepreneurship education on business performance and entrepreneurial self- efficacy of township entrepreneurs in Gauteng, South Africa*. Doctoral dissertation. University of the Witwatersrand.

Statista, 2022. *India: Youth unemployment rate from 1999 to 2021*. [online] Available at: <https://www.statista.com/statistics/812106/youth-unemployment-rate-in-india/> [Accessed 1 January 2023]

Statista, 2022. *Global youth unemployment rate from 2000 to 2020*. [online] Available at: <https://www.statista.com/statistics/269636/global-youth-unemployment-rate/> [Accessed 30 Jan 2023]



Sulin, C. and Tiwari, A., 2020. The Development of Entrepreneurship in India–Central Government-led Initiatives. *International Journal of Economics and Business Administration*, 6(1), pp.18-22.

Timmons, J.A., Spinelli, S. and Tan, Y., 2004. *New venture creation: Entrepreneurship for the 21st century* (Vol. 6). New York: McGraw-Hill/Irwin.

Truelove, S., 1995. *Handbook of training and development*. Blackwell.

Vanevenhoven, J. and Liguori, E., 2013. The impact of entrepreneurship education: Introducing the entrepreneurship education project. *Journal of small business management*, 51(3), pp.315-328.

Volery, T., Müller, S., Oser, F., Naepflin, C. and Rey, N.D., 2013. The impact of entrepreneurship education on human capital at upper-secondary level. *Journal of Small Business Management*, 51(3), pp.429-446.

Wilson, F., Kickul, J. and Marlino, D., 2007. Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship theory and practice*, 31(3), pp.387-406.

World Bank, 2013. *Framing the Global Landscape of Entrepreneurship Education and Training Programs*. Washington, DC.

United Nations Department of Economic and Social Affairs (UNDESA), Population Division, 2022. *World Population Prospects 2022: Summary of Results*. New York.



Appendix A - Survey questionnaire

Full list of questions asked in the survey

- ✓ I consent to participating in this survey
- ✓ What is your age bracket?
- ✓ What is your sex?
- ✓ Do you identify as a member of the LGBTQIA+ community?
- ✓ Which state or union territory do you live in?
- ✓ Which city do you live in?
- ✓ What's your annual household income?
- ✓ What's your current profession?
- ✓ What's your highest level of completed education?
- ✓ Finish the statement "I have..."
 - [...an active business]
 - [...a business idea]
 - [...the skills and knowledge required to launch and run a business]
 - [...the interest to acquire (more) skills and knowledge to launch and run a business]
 - [...no entrepreneurial ambitions whatsoever ('yes' if you don't have entrepreneurial ambitions)]
- ✓ What stage are you at right now?
- ✓ In which industry is your business idea or active business present?
- ✓ Please self-assess your knowledge in each of these entrepreneurship-related topics
 - [Sales]
 - [Marketing]
 - [Product/service development]
 - [Organisation/team management]
 - [Legal]
 - [Sustainability]
 - [Business economics/financials]



- [Fundraising]
- [Business ideation/creation]
- ✓ If you are considering starting a business, what is the main reason for this?
- ✓ If you are NOT considering starting a business, what is the main barrier you face to not consider starting a business?
- ✓ Have you received any form of entrepreneurship education?
- ✓ Where and how did you receive the type(s) of entrepreneurship education?
 - [Course (Elementary school, 1-8th standard)]
 - [Course (Secondary school, 9-12th standard)]
 - [Course (Undergraduate level)]
 - [Course (Master's degree or higher)]
 - [Course (certificate/non-formal)]
 - [Incubator/accelerator programme (>1 month)]
 - [Incubator/accelerator programme (1-3 months)]
 - [Incubator/accelerator programme (3+ months)]
 - [Self-contained material (e.g. Google, YouTube, books)]
 - [Passed on knowledge (knowledge acquired from parents and/or relatives)]
 - [Network/community]
 - [Independent coaching (coaches/mentors not affiliated with any institution)]
 - [Other]
- ✓ Which institution(s) provided the entrepreneurship education?
- ✓ Which topic(s) did you receive entrepreneurship education in?
- ✓ Did you pay for the entrepreneurship education you received?
- ✓ If you paid for your entrepreneurship education, how much did you pay for it?
- ✓ Would you like to receive (more) entrepreneurship education?
 - If you answered 'Maybe / Not Sure', what are the conditions/requirements you feel need to be satisfied for you to consider receiving more entrepreneurship education?
- ✓ Please pick the topic(s) you would like to receive more entrepreneurship education in, to further improve your business idea/business



- ✓ Which medium do you think suits you best to receive entrepreneurship education?
- ✓ Do you know where to turn, if you want to receive (more) entrepreneurship education?
- ✓ If you know where to receive entrepreneurship education, which institution(s) or which resource would you turn to receive further entrepreneurship education?
- ✓ If you DON'T know where to receive entrepreneurship education, what is the main reason for this?
- ✓ In order for you to consider paying for entrepreneurship education, what would be necessary?
- ✓ Would you access more entrepreneurship education if someone else paid for the entrepreneurship education?