Exploring the Transition Gap – A Processual Model of Contextual Influences on Students' Engagement in Entrepreneurial Activities

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List of Abbreviations

EE	Entrepreneurship Education
VIE	Valence, Instrumentality, and Expectancy
TPB	Theory of Planned Behavior

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Part 1: Rooftop Paper

1 Introduction

1.1 Practical Relevance

In light of the challenges presented by globalization and digitalization, there has been an increasing emphasis on fostering entrepreneurship within the educational sector (Schimperna et al., 2022). European policies have actively supported and promoted this trend among its member states (Núñez-Canal et al., 2023). By increasing the number of programs in entrepreneurship education in schools and, particularly, in Higher Educational Institutions (Commission/EACEA/Eurydice, 2016; Fayolle, 2013; Kuratko, 2005), policy makers have taken measures to include entrepreneurial aspects into the curricula of universities, and to provide appropriate facilities for supporting entrepreneurial endeavors (Ayob, 2021a). 19% of all students in Germany have participated in at least one course on entrepreneurship in their field of study so far with an upward tendency (Bendig et al., 2024). In contrast, only 10.7% of students are currently actively engaged in an entrepreneurial process during their studies (Bendig et al., 2024). However, comparing on a global level with insights form 57 countries, Germany ranks sixth-worst from the bottom regarding entrepreneurial activities of nascent and active student entrepreneurs (Sieger et al., 2024). This disparity highlights the need for further investigation into student entrepreneurship. While a significant proportion of students already opts to take entrepreneurship courses and eventually develop entrepreneurial intentions (Lv et al., 2021; Martin et al., 2013), they do not translate their intention into action. However, entrepreneurship requires action. This discrepancy raises the question of why.

Student entrepreneurship has already been credited as important driver of economic growth, job creation and innovation (Bergmann et al., 2016; Ćoćkalo et al., 2020). Through their embeddedness in the university as a highly knowledge-intensive context (Link & Sarala, 2019; Politis et al., 2012), student ventures often exhibit a high level of knowledge intensity. Therefore, these ventures have the potential to transform the competitive landscape and exert significant influence on both society and economy. By bringing the knowledge out of the campus, student entrepreneurs act as important connectors between the university and economy, and they “play an

important role as promoters of knowledge-intensive entrepreneurship in regionally embedded innovation systems" (Politis et al., 2012: p.675). Not only from an economic, but also from a social perspective, students create value through social innovations in domains of health care, education, environment or regional development (Brunner & Schaeffer, 2024). Particularly sustainability is a topic which is strongly linked to student entrepreneurship ventures (Fritzsche et al., 2023). These student entrepreneurs have the potential to create organizational or social change, through the grassroots leadership of socially oriented student entrepreneurs (Mars, 2009). These examples highlight the relevance of student entrepreneurship for economy and society. Therefore, understanding why students, despite their exposure to entrepreneurship education and the development of entrepreneurial intentions, are not engaging in entrepreneurial activities is crucial.

1.2 Research Relevance

Researchers have also established the importance of student entrepreneurship. Nevertheless, despite the growing interest in student entrepreneurship, there remain significant research gaps. One notable gap remains the understanding of the transition from entrepreneurial intention to action among students. While many studies have focused on identifying factors that shape entrepreneurial intentions, particularly with regard to entrepreneurship education (Bae et al., 2014; Ceresia, 2018; Oosterbeek et al., 2010; von Graevenitz et al., 2010), the insights remain scattered and form a mosaic rather than a comprehensive picture. Despite the significant body of research, the gap is not yet fully explored. There is a continued need to delve deeper into these factors and, especially to consider contextual elements, as each potential entrepreneurial transition is highly context-specific.

Additionally, there is a scarcity of research on the external contextual factors that influence student entrepreneurship. Most existing studies have primarily concentrated on individual-level determinants (Ayob, 2021b), neglecting the overall setting the student is situated in (Bergmann et al., 2023). Yet, research suggests that the organizational context often influences the decision to start a business and the consequent entrepreneurial process (Åstebro et al., 2012). Addressing this gap can provide a more holistic understanding of student entrepreneurship and highlight the

importance of creating supportive ecosystems that encourage entrepreneurial activities.

Ultimately, there is still “limited knowledge about the extent to which student entrepreneurs are socialized into a certain way of thinking and behaving in relation to their start-up processes” (Politis et al., 2012: p.660). This knowledge gap hinders the development of effective support mechanisms tailored to the unique needs of student entrepreneurs. Consequently, further research is needed to uncover which and how contextual influences shape entrepreneurial decisions and behaviors among students.

1.3 Research Aim

Addressing the above discussed research gaps, the consequent research aim is to identify and analyze the contextual factors that influence students' decisions to engage in entrepreneurial activities and to understand how these factors shape their entrepreneurial behavior and outcomes. The thesis aims to answer the following research question: *Which contextual factors play a role and how do they influence students’ decision on engaging in entrepreneurial activities?*

Answering the research question presents a significant opportunity to gain valuable insights into the contextual aspects that influence students' transition from the classroom to real-world entrepreneurship. These insights are important for the development of entrepreneurship education programs but also, they can guide educational institutions in creating environments that nurtures students’ willingness to initiate and develop entrepreneurial ventures. Furthermore, understanding these factors is crucial for tailoring support institutions to meet the specific needs of student entrepreneurs effectively. With more than 70% of aspiring student entrepreneurs expressing a desire to utilize various entrepreneurial support services (Bendig et al., 2024), there is clearly a high demand for robust support infrastructures at universities. This demand underscores the importance of developing targeted support mechanisms that can facilitate the transition from entrepreneurial intention to action. By addressing the identified barriers and enhancing facilitators within the university context, policymakers and educators can significantly improve the entrepreneurial outcomes for students.

This study focuses on master students who have taken an entrepreneurship course in a German university, where they developed business ideas to near market-ready products or services. After the course ends, only a few teams chose to continue their projects, while many others abandoned their ideas despite initial enthusiasm and the development of entrepreneurial intention throughout the course. Unlike the iconic examples of U.S. student entrepreneurs, such as the founders of Facebook, Snapchat, and Dropbox, who often acted alone or in teams of two, without attending entrepreneurial classes and sometimes dropped out of university to pursue their ventures, this study examines students who follow their university curriculum. These students represent the majority of the student body, reflecting the growing interest in entrepreneurship courses. This research is particularly concerned with those who, though not fully committed to an entrepreneurial path, actively choose to take these courses. Due to the limited understanding of this group and their behaviors, this study refers to them as potential student entrepreneurs. The above-mentioned discrepancy in students' participation in entrepreneurship courses and their engagement in entrepreneurial activities, which is observable in Germany, makes the German case particularly interesting to investigate.

1.4 Structure of the Rooftop Paper

In order to answer the overall research question, this introductory paper is structured as follows: The next chapter introduces the conceptual background of this work. The research context student entrepreneurship will be presented. Furthermore, the concept of the transition gap will be explained and an overview of the student entrepreneurship environment will be given, broken down into three levels: individual level, course level, and university level. In chapter 3, the overall methodical approach will be outlined. Furthermore, the chapter briefly presents the methodological approach as well as a brief outline of the three articles that are core to the dissertation. An overview including information on co-authorship and publication/submission details is given in Appendix 2. The articles aim to answer the research question on different levels.

Article 1: *Student Entrepreneurship – The Impact of University Environment on Students' Starting Conditions (Phuong & Freiling, 2022)* is a conceptual paper

which links the entrepreneurial constructs regarding the venture foundation process to the literature on Higher Educational Institutions and bordering topics. Research propositions were developed by connecting these two topic streams through causalities. The paper provides insight on the university setting as well as the student setting, and consequently, contribute to answering the research question on university level.

Article 2: *Bridging the Gap – Exploring students' entrepreneurial decision-making from classroom to reality (Phuong, under review)* is an empirical paper which sheds light on the impact of the preceding entrepreneurship education course, leading the students into the transition stage where the decision of continuing or dropping the idea takes place. The paper offers insights which answers the research question on course level and also contributes to the insights on individual level.

Article 3: *The Significance of Team Dynamics in Students' Entrepreneurial Decision-Making (Phuong, forthcoming)* tackles the research question through a team dynamic perspective as it explores how team dynamics influence students' decisions to either pursue or abandon a business idea following their participation in an experiential entrepreneurship course. Therefore, the article enables to incorporate the factor team in the equation.

Chapter four seeks to highlight the relevant factors for addressing the research question at multiple levels within the university context: university level, course level, team level, and individual level, drawing from the insights of the three articles presented previously.

Chapter five engages in the discussion of the factors and findings outlined in chapter four, examining the interplay between them and analyzing them from a broader perspective.

Lastly, chapter six concludes the thesis by presenting the research contribution, limitation and implication, as well as providing a future outlook for research.

2 Conceptual Background

2.1 Student Entrepreneurship

2.1.1 Definition and Characteristics of Student Entrepreneurship

The understanding of student entrepreneurs is very widespread, particularly regarding the criteria for identifying when a student qualifies as a student entrepreneur, and these perceptions can vary significantly: Some researchers consider a student entrepreneur as someone already generating revenue with their business, emphasizing the operational aspect, such as Marchand et al. (2015) who characterize student entrepreneurs as "individuals attending award classes at university and conducting innovative and revenue generating entrepreneurial activities" (Marchand et al., 2015: p.270). In this context, revenue generation is a necessary criterion for being a student entrepreneur. On the other hand, other researchers adopt a broader perspective, incorporating those who are in the early stages of exploring entrepreneurial ideas (Hägg & Kurczewska, 2019; Holienka et al., 2017). This thesis also adopts the more inclusive definition of Ayob (2021) stating that student entrepreneurship encompasses "the attempt (nascent) to, or eventual (active) start-up initiated by one or several students during their academic career" (Ayob, 2021: p.748). This broader definition allows the thesis to include students that are still in their pre-founding phase and conduct entrepreneurial activities without having formally founded a business yet. For a more nuanced approach on entrepreneurial engagement, Van der Zwan, Thurik, and Grilo (2010) differentiate five engagement levels in the entrepreneurial process: "never considered starting a business"; "thinking about starting a business"; "taking steps to start a business (nascent entrepreneurs)"; "running a business for less than three years"; and "running a business for more than three years" (Van Der Zwan et al., 2010). In the light of this metaphorical entrepreneurial ladder, the students being subject to this research, can be found on the second and third stage.

Student entrepreneurship has a unique context (Bergmann et al., 2016). After mostly focusing on internal contextual factors, such as individual-level determinants when investigating student entrepreneurs (Martin et al., 2013), literature has

slowly shifted its focus to look at external contextual factors. There are several features that differentiate students from other groups of entrepreneurs.

The first feature affecting student entrepreneurship is age (Schimperna et al., 2022). Students are usually younger. This does not refer to specific numerical data or age limits, but rather to the characteristics typically associated with youth. This younger age implies a greater adaptability and openness to new ideas and innovations (Álvarez-Herranz et al., 2011). However, it also means they may lack the maturity and life experience that can be crucial in navigating complex business challenges. Younger entrepreneurs might be more prone to risk-taking, which can be both a strength and a vulnerability, depending on the context of their ventures (Shirokova et al., 2016). Second, students have a lower human and social capital (Delanoë-Gueguen, 2016) as they are still in the stage of developing and forming human and social capital that is strongly influenced by the university environment (Bergmann et al., 2016). Third, student entrepreneurs generally lack resources (Longva, 2021), as they often face the challenge of balancing their academic responsibilities with the demands of launching a business. This dual commitment can lead to significant time and resource constraints, making it difficult for them to combine both areas. Furthermore, they have fewer professional experiences and networks, and lack experiences and knowledge of the professional world (Clarysse et al., 2022; Kaandorp et al., 2020), which reduces their legitimacy with potential investors and partners (Delanoë-Gueguen, 2016). This lack of professional experience can hinder their ability to find relevant stakeholders, and make informed business decisions. The absence of established networks further limits their access to partnership opportunities, placing them at a disadvantage compared to more experienced entrepreneurs. In another line of reasoning their lack of industry experience also implies that university and family may play a greater role for their entrepreneurial propensity compared to people that are at a later stage of their professional career (Bergmann et al., 2016). Considering that many students have experienced a substantial transition from school to university, often combined with a gradual process of distancing themselves from familial structures (Phuong & Freiling, 2022), this again underscores the relevance of the university context.

Upon closer profiling of student entrepreneurs engaged in business, social, environmental, and sustainable projects, Brunner and Schaeffer (2024) investigated students' individual features and found that they were mostly on a master level, while aspiring entrepreneurs tend to be found on bachelor level. Their entrepreneurial projects focused in the sectors digital, health, agriculture and culture, showing a broad range of interest in these fields. Schimperna, Nappo and Marsigalia (2022) have conducted a systematic literature analysis on the role of universities in student entrepreneurship in business, management, and accounting fields of study, and identified three major research areas: i) student entrepreneurship and entrepreneurial intention; ii) university support for entrepreneurship, and iii) entrepreneurship education and learning (Schimperna et al., 2022). These aspects sum up the context of student entrepreneurship and therefore, will also be relevant for answering the research question of the thesis. As a consequence, those aspects will be covered in the following part of the conceptual background.

2.1.2 Students' Transition Gap

The influence of entrepreneurship education on students' entrepreneurial intentions has been extensively studied as intention is often used to determine entrepreneurial activity (Fayolle et al., 2014). However, scholars have raised skepticism regarding the fundamental assumption that intentions reliably predict subsequent entrepreneurial behavior. Entrepreneurial intention does not always lead to entrepreneurial activity (Kautonen et al., 2013). The transition can underlie various reasons (Shirokova et al., 2016). Especially the unique context of student entrepreneurship opens up many aspects to consider, as the dynamics of their educational environment, balancing academic commitments and uncertainties create a complex interplay. To unravel the process, it is crucial to examine the external factors at play and how these factors influence and especially impede the process. Entrepreneurial intention in its most straightforward (and most cited) definition is the intention of an individual to start a new business (Krueger et al., 2000). Based on two consecutive systematic literature reviews of Liñán and Fayolle (2015) and Donaldson (2019) on the topic of entrepreneurial intention, covering research between the years 2004-2018, further dimensions have been added to induce more perspective to the concept. Building on those the insights that stem from the current research, Donaldson

(2021) provided an updated definition, where entrepreneurial intention is understood as “temporally embedded mindful willingness to engage in deliberative processes that both affect and are affected by context” (Donaldson et al., 2021: p.32). This updated definition emphasizes the dynamic and context-dependent nature of entrepreneurial intention, recognizing that it is not a static decision but an ongoing process influenced by temporal and situational factors. It reflects a more holistic understanding of how intentions evolve and interact with the surrounding environment over time.

Entrepreneurial action is defined as “behavior in response to a judgmental decision under uncertainty about a possible opportunity for profit” (Mcmullen & Shepherd, 2006: p.134). This definition highlights the inherent uncertainty and risk associated with entrepreneurial endeavors. It emphasizes that entrepreneurial action involves making decisions and taking steps despite the lack of guaranteed outcomes, often relying on the individual's judgment and perception of potential opportunities.

The transition gap, or sometimes called the intention-behavior gap, describes the fact that intent does not always translate into action (Shinnar et al., 2018). Researchers in this field have widely drawn upon the Theory of Planned Behavior (Ajzen, 1991) to study university students’ entrepreneurial behavior (Harima et al., 2021; Kautonen et al., 2013; Shirokova et al., 2016), as entrepreneurial intention serves as starting point for entrepreneurial actions (Krueger et al., 2000) and is a significant predictor of subsequent behavior (Kautonen et al., 2013). Nevertheless, understanding the transition from intention to actual behavior remains a challenge. Donaldson et al. (2021) highlight that the gaps in understanding arise since many studies have used cross-sectional methodology, which only provides a snapshot of the complete picture. This snapshot perspective is able to show correlational inferences, but not necessarily causal ones. As this approach collects data at a single point in time, it neglects events that occur before or after (Sniehotta et al., 2014), it is not able to capture the whole picture. In order to counteract these methodical limitations, researchers therefore stress the importance to give more considerations on the context (Donaldson et al., 2021; Zahra et al., 2014). This thesis addresses these concerns by focusing on contextual factors influencing students' decisions to engage in entrepreneurial activities.

2.2 Student Entrepreneurship Environment

2.2.1 The Role of University in Student Entrepreneurship

Not only entrepreneurship education per se, but overall, universities are catering to the demand of putting entrepreneurship to the foreground (Schimperna et al., 2022; Wright et al., 2017). Two of the most common measures taken by policy makers in this regard is the increase of entrepreneurship programs and courses, extra-curricular trainings and seminars (Morris et al., 2017; Pittaway & Cope, 2007; Walter et al., 2013) and creating a support infrastructure for entrepreneurship within universities (Schimperna et al., 2022), including the use of business simulations (Samašonok et al., 2020), the set-up of business incubators and accelerators (Covelli et al., 2020; Purwaningsih et al., 2017), grants and business plan competitions (Wright et al., 2017). A positive relationship between a favorable university environment and students' start-up activities has already been identified (Shirokova et al., 2016).

As literature on entrepreneurial ecosystems gains prominence, it acknowledges universities as a crucial element of an entrepreneurial ecosystem (Stam & Spigel, 2017). Building on this idea, another emerging research stream suggests that the university environment itself can also be conceptualized as a potential entrepreneurial ecosystem (Fetters et al., 2010; Lahikainen et al., 2019; Morris et al., 2017). Relevant stakeholders include students, alumni, university staff, all operating university institutions, and public authorities, which have to be connected and coordinated to function well and to contribute to the development of an entrepreneurial culture (Jansen et al., 2015; Matt & Schaeffer, 2018).

More recently, scholars have also directed their attention on the macro-level factors, such as Ayob who investigated how institutions affect student entrepreneurship (Ayob, 2021b, 2021a). Specifically, effects of macro-factors, such as economic conditions, entrepreneurial culture, entrepreneurship education, were tested in the context of university students. Findings show that cultural and educational factors were dominant stimulators, in contrast to the macroeconomic environment which had less impact (Ayob, 2021b). However, it is noteworthy that the study solely incorporated data from active student entrepreneurs who were already operating their businesses at the time of data collection, thereby excluding potential and nascent

student entrepreneurs. The exclusion of potential and nascent student entrepreneurs presents a significant gap in understanding the full spectrum of factors that influence the entrepreneurial journey. By only focusing on those who are already active, important insights into the initial stages of entrepreneurship and the challenges faced by those considering or just starting their entrepreneurial ventures are missing. Therefore, this thesis will focus on this specific group to fill the gap.

Students' inclination to be entrepreneurial however is not only affected the university environment, but also from national culture and society's perception of how desirable entrepreneurial behavior is (Shirokova et al., 2018). Within the university environment, researchers found that students originating from countries with a high level of uncertainty avoidance tend to acknowledge the uncertainties associated with entrepreneurship and exhibit a lower inclination to pursue entrepreneurial initiatives compared to their counterparts from countries with low uncertainty avoidance (Bae et al., 2014). It is essential to consider this aspect, given that the current study explores the transition gap among students within a German university context, and Germany is characterized as one of the high uncertainty avoidance countries (Aly & Galal-Edeen, 2021). This may present unique challenges and dynamics influencing students' entrepreneurial aspirations and actions. However, it is important to note that the assumption that universities are collectivist environments, reflecting the broader societal values within which they operate (Shirokova et al., 2018) may not always hold true. Even within a single society, variations exist among universities, with some being more entrepreneurial than others due to their distinct focus, orientation, and consequently, the measures they implement. This university culture, being in closer proximity to the students, may play a pivotal role in shaping entrepreneurial attitudes. The university environment has the potential to balance out or even override the influence of national culture (Ayob, 2021a), acting as a significant factor in fostering entrepreneurial aspirations among students.

Fayolle and Liñán (2014) called for further research on the role of institutions and the university context regarding their impact on entrepreneurial behavior. Because even though researchers are unanimous that the university environment can both

constrain and enable entrepreneurial behavior, the extent of their impact still remains unclear (Morris et al., 2017).

2.2.2 Entrepreneurship Education and Intention

Entrepreneurship Education is the most prominent research field with regard to student entrepreneurship and one of the fastest growing areas of education (Solomon, 2007). This has resulted in a significant body of systematic literature reviews since the most prominent one of Pittaway and Cope on Entrepreneurship Education in 2007 (Pittaway & Cope, 2007). About the initial debate on whether entrepreneurship can be taught or not (Fiet, 2000; Henry et al., 2005), researches have shifted their focus on questions of education science in terms of: what, how, for whom, why and what goal entrepreneurship education aims to achieve (Jones & Matlay, 2011). Some of the current research streams in this field have focused on curricula contents (Thomassen et al., 2020) and teaching methods (Sirelkhatim & Gangi, 2015). A significant amount of research on entrepreneurship education dealt with the impact and effectiveness of entrepreneurship education programs (Matlay, 2008; Vanevenhoven, 2013), with partly contradicting findings. Examples of positive outcomes are an increase in entrepreneurial intentions (Bae et al., 2014) or increased optimism (Fayolle et al., 2006). On the contrary, e.g., Graevenitz, Harhoff, and Weber (2010) found a declining entrepreneurial intention despite receiving positive effects on students' self-assessed entrepreneurial skills (Oosterbeek et al., 2010; von Graevenitz et al., 2010). Reasons lie in the fact that students learn about their entrepreneurial aptitude. While students enhance their entrepreneurial skills and knowledge through entrepreneurship education programs, they also become more aware of their own strengths, weaknesses, and personal preferences related to entrepreneurship, which consequently, can impact their intentions to pursue entrepreneurial endeavors negatively. Bordering on the issue of the impact of entrepreneurship education, existing literature has mainly investigated the intention-behavior gap of student entrepreneurs (e.g., Shirokova et al., 2016). These students develop entrepreneurial intentions through entrepreneurship education at the university but fail to translate these intentions into action. For instance, Harima et al. (2021) found that students encounter substantial challenges after entrepreneurship

programs, which invoke procrastinating behaviors which hinder them from founding the business (Harima et al., 2021).

Entrepreneurial education aims to promote three types of learning: first, enabling individuals to develop an enterprising mindset; second, equipping potential entrepreneurs with the necessary skills and knowledge; and finally, preparing individuals to become an academic or teacher in the field of entrepreneurship (Fayolle & Gailly, 2008). At the moment, entrepreneurship education is undergoing a methodological shift. Nowadays entrepreneurship courses are emphasizing learning through entrepreneurship which builds upon experiential and action-oriented pedagogies (Bell & Bell, 2016; Lackéus, 2020). These experiential formats, which often involve students collaborating in teams, allow students to experience the entrepreneurial learning which usually takes place in the venture creation process. Thus, experiential entrepreneurship education can be defined as "a form of participative learning that seeks to emulate the contexts faced by entrepreneurs by having students interact with potential customers, partners and suppliers to identify and develop a business opportunity while practicing and developing their entrepreneurial competencies" (Pazos et al., 2022: p.462). As part of this research, the context of an experiential entrepreneurship course will also serve as research setting.

2.2.3 Student Teams in Entrepreneurial Education

While the entrepreneurship classroom attempts to mimic the entrepreneurial process as closely as possible, it becomes obvious that differences already start with the formation of the teams, as it is mostly being organized by an instructor and confined in space and time (Warhuus et al., 2021). Students are limited to choose their members within the course participants knowing neither strengths and weaknesses, nor skills, motivation or mindset with which their peers have entered the course. This diversity also extends to varying levels of entrepreneurial competence among the students (Chlebiej, 2022). The entrepreneurship classroom then requires the newly formed teams to work towards a common goal of developing innovative solutions to real-world problems (Lackéus, 2020). In this stage, teamwork competences, such as communication, decision-making and problem-solving can play a crucial role for successful collaboration (Brinckmann & Hoegl, 2011; Spik, 2020). Conceptually, "team dynamics are embedded within team performance and are

comprised of a set of these interrelated attitudes, shared behaviors, and cognitions, all of which contribute to the dynamics processes of performance" (Delice et al., 2019: p.3). Team dynamics and interactions among members constantly fluctuate and are influenced by different external and internal factors, such as gender composition (Apesteguia et al., 2012) or the diversity of people involved in general (Ko et al., 2021), the complex interplay of interpersonal relationships, communication patterns, and collaborative processes within a group (Neumeyer & Santos, 2019). In the context of student teams in entrepreneurship education, the dynamics become particularly crucial as they influence how individuals collectively navigate challenges, make decisions, and contribute to the overall success of entrepreneurial projects (Brinckmann & Hoegl, 2011). Pazos et al. investigated student teams in experiential entrepreneurship courses and found that teamwork competencies as well as intragroup conflicts have direct influence on the team's performance. Consequently, teams with a combination of low interpersonal conflict and high cognitive conflict were likely to perform better (Pazos et al., 2022). Chen and Agrawal (2018) evaluated students' team behavior during different stages of team development. Their findings show that in the early stages, an entrepreneurial leader is central for directing the teams' behavior proactively. Interestingly, and partly contradicting to Pazos et al., their analysis showed that lower levels of task conflict reinforce the impact of leadership on team cohesion (Chen & Agrawal, 2018). The potential explanation for this contradiction could be rooted in the dynamics of conflict within student teams. As task conflicts increase within the team, it may lead to heightened tension which may spill over to other forms of conflict, such as relationship conflict (Tekleab et al., 2009), which encompasses personal and interpersonal disagreements unrelated to the task at hand. In such a scenario, the positive effects of cognitive conflict on team performance as noted by Pazos et al., may be overshadowed by the negative consequences of increased relationship conflict, impacting the teams' cohesion. However, understanding team dynamics goes beyond acknowledging the presence of conflicts or harmonious relationships. It involves delving into the underlying factors shaping these dynamics. Elements such as team cohesion, leadership styles, and the distribution of roles and responsibilities all contribute to the overall team dynamics and consequently, effectiveness (Spik, 2020). As

team dynamics are not static, they evolve over time based on the team's experiences, challenges faced, and shared accomplishments (Delice et al., 2019; Kozlowski & Ilgen, 2006). Recognizing the dynamic nature of teams is crucial for understanding how these dynamics impact decision-making beyond the initial stages of team formation (Tekleab et al., 2009).

Ben-Hafaïedh (2017) identified three main stages of entrepreneurial teams, which are i) forming, ii) functioning, and iii) evolving (Ben-Hafaïedh, 2017a). While research on entrepreneurial teams primarily focused on the formation of entrepreneurial teams (D'hont et al., 2016; Lazar et al., 2020), team compositions (Jin et al., 2017) or teams in relation to their performance (Kollmann et al., 2017; Zhou & Rosini, 2015), the overall constellation of the team has shown a tendency to remain unchanged. However, the unique aspect is that student teams in an entrepreneurial course setting have not yet established fixed formations, meaning, they are "individuals who are still in the process of launching a new business with unknown end results" (Ilonen, Heinonen and Stenholm, 2018: p.60). The related uncertainty applies not only to the business idea but also to the future of the team itself. It remains unclear whether the team will continue working on the project after the course or, continue in a different team formation, or disband once the course concludes.

Despite the significance of student teams in entrepreneurship education and student entrepreneurship (Phuong, forthcoming), the team aspect still remains largely unaddressed in current research considerations.

2.2.4 Influence of Personal Characteristics on Entrepreneurial Intention

The influence of personal-level variables on entrepreneurial intention is a significant aspect of entrepreneurship research. Factors such as personality traits, prior entrepreneurial experience, educational background, and socio-cultural context all play crucial roles in shaping individuals' intentions to engage in entrepreneurial activities. While scholars agree that personal characteristics influence entrepreneurial intentions and particularly explain a substantial proportion of student entrepreneurship (Bergmann et al., 2016), there are contradictory findings on which characteristics are relevant in this respect.

In the earlier systematic literature review on entrepreneurship education, conducted by Pittaway and Cope (2007), gender was only a minor factor impacting the intentionality of students, with male students show greater interest in an entrepreneurial career path. However, this aspect has now gained more significance. Several researchers have explored and acknowledged the gender-related effects and differences in entrepreneurship education with regard to students' entrepreneurial intentions (Bae et al., 2014; Hsu et al., 2014; Murnieks et al., 2020; Oosterbeek et al., 2010).

Recent studies have suggested that gender differences are more prevalent during the decision-making stages while considering to start a business (intention) rather than the business activity stage (Reissová et al., 2020; Verheul et al., 2012). Similar conclusions have been drawn by Maes, Leroy and Sels (2014) who investigated how gender affects drivers on entrepreneurial intentions. Employing the TPB model, they found that women tend to view entrepreneurship as a way to maintain autonomy and balance work and family responsibilities, while men tend to see it as a career path to achieve wealth. Furthermore, women generally show a lower level of perceived internal control compared to men (Maes et al., 2014). This may stem from the stereotype that entrepreneurial skills are rather associated with men, making women feel less confident in their abilities, and consequently, display a lower entrepreneurial intention (Wilson et al., 2007). This shows crucial gender differences in the factors that shape entrepreneurial intentions.

Despite the traditional research concentrating on inherent traits and demographic variables when talking about individual-level factors, this thesis adopts a broader and more dynamic perspective on those factors. Rather than focusing solely on static traits and demographic characteristics, it delves into how students' internal perceptions, behaviors, and motivations interact with their environment to shape their entrepreneurial decisions. This approach acknowledges that entrepreneurial decision-making is not just a product of inherent traits but is also significantly influenced by ongoing processes of adaptation and response to external stimuli.

3 Methodical Design

3.1 Research Philosophy and Research Design

This study adopts a social constructivist/constructionist epistemology. Social constructivism/constructionism posits that our understanding and knowledge are socially constructed (Gergen, 1985; Pryce et al., 2014). While *social constructivism* focuses on the internal cognitive processes on individuals within a social context, and is "more concerned with how individuals mentally construct their worlds with categories supplied by social relationship" (Denise Fletcher, 2007: p.164), *social constructionism* emphasizes on the collective aspects of meaning making (Samy & Robertson, 2017). Despite their complementary notion, both approaches seem similar as literature often uses both terms interchangeably because of their focus on sense-making (Mcnamee, 2004). Employed to the entrepreneurship context, social constructivism poses the question on how entrepreneurial activities are constructed through individual cognitive processes in a social context (Fletcher, 2007). Given that entrepreneurship, and particularly student entrepreneurship is highly context-specific (Bergmann et al., 2016) and the social dimension is highly relevant to students' decision-making processes, adopting a social constructivist/constructionist perspective offers valuable insight into the interplay between individual cognition and their interactions with others.

The purpose of this research is to gain an in-depth understanding of the contextual factors revolving students' entrepreneurial transition gap. The devotion of necessary attention to contextual dynamics in the process is missing thus far. Therefore, the study employs a qualitative research design, as qualitative research serves the purpose of in-depth analysis and is particularly advantageous to research topics about which little is yet known (Marschan-Piekkari & Welch, 2004; Strauss & Corbin, 1990). In contrast to quantitative researchers who seek causal determination, prediction, and generalization of findings, qualitative researchers look for illumination, understanding, and extrapolation to similar situations (Golafshani, 2003). Qualitative research is therefore suitable to grasp complex processes, such as students' decision-making process in maneuvering the transition gap. Qualitative

research focuses on how things operate within specific contexts, with certain people, at certain points in time. Qualitative studies are characterized by their interpretive, experiential, situational, and personalistic nature (Stake, 2010). Given the experiential nature of this study, it is empirical and field oriented, and thus, stems on the observations by the researcher. It is further personalistic, as it is empathic and works to understand the students' individual perceptions by seeking their point of view, frames of reference, and value commitments, and consequently, gain a deep understanding on how the students feel and perceive the situation regarding a potential entrepreneurial undertaking. The study is situational, as it is situated in a unique set of contexts which this study aims to analyze in detail. Lastly, the study is qualitative, as it delves into the meanings of human affairs from various perspectives. These criteria allow a holistic and contextual view on the phenomena which would not be possible when using a quantitative approach (Marschan-Piekkari & Welch, 2004).

Consequently, in alignment with qualitative research and the adapted epistemology, the study follows an interpretivist paradigm. This paradigm recognizes the existence of multiple realities, embracing the notion that the researcher is comfortable with multiple meanings (Packard, 2017). Furthermore, it acknowledges the fact that research findings are researcher-subject interactions which calls for the researcher, being most responsible for interpretations, to be present in the field making observations and iteratively refining interpretations throughout the research process. Doing so, calls for alertness and thoughtfulness regarding certain aspects. As expressed earlier, empathy plays a crucial role in interpreting data as it facilitates a deep level of understanding which is necessary for interpreting the subjective experiences and perspectives of research participants (Gair, 2012). According to the Cambridge dictionary, being empathic means being able to "share someone else's feelings or experiences by imagining what it would be like to be in that person's situation" (Cambridge Dictionary, 2024). The researcher needs to be aware of, and sensitive to the complex perceptions of individuals within their unique contexts, allowing for a richer and more nuanced analysis and interpretation of the data. Another aspect is the importance of context and situations, referring to the "particular places, times, social backgrounds, communication styles, and other backgrounds for the activities

and relationships being studied" (Stake, 2010: p. 52). Context is a fundamental consideration in qualitative research, as it encompasses a multitude of factors that shape the experiences and interactions of individuals within a given setting. Understanding the contextual factors at play is essential for interpreting qualitative data, as contextual elements all contribute to the meaning-making process of individuals and groups. It provides insight in to the nature of human behavior. As the researcher works within the university setting and is actively involved in entrepreneurial courses, the researcher is well acquainted with the scene under the investigation. This proximity to the research context further not only provides the researcher with firsthand knowledge of the dynamics within the university but also facilitates a deeper level of engagement with the participants and their experiences. Being embedded within the setting, the researcher gains valuable insights that may not be accessible to an outsider, allowing for a more nuanced interpretation of the date.

3.2 Method-Oriented Overview of the Three Papers

Article 1: *Student Entrepreneurship – The Impact of University Environment on Students' Starting Conditions (Phuong & Freiling, 2022)* is a conceptual paper with a deductive approach. The article is guided by the research question: How does the university environment impact students' entrepreneurial starting conditions? As there was no common theory addressing the setting entirely, the paper links the entrepreneurial constructs regarding the venture foundation process to the literature on Higher Educational Institutions and bordering topics. This way, the paper synthesizes prior knowledge and generates causalities deductively, building on established concepts. Eight research propositions were developed, enriching the understanding of the entrepreneurial process through incorporating student-relevant aspects that have been derived from their embeddedness in the university environment. The paper provides insight on the university setting as well as the student setting, and consequently, contribute to answering the research question on university and on individual level.

Article 2: *Bridging the Gap – Exploring students' entrepreneurial decision-making from classroom to reality (Phuong, under review)* is an empirical paper, employing

an inductive approach. The paper investigates the impact of the preceding entrepreneurship education course as the starting point that leads the students into the transition stage in which they decide whether to pursue or abandon entrepreneurial endeavors. The paper addresses the research questions: How does the decision process look like? And, what factors influence students' decision to transit their entrepreneurial project from classroom to reality and how? The study takes place within the context of an experiential entrepreneurship education program for master's students at a German university. Individual semi-structured interviews were conducted with two members of each startup team, in order to get a grounded insight into their project work. Based on the research setting, the selection criteria were master students who had previously attended the course in recent years. Specifically, teams were chosen that showed a high conviction in their entrepreneurial project. The further selection criteria include the development of entrepreneurial intention during the course which has been confirmed in a first conversation prior to the interviews. This ensured that the selected teams had a solid foundation regarding their team work and a certain level of commitment among their members towards the project's development and a successful performance in the course. The data collection took place between late 2020 and spring 2021 in face-to-face settings or via video chat. The duration of interviews ranges between 45-80 minutes. Twenty semi-structured interviews, direct observations, and secondary data in form of presentation material and media coverage served as data base for the subsequent analysis. The Gioia method (Gioia et al., 2013) was employed for a systematic approach to structure the data and to provide clear visualization of the data. The study presents eight research propositions that provide insight into the mechanisms at both the course and individual level that influence students' decision-making regarding the transition gap.

Article 3: *The Significance of Team Dynamics in Students' Entrepreneurial Decision-Making (Phuong, 2024)* draws on the same data sample as Article 2. The paper also follows a qualitative inductive approach, tackling the research question: How do team dynamics impact students' entrepreneurial decision-making and outcomes? The data set has been revised and re-coded through a team dynamic lens. Seven research propositions have been developed, unveiling the interplay between team

dynamics and individual decision-making. The study contributes to the current literature by offering a nuanced perspective on how collaborative contexts, and therefore particularly team dynamics, influence students' willingness to extend entrepreneurial projects yond the classroom. The paper contributes the team perspective in answering the overarching research question.

Startup	Startup Idea	Startup Status	Gender	Age
Startup A	Medical Innovation	Ongoing	Male Female	28 28
Startup B	Medical VR App	Dropped	Female Female	27 26
Startup C	Digitalisation Platform in Logistics	Dropped	Male Male	27 27
Startup D	Recruitment App	Ongoing	Male Male	23 25
Startup E	Social Startup	Dropped	Female Female	24 26
Startup F	Lifestyle Gadget	Dropped	Male Female	28 27
Startup G	Sustainable Product	Dropped	Female Female	23 25
Startup H	Healthy Food Box	Ongoing	Female Female	25 24
Startup I	Sustainable Packaging	Ongoing	Female Male	25 25
Startup J	International Baking Box	Dropped	Female Female	25 24

Table 1: List of Interviewees for Article 2 & 3

3.3 The Relation of the Rooftop Paper and Contributing Articles

In order to answer the research question, the rooftop paper draws on the insights of the three articles which are considered for the cumulative dissertation. The articles each have their own research questions but shed light on the overarching topics on different levels: the university level, the course level, the team level and the individual level.

These four levels have developed during the research process. The university dimension, course dimension and individual dimension have been identified as relevant dimensions through the literature review but also have been confirmed through the own data set collected for the empirical papers. As the data collection and analysis progressed for the second paper, a significant finding emerged that the team

aspect plays a more prominent role in students' entrepreneurial decisions than expected. This unforeseen finding led to the formation of the third paper, as well as the inclusion of the team level as a distinct focus of the study.

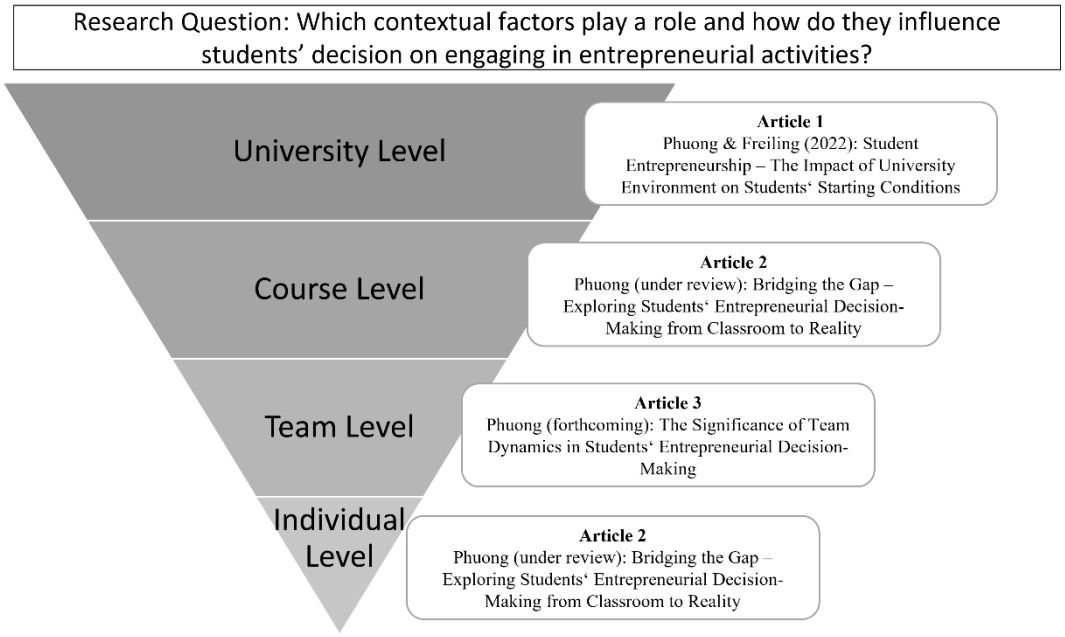

Figure 1: Research Question and the Relation to the Papers of the Dissertation (Own Illustration)

This methodology underscores the dynamic nature of qualitative research, where the research process evolves in response to emerging insights and unexpected findings. By remaining open to new possibilities and adapting our approach accordingly, the thesis aims to provide a comprehensive understanding of the contextual factors shaping students' decisions to engage in entrepreneurial activities. To maintain the quality of empirical research as well as the validity of the study's findings, several measures have been taken to ensure data triangulation (Denzin, 1970). The procedures are outlined in detail in Papers 2 and 3.

RQ: Which contextual factors play a role and how do they influence students' decision on engaging in entrepreneurial activities?		
Paper	Research Questions	Contributions
Paper 1	How does the university environment impact students' entrepreneurial starting conditions?	• Offering causalities on the impact of the university environment on students' entrepreneurial engagement • Providing insights to answer the RQ on university level

Paper 2	How does the decision process look like? And, what factors influence students' decision to transit their entrepreneurial project from classroom to reality and how?	• Outlining the contextual setting after the entrepreneurship course's end • Shedding light on the impact of the preceding entrepreneurship education course • Investigating the decision-making process in the light of the expectancy lens • Deriving insights on individual level factors • Providing insights to answer the RQ on course and individual level
Paper 3	How do team dynamics impact students' entrepreneurial decision-making and outcomes?	• Exploring the influence of team dynamics on students' decision-making • Providing insights to answer the RQ through a team perspective

Table 2: Alignment of Research Questions and Contributions Regarding the Overall Research Question

4 Contextual Factors in Students' Entrepreneurial Decisions

4.1 Factors on University Level (Paper 1)

Although establishing ventures is a concern that involves society as a whole, campuses can serve as significant catalysts for startup entrepreneurship (Jansen et al., 2015). The exchange of ideas between students and academics, coupled with a comprehensive learning environment that imparts knowledge on contemporary societal, environmental, cultural, and technical issues, can create a fertile ground for students inclined toward entrepreneurship. Furthermore, this environment may stimulate students and trigger bandwagon effects, encouraging other students to join entrepreneurial initiatives. The entrepreneurial starting conditions provided by the university environment, as explored in Paper 1, are directly relevant to understanding students' decisions to engage in entrepreneurial activities. Upon entering the university and engaging in its everyday life, the students become embedded in the university structure. Students can be "shaped by professors and student peers within and beyond the classroom as well as by an array of organizations and social structures inside and outside of universities" (Mars et al., 2008: p. 693). Given that students are embedded in the university context – with the university playing a central role in their lives – the exposure to different factors impacts their entrepreneurial conditions and behavior, including the decision whether or not to engage in entrepreneurial activities. These factors apply to all students and thus, allow a broader understanding for nascent and potential student entrepreneurs.

University environment in this context is understood as the internal and external factors that relate to being a student at a university from a student's viewpoint. As environmental factors include formal and informal elements (Liñán et al., 2011), this encompasses all influences exposed to and involved in the university, as well as tangible and intangible assets and experiences provided by the university. Looking at the university environment, the relevant factors can be arranged into two main categories: university setting and student setting. The university setting comprises factors related to the university factors. The factors encompass dimensions of i) interaction, ii) exposure to diversity, and iii) university entrepreneurial ecosystem.

The student setting includes two status factors, namely i) the university daily life, and ii) moratorium.

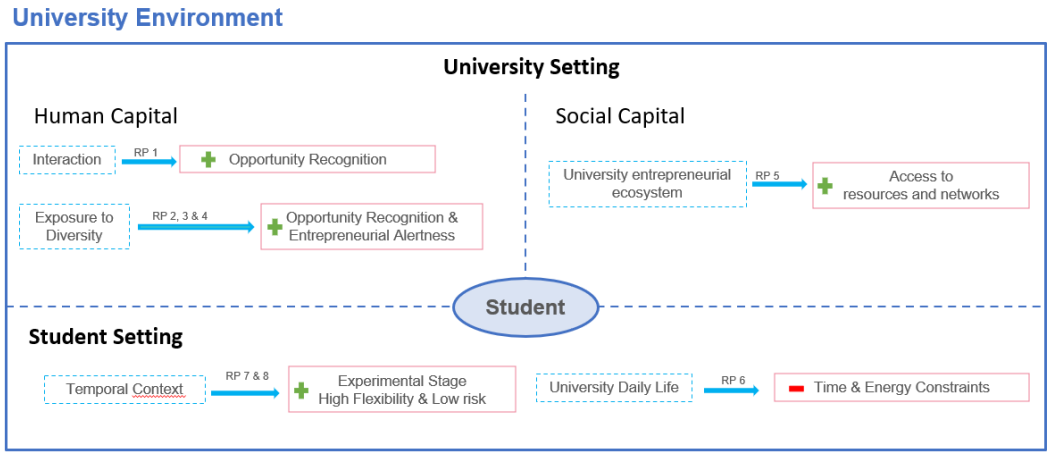

Figure 2: Impact of University Environment on Students' Entrepreneurial Starting Conditions (Phuong & Freiling, 2022)

4.1.1 University Setting

The university setting impacts students' human capital and social capital in a positive and specific manner. On human capital side, the university campus contributes to the development and refinement of students' skills in terms of critical and problem-solving thinking (Smith & Bath, 2006). Critical thinking, defined as the ability to effectively address social, scientific, and practical problems (Shakirova, 2007), holds significant value over students' capacity to identify opportunities and shape their startup ideas accordingly. First of all, the university campus provides manifold opportunities for students to get in touch with diversity. Gurin et al. (2002) differentiates between three types of diversity that can be encountered by students at the university: structural diversity, informal interaction diversity, and classroom diversity. Structural diversity describes the diversity within the student body in terms of their backgrounds in form of ethnicity, culture, religion, socioeconomic status, beliefs and so on. Informal interaction diversity relates to the extent and nature of students' informal interactions with peers. And lastly, classroom diversity encompasses the experiences within classroom settings, where students are exposed to a variety of knowledge and perspectives. This exposure to diversity, allows students to learn about perspectives and experiences that they have not yet come in touch

with, leading to knowledge gain, open-mindedness and social sensitivity which reinforces their entrepreneurial alertness and ability for opportunity recognition. Interaction with their peers and faculty staff further increases students' level of engagement with new ideas and viewpoints to a higher level.

While the left side of the figure (human capital) rather explains the reasons for students being advantageous, when it comes to opportunity recognition and entrepreneurial alertness, the social capital side, with the university entrepreneurial ecosystem as trigger, offers potential reasons that are relevant to answering the question why students may continue an entrepreneurial project. Beyond just human capital, the university entrepreneurial ecosystem provides students with various resources that offer substantial advantages for entrepreneurial pursuits. Similar to regional entrepreneurial ecosystems, viewing the university as an ecosystem has gained traction among researchers, due to its diverse contexts, stakeholders, and cultural, social, and material attributes fostering entrepreneurship (Spigel, 2017). A membership in the university offers numerous benefits beyond specialized knowledge, including access to state-of-the-art information, networks, experts in forms of faculty members and professions, research and experimental labs facilities and technical resources, workspaces etc. (Morris et al., 2017). Particularly noteworthy are the opportunities for students to participate in entrepreneurial-focused initiatives such as incubators, accelerators, competitions, and mentoring programs. These resources, often exclusive to students, provide a solid foundation for students' early-stage entrepreneurial activities.

This given infrastructure can positively impact students' transition of their business idea out of the classroom, as students are aware of the numerous entrepreneurial support institutions within their reach. The accessible resources not only lower the barriers to entry entrepreneurial activities but also reduce potential costs associated with accessing them.

4.1.2 Student Setting

Besides the university campus, the student setting itself encompasses the circumstances of university daily life and the temporal context, aspects that are often overlooked when examining the university environment. These two factors play a sig-

nificant role when looking at the overall stage of a student. Embedded in the university context, students are mostly occupied with their university daily life, which, combined with visiting courses, course-related obligations such as project work, and part-time employment, can impede their pursuit of entrepreneurial aspirations. Apart from academic commitments, a growing number of students engage in part-time work due to financial reasons, supporting lifestyle preferences, or to gain work experience (Bradley, 2006; Carney et al., 2005). Robotham (2012) observed that students engaged in part-time employment often have less time for academic pursuits and must cut back on leisure activities. These constraints have direct implications for students' entrepreneurial endeavors, as the time and energy consumed by part-time jobs limit their capacity to fully engage with and develop their business ideas. Consequently, the pursuit of entrepreneurial ventures becomes more challenging for students as they are already balancing academic responsibilities and part-time employment commitments.

Besides the academic duties, there is a high and increasing number of students doing part-time jobs for reasons of financial necessity, supporting a lifestyle, or to gather work experience. Robotham (2012) found that these students had less time for university and also had to cut down on leisure activities. These consequences also impact students' entrepreneurial undertaking, as part-time employment consumes valuable time and energy that a student could have otherwise invested in working on their business idea.

The temporal aspect concerns the stage in which student life is situated. It is the transitional phase between adolescence and adulthood, called moratorium. The moratorium, as defined by psychologist Erikson (1956), marks a crucial period, where individuals actively explore and develop their identities without making firm commitments. This phase, particularly prevalent among students, is characterized by a search for values, attitudes, and roles. Higher Education Institutions (HEIs) play a pivotal role during this time by providing an environment rich in opportunities for experimentation and self-discovery (Laird, 2005). Students in this transitional phase often experiment with entrepreneurial activities as they navigate various potential career paths. HEIs offer a conducive setting for such exploration, allowing students to test their entrepreneurial skills and interests. While the university

environment may not directly influence entrepreneurial aptitude, it exposes students to entrepreneurship, potentially sparking an interest in pursuing this path or continuing entrepreneurial endeavors in the future. Furthermore, the moratorium is also characterized by a certain disembeddedness for students entering university. Consequently, students often find themselves separated from familial support and substitute parental figures with new people that surround them, such as teachers or relatives. This detachment creates a space where students are free from familial obligations, allowing them to focus on relationships with peers, role models, friends, and partners. This detachment from familial responsibilities creates a sense of disembeddedness, allowing students to take greater risks in entrepreneurial endeavors. Unlike entrepreneurs with family financial obligations, students face comparatively lower risks, as failures do not have existential consequences for their families. This affords them greater flexibility in decision-making, as they need only consider their own risk tolerance. Without the burden of family concerns, students can pursue riskier ventures with potentially higher rewards.

While the university setting positively influences students' starting conditions with regard to human and social capital, and thus, the chances of students to start a business or to continue a business idea after an entrepreneurship course, the student setting offers insight to potential barriers and reasons, why students may not pursue their entrepreneurial ideas by the end of a course. Despite the supportive environment provided by the university, it becomes obvious that students face various challenges, stemming from being a student, that overshadow their interest to pursue their entrepreneurial idea. The demanding nature of university life, where students' daily routine requires them to attend numerous courses, fulfilling course-related obligations such as project work, and balancing these commitments with part-time employments or internships, leaves them with little time and energy to invest into an entrepreneurial project which is heavily time-consuming.

University Setting
Interaction **RP1:** Through interaction with faculty and peers, inside and outside the classroom, students develop the ability towards critical and problem-solving thinking which promotes proficiency for opportunity recognition.
Exposure to Diversity **RP2:** Diversity fosters knowledge gain and open-mindedness, which broadens students' prior knowledge base for opportunity recognition.
RP3: The exposure to diversity on campus fosters social sensitivity, which cultivates students' entrepreneurial alertness.
RP4: Diversity promotes social agency, which gives students the impulse for their opportunity recognition to be an active and conscious act.
University Entrepreneurial Ecosystem **RP5:** Being members of the university, students can almost freely draw on infrastructures and networks of the university entrepreneurial ecosystem, which grants them extensive access to resources and social capital and supports the initiation and unfolding of entrepreneurial initiatives.
Student Setting
Student Daily Life **RP6:** Through university-bound tasks and responsibilities, as well as part-time employment, students have less time to work on their business idea which decreases the likelihood to start entrepreneurial activities and not to abandon the process midway.
Moratorium **RP7:** The moratorium at the university grants students time and place to experiment and explore options and allows getting in touch which entrepreneurial paths that they have not considered before.
RP8: In a moratorium stage, students are less embedded in a family context and bear no financial responsibilities for family (members), which enables them to act more flexible regarding entrepreneurial decisions and take risks.

Table 3: The Impact of the University Environment: Research Propositions from Paper 1 (Phuong & Freiling, 2022)

4.2 Factors on Course Level (Paper 2)

While many researchers have focused on the impact of entrepreneurship education on students' entrepreneurial activities, Paper 2 investigates the course-reality mismatch that arises when students complete an entrepreneurship course. The disparity between the two settings during and after the entrepreneurial course demonstrate a course-reality mismatch.

Throughout the entrepreneurship course, students encountered a series of stimuli that catalyzed their entrepreneurial motivation and intentions. They successfully achieved various milestones and gathered substantial positive feedback, which not only validated their business idea but also instilled a sense of confidence and conviction in its potential. This realization, coupled with positive feedback from peers,

coaches, lecturers and an external jury at the final pitch event, further solidified their belief that their project was worth pursuing. The regular coaching sessions provided them with methodological guidance at every stage. Through ongoing discussions with their coach, they had the opportunity to review upcoming steps, thereby reducing the likelihood of significant errors. The course framework thus provided students with both a guiding structure and coaching, ensuring they remained oriented amidst the multitude of tasks involved in developing a viable business idea and model. Lastly, a good grade as outcome of a good performance served as major incentive to perform well. Therefore, students put great effort in their work.

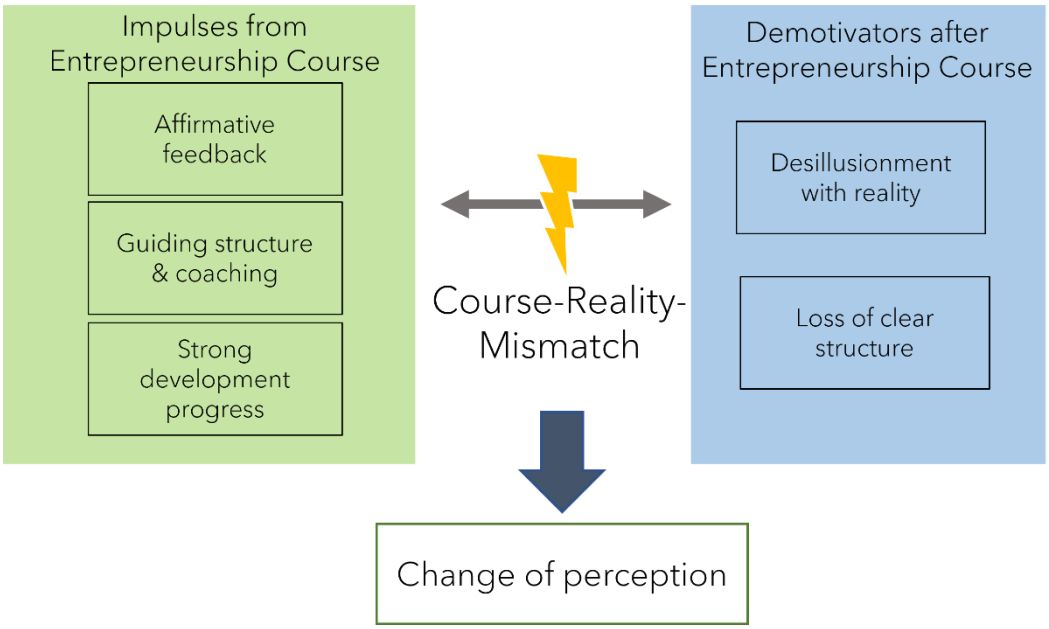

Figure 3: The Course-Reality Mismatch from Paper 2 (Phuong, submitted)

After the conclusion of the course, significant changes in routine occurred. Integrating the pursuit of their entrepreneurial project into their daily lives proved to be challenging. Firstly, the dedicated time and space provided by the entrepreneurship course for working on their ideas was not given anymore. Instead, new courses took up the time, leaving less time for entrepreneurial endeavors. They now had to use their own free time on top of university-related assignments. Secondly, the structured deadlines and milestones of the course were not existent anymore which left them without a roadmap that they could follow. Students became overwhelmed with navigating the number of tasks on their own which led to uncertainty about

how to proceed. The loss of clear structure weakened their motivation to continue entrepreneurial projects after the course. Additionally, the transition from the creative and enjoyable aspects of concept development to more mundane tasks, coupled with unforeseen challenges in implementation, led to frustration and disillusionment among teams.

The entrepreneurial project, often regarded as one of the most enjoyable aspects of the course, unexpectedly transformed into an added source of stress. Despite initially opting to pursue the project further, it began to feel burdensome and added to the students' responsibilities. Over time, doubts emerged among the students about the project's value and whether it warranted the investment of their time and effort.

The valence, instrumentality, and expectancy model (VIE model) of the expectancy theory has been employed to map the changes in circumstances students face upon completing the course.

	During the course	**After the course**
Expectancy *is the belief that if students act in a certain way, their efforts will result in the desired outcome*	The students make a great effort and go out of their comfort zones while working on their idea. Their goal is to develop a sound and promising business idea concept. Their goal is aligned with the assignment of the entrepreneurship course.	The student teams express doubts whether putting more time and energy into the project will lead them to overcome the challenges.
Instrumentality *is the belief that if they meet performance expectations, they will receive a greater reward*	In the entrepreneurship course context, students are aware that creating a successful business idea concept will lead to a good grade.	The student teams realized that leading a startup is connected to many sacrifices, especially in terms of free time.
Valence *indicates the value that the students base on the reward*	Being a course, which is integrated in the students' study program, grading is a relevant factor for students. It is therefore important for them to receive a good grade in the first place and thus, in their opinion, successfully complete the course. A good grade is therefore considered as an attractive outcome, keeping	The change in perception deals with the value the students perceive. Students express great doubts whether it is worth pursuing the startup project as the costs for continuing the project do not necessarily match the desired outcome.

	them motivated to make big efforts in order to develop and validate the business idea.	

Table 4: VIE Model on the Course-Reality Mismatch from Paper 2 (Phuong, submitted)

It is observable that both the instrumentality and valence weakened significantly. The value students placed in their startup project is not eminent anymore. Further, they did not believe that putting in more effort would result in a satisfactory outcome. While the passion and conviction in the idea itself weakened, their motivational force lessened. The dynamic was even more reinforced by deadlines and work intensive assignments that were due in other seminars.

With regard to the research question, these insights underscore the dynamic interplay between internal motivations, external incentives, and environmental pressures in shaping students' decisions regarding entrepreneurial engagement. Particularly the course-reality mismatch after the end of the entrepreneurial education course diminishes students' entrepreneurial motivation significantly.

Impulses from the Entrepreneurship Course
RP1: Affirmative feedback, guiding structure and coaching, and the strong development progress throughout the entrepreneurship course motivated students to continue developing their business idea.
Demotivators after the Entrepreneurship Course
RP2: The loss of clear structure weakens students' motivation to continue the entrepreneurial projects after the course has ended.
RP3: Disillusionment with reality slows down the process and increases frustration, weakening the motivation to continue the entrepreneurial project.
Course-Reality Mismatch
RP4: The course-reality mismatch leads to a significant decrease in valence and instrumentality, diminishing students' motivation to continue the project after the course.

Table 5: Influences on Entrepreneurship Course Level: Research Propositions from Paper 2 (Phuong, submitted)

4.3 Factors on Team Level (Paper 3)

While the university environment and entrepreneurship course undoubtedly have an impact how students transit their business idea out of the course, it is similarly crucial to closely examine the role of the project team as a variable in this process, as entrepreneurship education programs in higher educational institutions often involve students working together in teams to simulate real-world entrepreneurial

scenarios (Harms, 2015). In these settings, the individual student finds himself/herself as integral part of the project team that have navigated decisions together throughout the entrepreneurship course. Having built specific dynamics within these project teams during the course, these dynamics can greatly influence how individual students perceive and approach their entrepreneurial aspirations. Therefore, understanding the role of the project team as a variable in the transition process is essential for gaining comprehensive insights into students' entrepreneurial journeys.

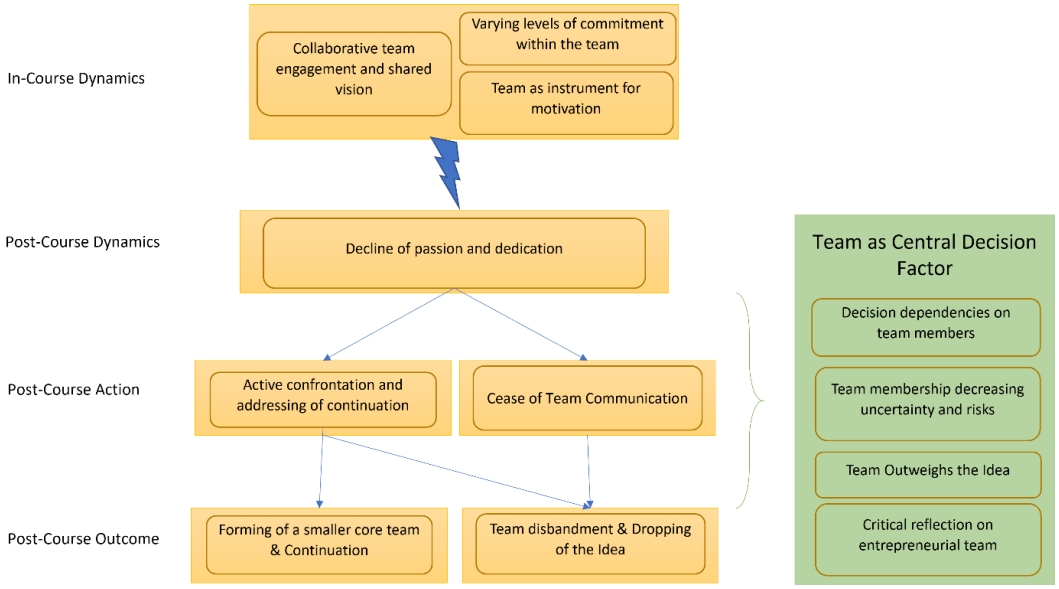

Figure 4: Dynamics of the Course-Reality Mismatch (Phuong, 2024)

While the previous chapter describes the course-reality mismatch that students experience after an entrepreneurship course ends, two scenarios became apparent. In cases of deliberate action, team members with high entrepreneurial intention actively confronted to the team in an open discussion and pose the question on continuation towards the team. The discussion consequently led to two potential outcomes, either disbandment of the team and dropping of the idea, or, in all cases of pursuing continuation, smaller core teams were formed which then continue to work on idea after course ends. Conversely, in the case of fading away, the project members stopped communicating with each other, leading to the project fading into the background. Consequently, this lack of communication ultimately leads to the disbandment of the team without any active decision-making or discussion.

The role of the team in students' individual decision-making is by no means negligible. It becomes evident that students' individual decisions are primarily influenced or even determined by the team in different ways (Phuong, 2024).

During the course, students engage in intense collaboration and the members get to know each other in terms of skills, character, and working style. While the students express healthy team dynamics during the course, it becomes apparent that they differentiate strongly between the course project team and an entrepreneurial team. Upon critical reflection for a potential continuation of the project beyond the classroom context, the students become aware that the team forming process which has been done at the beginning of the entrepreneurship course does not necessarily equip them with competencies and qualities to succeed in an entrepreneurial team. Although the team was sufficient for completing course assignments, they are reluctant to further collaborate with the same team members on real entrepreneurial undertakings.

In terms of individual sense of security, it was observable that team membership plays a pivotal role in mitigating uncertainty and reducing risks. While being on their own, students did not feel confident to take upon the challenges of an entrepreneurial undertaking. This perception however changed, knowing that they have a reliable team with complementing competencies backing them. Being part of a capable and reliable team instills a sense of security and fosters a readiness to embrace risks, making them more risk-taking than they would have been otherwise. This increased willingness to take risks translates into a higher likelihood of students continuing the project after an entrepreneurship course.

The significance of the team becomes even more evident when unveiling the motivation behind students continuing an entrepreneurial project: the importance of the team often outweighs the business idea itself. Students express a strong preference for pursuing entrepreneurial ventures with the team they have formed during the course, emphasizing the cohesion, reliability, and mutual support within the team. For many, the decision to continue the project is driven primarily by their desire to collaborate further with their team members, whom they have come to value and trust. Students emphasize the unique dynamics and bonds formed within their teams. Consequently, they place greater trust in their team's abilities and team bond,

regarding the strength of their team as a crucial factor in the potential success of their project.

The significance of the team impact also holds true for those students that are indecisive about continuing or abandoning the business idea. Students tend to rely heavily on team dynamics and collective team decisions when deciding whether to continue a project, often seeking encouragement or stimulus from their team members. The decision-making process is influenced by the general dynamic within the group, with students observing how their peers act and feel about the project. This responsive behavior reflects underlying insecurity and uncertainty, as students prefer to go with the flow of the team rather than proactively making individual choices. However, a lack of initiative often results in students waiting for cues or signals from their team members before taking action. If there is a lack of passion among team members, those contemplating students would not take the initiative to continue despite having entrepreneurial intention. With regard to the research question, team or team dynamics emerge as a highly fundamental aspect towards students' decision to engage in entrepreneurial activities. It becomes clear that the preceding collaborative context highly shapes students' willingness to pursue projects beyond the entrepreneurial classroom.

In-Course Team Dynamics

RP1: Despite varying levels of commitment within the team, teams display a healthy team dynamic in the entrepreneurship course.

Post-Course Team Dynamics

RP2: The team dynamics changes after course end. The decline of group exchanges leads to a subsequent decline of passion and commitment towards the project idea.

Post-Course Action and Post-Course Outcome

RP3a: An open discussion after course end leads to either the team disbandment or a formation of a smaller core team who continues to pursue the project.

RP3b: While the project fades into the background after course end, the process of dropping the idea happens as a passive act without communication among the members.

Team as Central Decision Factor

Critical Reflection on Entrepreneurial Team

RP4: Students reflect critically on their team in the light of starting a business and differentiated between a course team and an entrepreneurial team, the latter demanding more and stricter requirements in comparison to a course team.

Team Membership Decreasing Uncertainty and Risks

RP5: During the course, students become acquainted with their team mates. Being part of a capable and reliable team provides a sense of security and encourages the willingness to take risks, so students are more likely to continue the project with this specific team.
Team Outweighs the Idea
RP6: The team's cohesion plays a decisive role in the decision to continue the project, surpassing the impact of the idea itself.
Decision Dependencies on Team Members
RP7: Students tend to base their decisions on whether to continue a project more on team dynamics and collective team decisions rather than proactively making individual choices.

Table 6: The Role of Team Dynamics: Research Propositions from Paper 3 (Phuong, 2024)

4.4 Factors on Individual Level (Paper 2)

While research on individual-level factors in entrepreneurship often focus on specific characteristics such as personality traits, family background, gender, and demographics (cf. Reissová et al., 2020; Shinnar et al., 2018; Verheul et al., 2012), this thesis takes a broader view. It explores how students' internal perceptions, behavior, and motivation interact with the environment to shape their decisions. This dynamic approach acknowledges that their individual entrepreneurial decision-making is not only influenced by inherent traits but also by ongoing processes of perceptions, adaptation, and response to external stimulating factors. By considering these broader dimensions of individual experience, it is possible to gain a richer understanding of the multifaceted factors influencing students' engagement in entrepreneurial activities.

Three major categories have been identified which are most relevant in students' evaluation process: i) *perception of feasibility*, ii) *comfort-zone behavior*, and iii) *stimulating impulses*. While Paper 2 also identified team dynamics as a relevant factor, the content has already been covered in the preceding chapter, and has therefore been excluded here. Depending on how pronounced the characteristics are, students' decision will lean towards dropping or continuing the idea.

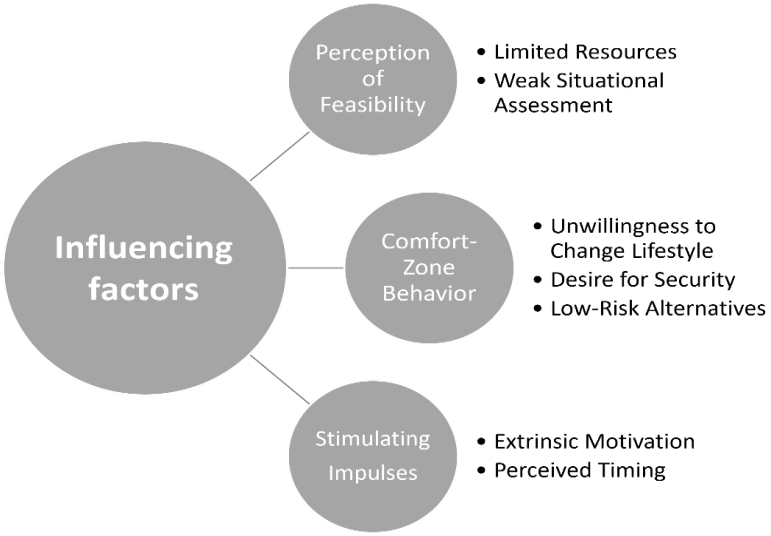

Figure 5: Influencing Factors on Individual Level, adapted from Paper 2 (Phuong, submitted)

Students' perception of feasibility emerges as crucial factor influencing their decision-making regarding entrepreneurial activities. This perception is framed by their limited resources and their weak situational assessment. Limited resources are a critical concern that students have raised. They emphasized that they are unwilling to take on loans or go into debt to fund their entrepreneurial activities. If the business idea needs too much monetary input from themselves, they are unlikely to proceed. Students prefer to focus on the job market instead of spending their time on an entrepreneurial project with an uncertain outcome. However, despite financial stability, students identified time and energy as the most lacking resources. Balancing academic coursework, part-time employment, and other obligations left them with little spare time to dedicate to entrepreneurial ventures. The demands of university life, particularly in master's programs with intensive workloads and impending theses, further restricted their availability. Moreover, the pressure to maintain academic performance and avoid prolonging their studies added to their time constraints. Many students were unwilling to sacrifice their grades or extend their study duration by dedicating less time to coursework, thus affecting their ability to engage fully in entrepreneurial activities.

Weak situational assessment refers to teams' struggles in accurately evaluating the feasibility and complexity of their business ideas. Particularly teams with innovative concepts which require IT and professional expertise often feel overwhelmed

by the complexity of the idea, as they themselves lack expertise to evaluate its implementability. The scope of the technical challenges leads to a sense of respect, fear, and uncertainty, contributing to their reluctance to pursue the idea further. Without sufficient expertise and information to assess the challenges, students often find it challenging to progress with their ideas. This lack of knowledge and direction hampers their progress and demotivates them, consequently leading to the abandonment of the project.

Comfort-zone behavior explains students' inclination to favor safety and consequently, completing their studies as their primary goals, as they consider their degree as an investment in their future. Students that choose to continue their entrepreneurial projects often manage to obtain financial support through scholarships or a participation in accelerator programs, which provides a safety net for them that reduces the risk they face. Particularly the participation in an accelerator program allows them to work on their idea while being in a safe environment, similar to the entrepreneurship course before. Despite entrepreneurial aspirations, students carefully weigh the risks and benefits, considering alternative career paths that offer stability and guaranteed income. Furthermore, they carefully weigh their options, considering alternative career paths in the job market that offer stability and a guaranteed income. Many opt for roles in product or business development, which offer a balance of security and but still tap on topics of entrepreneurship, such as innovation. The availability of these low-risk alternatives influences students' decisions and hinders their continuation of entrepreneurial projects.

Students lead busy lives, with limited free time allocated to studies, part-time jobs, and personal commitments. While they value social connections, hobbies, and family, adding entrepreneurial projects to their schedule leaves little room for these activities. However, sacrificing their free time is a sacrifice that many students are not willing to make. Moreover, an entrepreneurial project consumes much time that interferes with other projects such as planned internships or a semester abroad. But students are unwilling to compromise on their current lifestyle, habits and routines in order to put an entrepreneurial endeavor in between. This results in a tendency to discontinue their project.

Lastly, *stimulating impulses* refers to external factors that prompt students' action or motivation, particularly the presence or absence of extrinsic motivation and the perceived timing by students. Extrinsic motivation, such as deadlines, and feedback and support from lecturers and coaches, is crucial for sustaining momentum. While intrinsic motivation from belief in the idea exists, students need external motivation in order to keep focused amidst distractions. However, finding external motivation post-course is challenging. The presence or absence of external motivation thus can be crucial to whether the idea gets dropped or not. The second stimulating impulse is the perceived timing or more specifically, events that coincide with the time of the course ends. These could be upcoming calls for accelerator programs or business idea competitions on campus. The availability of such opportunities and incentives immediately after the course ends influences students' perception of how favorable to time is to continue their project. Lastly, also political and environmental factors, such as regulatory changes benefitting specific initiatives in favor of their business idea, also influence students' perception of timing, and consequently the decision to continue the project.

Perception of Feasibility
RP1: Limited resources and weak situational assessment negatively influence students' perception of feasibility, and thus, weaken their entrepreneurial motivation.
Comfort-zone Behavior
RP2: The interplay between students' unwillingness to change their lifestyle, their desire for security, and the availability of low-risk alternatives leads to a comfort-zone behavior, hindering a continuation of the entrepreneurial project.
Stimulating Impulses
RP3: Depending on the availability or absence of extrinsic motivation and other incentives, students perceive the timing as favorable or unfavorable for continuing the project immediately after the course.

Table 7: Influencing Factors on Individual Level: Research Propositions from Paper 2 (Phuong, submitted)

5 Discussion

5.1 Interplay Between Levels and Factors

In order to answer the overarching research question "Which contextual factors play a role and how do they influence students' decision on engaging in entrepreneurial activities?", this thesis identified four dimensions/levels of factors. These have been presented and described in the previous chapter and provide answer to the research question on each consecutive level. This chapter will delve into the interplay between these factors and levels, to provide a more holistic understanding on the dynamic nature of the influences that impact students' decision in the transition gap. Additionally, it will connect to prior research to make the overall contribution visible.

Figure 5 shows the different levels that cannot be regarded separately from each other. The interdependence between the levels is shown through the arrows. While the dimensions that are immediate to each other impact each other the strongest, there is still interplay between those that are not located immediate to each other, but on a lower degree. The university provides the overall environment, in which the entrepreneurship course, the team and also the individual student is embedded in. These dimensions all impact students' entrepreneurial engagement with a different intensity. Essentially: the closer the factors and dimensions are located to the individual student as an active decision-making agent, the more impact they have on students' decision to engage in entrepreneurial activity. While there are also general interactions between the levels, this thesis focuses on the interactions of those factors discussed in the previous chapter.

In the following, the different interactions between the levels will be illuminated, focusing on the most prominent ones.

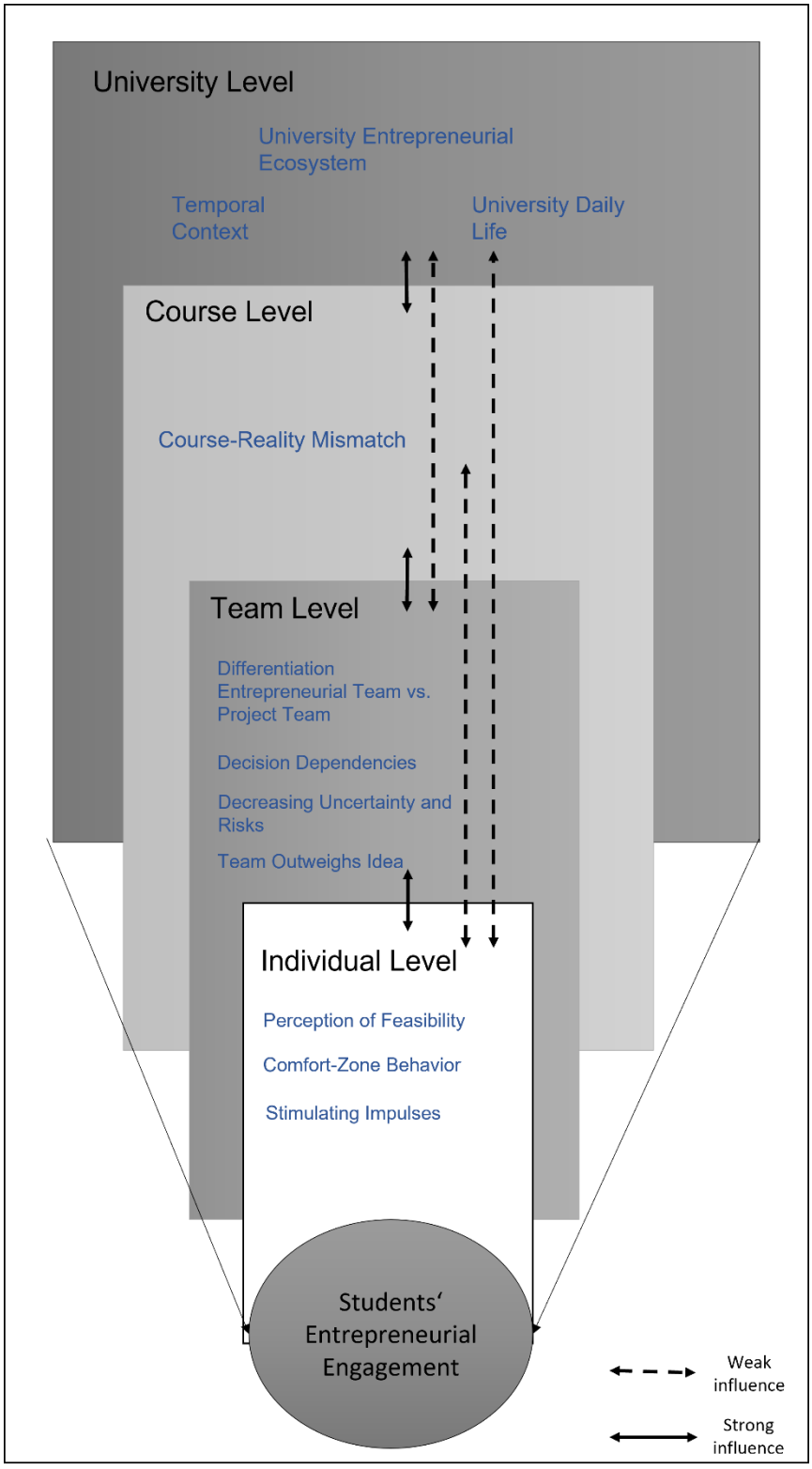

Figure 6: Processual Model of Contextual Factors Influencing Students' Entrepreneurial Engagement Across Multiple Levels (Own Illustration)

5.1.1 University Level to Course Level Interaction

General university-course level interactions are available with regard to the impact of university policies and strategic orientation on the availability of entrepreneurship education course offers. Universities that prioritize entrepreneurship as a strategic focus may allocate more resources on the development of an entrepreneurship faculty which consequently, lead to the development and offer of entrepreneurship courses. Furthermore, the curriculum and the faculty can impact the design and pedagogical approach employed in an experiential entrepreneurship course. Depending on the specific goal of entrepreneurship education at each university, the course can be designed to teach about, for, or through entrepreneurship. Moreover, the entrepreneurship course can integrate industry partnerships, or aim to cultivate specific demanded (entrepreneurial) competencies. As a result, the course content and structure may reflect the university's goal and vision for entrepreneurship education. In general, there is comparatively little interplay between the factors on university and course level that has significance for the actual decision of students to engage in entrepreneurial activities or not.

However, in the particular case of the course-reality mismatch that arises from the entrepreneurship course, the university, especially through its entrepreneurial ecosystem, can play a crucial role in mitigating the negative effects students experience after the course ends. When students transition from the structured and supportive environment of the course to a less structured real-world setting, they often face challenges that can dampen their enthusiasm and progress. This is where the university's entrepreneurial ecosystem can catch students' fall and provide a soft landing. students’ fall into reality through entrepreneurial offers.

Depending on the configuration of the university entrepreneurial ecosystem, the university can offer various support mechanisms. First, accelerator or incubator programs can provide mentorship and guidance to help students continuing their entrepreneurial projects. These programs can be strategically timed to coincide with the end of the entrepreneurship course. This would ensure that the students do not feel lost once the course concludes. By integrating or adding these initiatives in the course timeline, the university can keep students on track with their ideas, main-

taining their momentum and motivation. Besides accelerator and incubator programs, the university can organize business model competitions and other entrepreneurial events that encourage students to further develop their business idea. These events would provide incentives for students to work on their idea as they act as a source for extrinsic motivation. Facing these initiatives where students have to work and prepare for, these events create a sense of urgency and purpose, motivating students to continue their entrepreneurial journey. Such initiatives can bridge the gap between the course and the “real world”, ensuring that students remain supported and engaged. Another aspect is the continuous access to resources like coworking spaces, experimentation labs, workshops, technical facilities, libraries, and various networks. The availability of a comprehensive entrepreneurial ecosystem at the university can help to maintain the supportive environment that students experienced during the course. Ultimately, the university can dampen the course-reality mismatch by providing the support structure and guidance that students received during the course. This can enable them to stay on track and not to feel left alone in navigating their entrepreneurial venture.

5.1.2 University Level to Individual Level Interaction

Depending on the constitution of the university entrepreneurial ecosystem of the university, in which the student is situated in, the impact may be different. Universities with a robust university entrepreneurial ecosystem have a stronger entrepreneurial support infrastructure which can include startup incubators, accelerator programs, may make students feel more encouraged and empowered to pursue entrepreneurial ventures. The available institutional support can enhance students' confidence, expand their network and provide tangible resources to support their entrepreneurial aspirations. In this regard, the university can influence students' perception and motivations' regarding entrepreneurial activities. Students may include the infrastructure and knowledge available to them in their situational assessment when evaluating the complexity of their idea.

Two other aspects stemming from the availability and robustness of universities' entrepreneurial ecosystem is the universities reputation and their entrepreneurial culture. Universities with a strong entrepreneurial culture that have entrepreneurial success stories may inspire students to pursue an entrepreneurship and even view it

as a viable career option. The exposure to role models, success stories of peers or alumni and frequent entrepreneurship events can influence students' belief and motivation, thus shaping their decision and behavior regarding an entrepreneurial endeavor. In a similar line of reasoning, less entrepreneurial universities can negatively impact students' situational assessment and consequently, the perception of feasibility towards their business idea due to the absence of all above mentioned aspects. Consequently, they would have a negative impact on students' decision to engage in entrepreneurial activities. The same reasoning can be applied to the absence or availability of stimulating impulses through incentives which can be provided by the university. These incentives such as entrepreneurial events, initiatives or incubator and accelerator participation can function as extrinsic motivation for students to continue working on their business idea.

5.1.3 University Level to Team Level Interaction

As a team consists of multiple individual students, the interdependence on university level to team level is similar to the one from university to individual level. These interdependencies do not only shape the individuals' attitude regarding entrepreneurship but also impact the collective decision-making and dynamics within the team, as there are dependencies in decision-making within the team. Thus, the dependencies which rule between university and individuals are also crucial on the team level, as they influence the individual members' commitment to entrepreneurial activities and consequently, the teams' overall decision whether to continue or not.

The university campus offers manifold opportunities to get in touch with diversity (Phuong & Freiling, 2022). Especially as the student body within the campus is diverse, there is a great potential for many interdisciplinary connections among students. On the one hand, interdisciplinary connections among students can foster innovative ideas and approaches by combining different perspectives and skill sets. On the other hand, diversity is beneficial for team compositions as it brings a range of experiences and viewpoints that can enhance problem-solving. Also diversity in skills, competencies and character within the team can lead to students potentially perceiving the risk and uncertainty as lower. Teams that cover a wide array of competencies can tackle different tasks of the entrepreneurial process more efficiently,

and thus, distributing the perceived risk. This dynamic could lead to student teams being more inclined to engage in entrepreneurial activities.

5.1.4 Course Level to Team Level Interaction

The interaction between the course and team levels is particularly significant in the context of entrepreneurship education. During the course, students typically operate within a structured environment that provides them with coaching, guidance, and a clear framework to develop their entrepreneurial projects. This supportive context helps teams function effectively, with defined roles and responsibilities, frequent feedback, and external motivation from instructors and deadlines.

However, when the course ends, students often encounter a course-reality mismatch. This disillusionment arises because the structured support they received during the course dissipates, leaving them to navigate their entrepreneurial endeavors independently. This transition can profoundly affect the team's dynamics and the perception of each member's role within the team. The biggest interdependence exists with regard to students' differentiation between the project and a potential entrepreneurial team, as the course-reality mismatch on the course level perspective again reinforces students' reflection upon the team. Without the external guidance and predefined structure, students must rely more heavily on their own and their teammates' commitment and initiative. This often leads to a re-reflection on the compatibility of the team members' competences, work ethics, and entrepreneurial attitudes and goals. Furthermore, the absence of a structured course environment means that team cohesion and interpersonal dynamics become crucial for sustaining progress. Teams with a strong internal communication, and especially, a shared vision are more likely to maintain momentum, whereas those teams with underlying conflicts or too different attitudes within the members may struggle to stay motivated. Another issue is that the course-reality mismatch tests the persistence and perseverance of the team. The entrepreneurship course provided external motivation through grades, instructor feedback, and scheduled presentations. Post-course, the team must generate their own motivation, relying on their team members' passion for the project, encouraging each other to pull in the same direction.

5.1.5 Course and Team Level to Individual Level Interaction

As already indicated and elaborated in the previous chapter, team dynamics play a significant role in students' decision-making. Many interactions on team to individual level thus have already been covered. Therefore, this section will shortly go over the most relevant interdependencies in between the levels with particular focus on the specific individual-level aspects that have been carved out in the model. However, this subchapter will also include the course level perspective into consideration. Including the course-reality mismatch in the discussion of individual-team level interactions is crucial for several reasons. The course-reality mismatch provides the broader context in which students make decisions about whether to continue or abandon their entrepreneurial projects. By incorporating this aspect into the analysis, the thesis again stresses that the decisions made by students are not in isolation but influenced by their learning environment. The absence of the entrepreneurship course's support system exacerbates the need for a strong, cohesive team, as students must now rely more heavily on each other to navigate the uncertainties and challenges of entrepreneurship. This interconnectedness highlights how the course-reality mismatch directly impacts the dynamics within the team and influences individual decisions. Understanding this interplay provides a more comprehensive view of the factors that shape students' entrepreneurial intentions and actions.

As already established before, students within team rely heavily on each other's decisions. This consequently creates a dynamic where the individual students' choices are significantly shaped by the collective mindset. Furthermore, it can either reinforce their commitment to the entrepreneurial project or lead to its abandonment if the majority of the team leans that way. If the team collectively faces a course-reality mismatch, the lack of external structure and guidance can strengthen this dependency. This again leads to individual students feeling even less confident in making decisions independently. Waiting for a consensus within a team, while no one wants to take the initiative can significantly delay progress and decision-making. Particularly with regard to the question on continuing or dropping the entrepreneurial idea, this dynamic increases the chance that the team falls into a state of

inaction, where members passively wait for something to happen. This leads to decreased communication, and, most likely, an abandonment of the idea.

Looking at the influence of decreasing risk and uncertainty by being a member of a team on the individual level, the earlier chapter has already established that individual students feel more confident in continuing their entrepreneurial pursuits, as responsibilities and risks are shared, and students complement each other's weaknesses and strengths with regard to their competencies. The course-reality mismatch can exacerbate the need for this security. As students face uncertainties without the structured environment and guidance provided by the course, the role of the team as a supportive network becomes increasingly crucial. The absence of external structure and guidance can further increase students' uncertainties associated with limited resources and weak situational assessments, and thus, impact their perception of feasibility. In this context, the perceived safety provided by the team can mitigate fears and insecurities, making it more likely for students to continue with their project despite the challenges. The reassurance that comes from shared responsibilities and the ability to lean on each other's strengths can be a decisive factor in their decision to proceed with their entrepreneurial venture.

Nevertheless, a potential scenario could be where a single student with strong entrepreneurial drive breaks free from the team after the course and proceeds to realize the project independently. This student might seek out new resources and support networks, eventually involving personal friends and connections in this endeavor. This would be a case where the individual perception of feasibility is stronger than team dynamics or their dependence to the team. However, this scenario could not be observed during the study.

5.2 Research Contributions

The study answers the research question "*Which contextual factors play a role and how do they influence students' decision on engaging in entrepreneurial activities?*" on four levels. First it answers the question on university level (Paper 1) by identifying how the university setting, but especially the student setting can influence students' decision to engage in entrepreneurial activities. Current research is primarily concentrating on the resource perspective in terms of resources and

knowledge (Bergmann et al., 2016). While the university setting also shows similar findings to current research, confirming the importance of the university entrepreneurial ecosystem (Miller & Acs, 2017; Wright et al., 2017), this study contributes to the contextual understanding of student entrepreneurship (cf. Bergmann et al., 2016, 2023) by adding the student setting, which encompasses the consideration of the time dimension in connection with the university context. This time dimension visualizes how the student daily life as well as the moratorium can trigger changes and barriers for students with entrepreneurial intentions.

Secondly, the study illuminates the question on course level, focusing particularly on the time span immediately after course ends and the aftermath of the entrepreneurship course. Results indicate that the discrepancy between the course experience and real-world application (course-reality mismatch) significantly impacts students' expectations negatively. Notably, there is an abrupt decline in motivation following the course's conclusion. As previously mentioned, their emotional engagement peaks towards the course's end. However, the sudden loss of structure, guidance and support leads to disillusionment and a subsequent decline in their entrepreneurial motivation, which consequently, increases the probability of students dropping the idea. This thesis therefore adds to the literature of experiential entrepreneurship education (Lackéus, 2020; Pazos et al., 2022) by extending the period of investigation outside the course itself. As other studies mostly focus on the time span of the course itself (Ilonen et al., 2018), this study is able to provide novel insights such as the course-reality mismatch dynamic including all its implications which only unfold after course ends.

Thirdly, the research question gets tackled on team level, unveiling the pronounced significance the individual student places on the team dynamics, influenced by the views of other members. Although most startups are established by teams (Bormans et al., 2020), research on entrepreneurial teams is still limited (Ben-Hafaïedh, 2017b). There is a noticeable lack of studies that consider teams as a significant variable, particularly in student entrepreneurship. Therefore, the study advances the current literature on student entrepreneurship by uncovering the intricate connections between team dynamics and entrepreneurial decision-making. By offering a detailed perspective, it demonstrates how collaborative settings impact students'

motivation to pursue projects outside of the entrepreneurship classroom. Furthermore, it enriches the field of experiential entrepreneurship education by emphasizing the critical role of team-based approaches.

In a next step, it looks at the research question, taking an individual-level perspective. While "research concentrates on determinant at the individual level, particularly personality traits" (Ayob, 2021b: p.748), this thesis approaches individual-level differently. It examines how students' internal perceptions, behavior, and motivation interact with their environment to influence their decisions. This dynamic approach recognizes that individual entrepreneurial decision-making is shaped not only by inherent traits but also by the continuous processes of perception, adaptation, and response to external stimuli. This novel approach contributes novel empirical insights to the research on personal factors (Reissová et al., 2020), taking into account how they unfold within the given context.

Lastly, the interdependencies between the different levels have been analyzed and interpreted. By reflecting on the findings at each level and the interactions between levels, the study provides a comprehensive understanding of how various factors collectively influence entrepreneurial decision-making. This holistic approach not only highlights the interconnectedness of these elements but also offers practical insights for designing educational programs and support institutions that foster effective entrepreneurship at multiple levels. These insights further contribute to the current research on contextual factors of student entrepreneurship (Bergmann et al., 2023) by bridging gaps between individual, team, course and university perspectives. In doing so, the thesis enriches the understanding of the multifaceted and highly intertwined nature of contextual factors influencing entrepreneurship.

All in all, the thesis further contributes to the entrepreneurial cognition literature (Chen et al., 2022; Santos et al., 2016) by providing a nuanced understanding of the contextual dynamics that prevail while students figure out whether to translate entrepreneurial intentions into start-up activities. By incorporating students' perception with the environment, it also views the entrepreneurial decision-making process as volitional behavior, which is essential for entrepreneurship literature (Fayolle & Linan, 2014). Students in this case are active decision-making agents and not only passive individuals that are influenced by their environment.

The study answers the call for more research on meso and macro factors with regard to student entrepreneurship (Ayob, 2021a) by particularly providing new insights on the widely neglected meso level, specifically team and course levels, and the university as the macro level. This multi-level approach offers a more comprehensive understanding of how different contextual layers interact and influence student entrepreneurial activities, highlighting the importance of both immediate team dynamics and broader institutional frameworks.

This study also contributes to the ongoing research on the intention-behavior gap in student entrepreneurship. By focusing on the team level, this study addresses the need to understand how collective processes and interactions influence individual and group-level entrepreneurial outcomes, thereby enriching the discourse on the intention-behavior gap in entrepreneurial research. This aligns with recent calls to investigate intention-action moderators on group level as “the start-up process usually happens in teams, warranting the need to investigate the group processes” (Shirokova et al., 2016: p.11).

The investigation on team level also adds to the discussion in the experiential entrepreneurship education research which also suffers from a vacuum on the relevance of the team aspect in entrepreneurship education literature (Karlsson & Nowell, 2021; Warhuus et al., 2021). By identifying the interactions and dynamics within a team, this study provides empirical evidence on how team dynamics influence entrepreneurial outcomes. Filling a critical gap in the literature, it also underscores the need for further research into team-based approaches in entrepreneurship education, as this contribution highlights how crucial the project team aspect is for the continuation of the entrepreneurial idea.

6 Conclusions

6.1 Practical Implications

The results offer implications for several stakeholders, such as students, universities, lecturers, support institutions etc. However, it is difficult to differentiate between implications for faculty members, such as professors and lecturers, and from those for policy makers at universities. While policy makers set the overarching direction and frameworks for institutional policies, faculty members, including professors and lecturers, but also university-internal support institutions, play a crucial role in operationalizing these policies within their academic departments and classrooms. They are responsible for translating these strategies into action, and consequently, integrating policies into daily academic practices, curriculum development, teaching methodologies, and student interactions.

As these overlaps cannot be avoided, this study will therefore only differentiate between i) student teams, and ii) practitioners on university level.

At i) team level, this study offers potential strategies to mitigate issues that arise between the members. First of all, establishing clear roles and responsibilities within the team can help mitigate decision dependencies. When everyone knows their specific role and contribution, it can reduce the hesitation to make decisions. In terms of different personal goals and different levels of commitment within the team post-course, implementing regular team meetings and check-ins can ensure that the team remains aligned and can address any issues or disagreements promptly. Seeking external mentorship or participating in university-supported programs like incubators or accelerators can provide the necessary guidance and motivation, reducing the over-reliance on team consensus alone.

As the university functions as umbrella setting, the results, for the most part, offer implications for ii) practitioners on university level that will have influence on team, course and individual level. The first implication concerns the ecosystem development within the university. It is essential for a university to establish incubator and accelerator programs, or similar facilities, that offer structured support. The offers

can include working spaces, or funding, but with regard to the question of transitioning the entrepreneurial project out of the classroom, the thesis has identified coaching and mentorship as most relevant aspect. These programs should aim to bridge the gap between the classroom and the real world, by offering students the necessary guidance which they need to develop their idea further. Equally important is the timing of the start of these programs. It would be ideal for the programs to start immediately or within a short timespan after the course ends in order to maintain momentum. This would ensure that students don not feel abandoned and lost, once the course finishes. These entrepreneurship support offers would mitigate the risk of students falling into this course-reality mismatch pitfall and abandoning their idea.

With regard to university policy, the universities could develop a plan to provide incentives for students to engage in entrepreneurial activities. As a starting point, they could provide academic credits for entrepreneurial activities such as participating in startup programs, or engaging in business plan competitions. In doing so, they would acknowledge the value and effort of practical entrepreneurial experience. Furthermore, these incentives would demonstrate to students that entrepreneurial activities are welcomed and not a hindrance to their studies.

Last but most important point for a university is the creation of an entrepreneurial culture that i) enables a transition for students from a traditional academic mindset to an entrepreneurial mentality, and then ii) fosters an entrepreneurial mindset among students, as it directly affects students' individual perception of entrepreneurship (Valencia-Arias et al., 2022). To achieve the first step, universities should create more experiential learning opportunities within students' study programs where they can first get familiar with the entrepreneurial mentality. An entrepreneurial culture emphasizes innovation, risk-taking, and proactive problem-solving, which are essential traits for successful entrepreneurship (Poi, 2020). To cultivate this culture, universities need to create an environment where entrepreneurial activities are encouraged, supported, and integrated into the academic experience. Furthermore, promoting a culture that celebrates entrepreneurial successes and learns from failures is essential. Highlighting successful student entrepreneurs through university publications, social media, and events can inspire others to pursue their

entrepreneurial ambitions (Adesola et al., 2019; Boldureanu et al., 2020; Nowiński & Haddoud, 2019). Featuring these individuals as role models, for instance through guest lectures, can demonstrate the possible achievements that come from entrepreneurial efforts, making the path seem more attainable and motivating for other students. This can positively influence students' perception of feasibility by showing them that success is achievable despite limited resources. Similarly, creating a safe space where failures are viewed as learning opportunities rather than setbacks can encourage students to take risks and innovate without fear of judgment. This approach can help students move beyond their comfort-zone behavior by providing a supportive environment that reduces the fear of failure and enhances their confidence to pursue entrepreneurial activities.

In order to manage all these suggestions, it is essential for a university to have a unified entrepreneurial push strategy (Wegner et al., 2020), which is coordinated with all relevant faculties and other stakeholders. The topic of entrepreneurship has to be treated as a superordinate topic, which is not only anchored in the business faculty or at specific support institutions. The university leadership must be committed to embedding entrepreneurship into the institution's mission and strategic plan. This includes allocating resources to entrepreneurial initiatives but also ensuring that university staff share entrepreneurial values, as they act as intermediaries to communicate these values to students. Lastly, providing necessary training, and encouraging them to incorporate entrepreneurial thinking into their teaching and research can help build a cohesive entrepreneurial culture.

6.2 Limitations

The thesis faces some limitations. The first limitation arises from the chosen research design. While this qualitative approach allows for in-depth analysis, it is data dependent and may not capture the full range of factors influencing student entrepreneurship across different contexts and settings. As the findings have been derived from the conducted interviews, they are therefore limited by the subjective experiences and perspectives of the interviewees. A longitudinal perspective is lacking, which could provide insights into how different factors may become more or less relevant over time, or how new factors might come into the fore and impact

students' entrepreneurial behavior. Furthermore, the different cultural, socioeconomic backgrounds and, in general, diversity of students have not been considered while analyzing the data. However, this factor could potentially have influenced how students perceive and interpret actions and behaviors which ultimately would have affected perception and evaluation of team dynamics or feasibility of the idea. While the study attempted to mitigate these differences by separately interviewing two members per team to crosscheck their impressions, this aspect cannot be fully excluded. Another drawback is that the data has been analyzed and interpreted by the author alone. Data triangulation to bolster validity (Flick, 2004) has been done by systematically collecting and cataloging secondary data and cross-referenced with interview data to identify consistencies, discrepancies, and emerging patterns. However, the potential for biases cannot be entirely eliminated.

Another limitation comes from the chosen research setting. As the study takes place at a German university, the findings may reflect specific cultural, educational, and institutional characteristics that are unique to this context. Since particularly cultural and educational factors have been found to be dominant stimulators for student entrepreneurship (Ayob, 2021b), this geographical and cultural frame can yield significantly different results compared to other countries or region, which might have a different approach to entrepreneurship or varying levels of emphasis on entrepreneurial activities in general. This aspect is even more reinforced, considering the fact that Germany's entrepreneurial climate is perceived by students as the 3rd worst out of 57 countries (Sieger et al., 2024).

Lastly, as the study only focuses on the university environment as "macro level", it does not take the broader ecosystem into consideration, which encompasses external economic conditions, industry trends, policy frameworks, the influence of the regional entrepreneurial ecosystem, or even the prevalence of a possible entrepreneurial culture. These aspects still play a significant role, as the university is embedded within its regional context. This means that while the university environment is a critical component of the entrepreneurial journey, it is not the sole determinant of success or failure. Therefore, to gain a more holistic understanding of the factors that influence student entrepreneurship, future research should consider incorporating these external elements.

6.3 Future Perspectives

The study has shed light on a few interesting aspects and dynamics which have not yet been widely covered or discussed in the literature before. These findings open up new research opportunities in order to explore them more in-depth to fully grasp their impact on (nascent) student entrepreneurs.

One suggestion for future research can be derived from the limitation of this thesis, which is that the research in conducted within a German university which does not have a pronounced entrepreneurial culture. Therefore, comparative studies across various universities or regions or even countries could provide more insight on how differences in entrepreneurial culture and ecosystem, on university and also on regional level, affect student entrepreneurship. By comparing the different universities, the research could offer valuable guidance for institutions that seek to enhance their support for entrepreneurial activities across different settings. This kind of research would also align with the call to focus contextual research on student entrepreneurship on the macro level (Ayob, 2021a).

For future research, it would furthermore be valuable to investigate the nature and the evolutionary dimension of the relationships and interdependencies between various levels and factors influencing student entrepreneurship. Understanding these interactions can reveal dynamics that drive or hinder entrepreneurial activity. Longitudinal studies could uncover patterns and causal relationships, providing a more comprehensive framework for supporting student entrepreneurship in diverse contexts.

While highlighting the relevance of the availability of external stimulating impulses, the study has not yet covered how they may look like. Future research can delve deeper into investigating which impulses, incentives or support mechanisms are most effective in maintaining student engagement. This could involve examining various types of external stimuli such as mentorship programs, networking or competition opportunities, but also financial incentives. Understanding the specific needs and preferences of students can help tailoring the entrepreneurship offers and their consequent impulses to be more impactful.

One relevant aspect which has been identified, yet not been explored in detail in this thesis, is that students place high value in their studies and prioritize their course grades and the acquisition of the university degree above all else. This also holds true for those students that decided to continue their entrepreneurial project outside the classroom. Consequently, it would be insightful to particularly have a look at those students that are highly motivated and pursue venturing, and investigate how they manage to balance their academic responsibilities and entrepreneurial activities, what kind of obstacles they overcame, and how they coped with the challenges of finding the right team on campus. By examining factors such as time management, prioritization, and resource allocation, researchers can uncover insights into how students navigate these dual roles and how their academic performance and entrepreneurial endeavors influence each other. By understanding how they navigate the challenges, educational institutions can again, tailor their support structures and initiatives efficiently, providing students the necessary aid for them to excel academically, while they pursue their entrepreneurial ambitions. Parallelly, it would be meaningful to examine how to align entrepreneurial activities with study progress, facilitating venture creation after graduation. Future research could explore strategies that help students balance academic and entrepreneurial activities, such as flexible course schedules, independent study credits for entrepreneurial projects or other channels to enable seamless integration.

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Part 2: Three Research Papers

Paper 1

Student Entrepreneurship – The Impact of University Environment on Students' Starting Conditions

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Abstract
Purpose: The research aim is to identify how the university campus influences students' entrepreneurial starting conditions.
Approach: The underlying paper is conceptual. The focus is to propose new relationships among constructs and bridge existing theories. In this paper, the entrepreneurial constructs regarding the venture foundation process are linked to extant literature on Higher Educational Institutions and bordering topics. We develop research propositions by connecting these two topic streams through causalities.
Findings: We developed eight research propositions, arranged into two categories: university-setting and student setting. The university setting comprises factors accentuating the specific, fertile university environment, the student setting the specific status and related peculiarities.
Research Limitations/Implications: Limitations arise, as the conceptual paper does not refer to data. Thus, there is a risk of being incomplete and biased based on the theoretical lens. The study adds to the contextual view of student entrepreneurship. It offers a sound set of causalities as a base for future empirical research.
Practical Implications: Through the insights, universities can adapt their offers in terms of support space and services and start tackling the students' needs as well as their weak points in terms of entrepreneurial starting conditions
Originality/Value: The paper contributes to the current literature by presenting relations between the university environment and student entrepreneurship that have not been connected before. This allows a deeper understanding of how students deal with entrepreneurial issues and what reasons lie behind their related behavior.
Keywords: Student entrepreneurship, University entrepreneurial ecosystem
JEL: M13, M14, O30

Paper 2

Bridging the Gap – Exploring students' entrepreneurial decision-making from classroom to reality

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Abstract

Entrepreneurship is increasingly prominent at German universities, with more students participating in entrepreneurship courses and attempting to start their own businesses during their studies. Despite students' growing interest and demand in entrepreneurship courses, many students do not continue their entrepreneurial projects after their courses end. This study explores the reasons behind this trend, focusing on the decision-making process and factors influencing students' choices to either continue or abandon their entrepreneurial projects post-course. Using Vroom's Expectancy Theory as a conceptual framework, this research examines master's students who participated in an entrepreneurship course, progressing from idea generation to near market-ready products or services. While some teams continued their projects, others did not, despite significant investment and belief in their ideas. The study aims to understand the mediating factors behind these decisions and provide insights into how universities can better support students in transitioning their projects from classroom to reality. One key finding of the study is the identification of a course-reality mismatch. While students gain valuable skills and experience during entrepreneurship courses, the transition from classroom projects to real-world ventures is often hindered by the disparity between academic settings and the complexities of actual business environments. This mismatch results in students feeling unprepared and insecure about continuing their entrepreneurial projects post-course. This study contributes to the existing literature by providing a contextualized understanding of the factors influencing students' decisions to transition their entrepreneurial projects from classroom to reality, addressing a gap in

research on post-course entrepreneurial activities. Additionally, it offers practical insights for universities to enhance their entrepreneurship education and support programs.

1. Introduction

Entrepreneurship is becoming increasingly present at German universities. The number of entrepreneurship-related offers is steadily growing. 18% of all students in Germany have visited at least one entrepreneurship course, with an upward tendency (Bergmann & Golla, 2020). Students are confronted with entrepreneurship more often than in the past. Currently, 7,6% of all students try to start their own business during their studies (Bergmann & Golla, 2020). The reasons for this are lie in the many benefits students face when starting and founding a business as a student: The university provides students not only with human capital, e.g., in terms of knowledge but multiple kinds of assets that grant students significant advantages when conducting entrepreneurial activities in terms of resources and social capital (Morris et al., 2017). They have access to a range of exclusive entrepreneurship support programs provided as more and more universities are increasingly offering and establishing entrepreneurship-focused programs and institutions which support entrepreneurial activities (Fritzsche et al., 2023; Siegel et al., 2007). University business incubators and accelerators, business plan competitions, mentoring programs, entrepreneurship centers that offer entrepreneurship-specific courses and consultation are only a few to mention. These programs and institutions are primarily available for faculty and student-run businesses (Covelli et al., 2020; Custer, 2015). Therefore, students have the opportunity to receive exclusive and free support. All in all, universities provide them with conditions, resources, and talent, fostering the emergence of breakthrough ideas (Beyhan & Findik, 2018).

While the demand for entrepreneurship courses is increasing, entrepreneurship education is also experiencing transformation in terms of contents and teaching methods (Welsh et al., 2016). Currently, we experience a shift from learning about entrepreneurship to learning through entrepreneurship (Heinonen & Hytti, 2010). Thus, students in the courses often experience the start-up process, beginning with idea generation and ending shortly before venture creation. During this time, they spend a lot of time on the project and have also already made significant business

development steps. However, it can be observed that the majority of students do not continue their entrepreneurial projects after the course ends. The number of entrepreneurial activities from students is observed to be stagnating or even declining in the past years despite the rising interest in the topic (Bergmann & Golla, 2020). This raises the question of why students tend to decide not to pursue entrepreneurial endeavors and how this decision is made, given that there are a number of above-mentioned benefits if students decide to transit their entrepreneurial project from classroom to reality.

Despite the consideration that students may not start their business directly during their study time at the university, there is still no comprehensive explanation as to why students sometimes take the step of founding a company and why not. Furthermore, there is a lack of theory-based research that provides information to understand the transition of entrepreneurial motivation into startup activities (Renko et al., 2012). A contextualized view can add to the understanding of this discrepancy as previous research has also highlighted the need for "a richer understanding of process steps, necessary sequences and decision-making rationales" (Arend et al., 2015: p.646). Accordingly, the aim of the paper is to understand the relevant mediating factors behind the decision to continue the project which has been started in the entrepreneurship course outside of the course settings. Accordingly, the paper addresses the following research questions: 1) *How does the decision process looks like?* and 2) W*hat factors influence students' decision to transit their entrepreneurial project from classroom to reality and how?* Answering this question, the paper can generate qualitative insights about students who are interested in the entrepreneurial path. Secondly, it can provide relevant insights on what lies within the scope of action of a university (and what not) and, how universities can better adapt their entrepreneurship education offers and entrepreneurship support mechanisms to students' needs. In order to do so, the paper uses Vroom's Expectancy Theory (Vroom, 1964) as a conceptual lens. As the theory emphasis on individuals' beliefs about the relationship between effort, performance, and outcomes, it provides a comprehensive framework for analyzing the motivational processes underlying entrepreneurial decision-making.

In the studied context, the focus is directed to master students who have attended an entrepreneurship course in which they had to go through all steps of the business idea-finding process to an almost market-ready product or service. After the course, only few teams decided to continue pursuing their entrepreneurial project, while other teams dropped the idea despite being very invested and convinced of the idea. This study differentiates between different notions in terms of student entrepreneurs. When talking about student entrepreneurs, people usually think about the prominent examples from the U.S. such as the founders of Facebook, Dell, and FedEx, who started working on their business idea while still being in university. These examples are exceptional in many ways, e.g., did they act as solo entrepreneurs (or in teams of two), and did not attend entrepreneurial education classes. Rather did they already had the entrepreneurial intentions clear and used their time at the university with the aim to make their entrepreneurial ambitions come true. Not uncommonly, they drop out of university to continue pursuing their entrepreneurial endeavor. However, these kinds of students are the exception and not subject of this study. This study focuses on the students who follow their university curriculum as it holds true for the majority of students.

As entrepreneurship courses are getting more and more prominent and there is a rising interest from the students' side, it is worthwhile to also take a closer look at those students who have actively decided on taking entrepreneurship courses, even though they have not completely decided for themselves to go down the entrepreneurial path. As there is yet only little about these students and their action patterns, this study refers to this group as potential student entrepreneurs.

The paper will proceed with a literature review on student entrepreneurship and entrepreneurship education to provide an overview of the topic and position the study within the current research. Furthermore, a short introduction to the expectancy theory will be given. The following method chapter discusses the research approach that is employed in this paper. This study uses a qualitative inductive approach with twenty interviews from student startups. After that, findings will be presented and research propositions will be derived in order to answer the research questions. In the end, theoretical contributions, practical implications, limitations, and a future outlook will be outlined.

2. Conceptual Background

2.1. The Impact of Entrepreneurship Education on Student Entrepreneurship

Universities have been credited to play a crucial role in students' development of entrepreneurial skills and orientation (Buchnik et al., 2018). Among various factors, particularly, entrepreneurship education has been considered to be essential in developing students' entrepreneurial orientation (Bae et al., 2014).

A significant amount of research on entrepreneurship education dealt with the impact and effectiveness of entrepreneurship education programs (Matlay, 2008; Vanevenhoven, 2013), with partly contradicting findings. Examples of positive outcomes are an increase in entrepreneurial intentions (Bae et al., 2014) or increased optimism (Fayolle et al., 2006). On the contrary, e.g. Graevenitz, Harhoff, and Weber (2010) found a declining entrepreneurial intention despite receiving positive effects on students' self-assessed entrepreneurial skills (Oosterbeek et al., 2010; von Graevenitz et al., 2010). Reasons lie in the fact that students learn about their entrepreneurial aptitude. While students enhance their entrepreneurial skills and knowledge through entrepreneurship education programs, they also become more aware of their own strengths, weaknesses, and personal preferences related to entrepreneurship, which consequently, can impact their intentions to pursue entrepreneurial endeavors negatively. Bordering on the issue of the impact of entrepreneurship education, existing literature has mainly investigated the intention-behavior gap of student entrepreneurs (e.g. Shirokova et al., 2016). These students develop entrepreneurial intentions through entrepreneurship education at the university but fail to translate these intentions into action. For instance, Harima et al. (2021) found that students encounter substantial challenges after entrepreneurship programs, which invoke procrastinating behaviors which hinder them from founding the business (Harima et al., 2021).

Nevertheless, the transition from entrepreneurial intentions to entrepreneurial behavior still raises questions that have not yet been resolved. Despite several studies approaching the topic, reviews have yet shown that this intention-behavior gap in the context of entrepreneurship education and student entrepreneurship is still under-researched (Nabi et al., 2017). One contributing factor to this gap is the unique

setting in which the student is situated in. As entrepreneurship does not happen in isolation (Bergmann et al., 2016), student entrepreneurs are inevitably shaped by their context. Specifically, the environment provided by higher educational institutions introduces a multitude of influences that affect the student in different ways (Phuong & Freiling, 2022). However, these contextual factors have yet to be fully investigated and further linked students' entrepreneurial decision process. Furthermore, research has been primarily focusing on the education part in the past and tends to treat students as passive actors on the receiving side as previous studies place focus on the entrepreneurial education part and neglecting the students' perspective (Del Giudice et al., 2014). And only recently research started to shift focus onto students as active entrepreneurial agents.

Student entrepreneurship refers to "an attempt (nascent) to, or eventual (active) start-up initiated by one or several students during their academic career" (Ayob, 2021: p.747). As entrepreneurship and especially academic entrepreneurship is very context-dependent (Bercovitz & Feldman, 2008), student entrepreneurship also has its unique characteristics. Student entrepreneurs differ from common entrepreneurs, for instance, in their use of resource and resource logic that favors both effectual reasoning and the use of bootstrapping methods (Politis et al., 2012).

Researchers have further indicated that there has been little or no consideration of entrepreneurship research as a process that accounts for varying degrees of motivational factors during specific steps in the entrepreneurial process (Shane et al., 2003). Especially, this is the case with student entrepreneurship. However, first efforts to understand students' entrepreneurial decision-making logic have been done. Ilonen et al. (2018) investigated the decision-making logic of bachelor students in the higher educational setting. Their findings show three transformation patterns, namely doubts in how to proceed, unwillingness to proceed, and unsatisfactory team dynamics which led students towards a coping decision-making logic (Ilonen et al., 2018).

As the topic still lacks explorative research to understand why sometimes students do not engage in entrepreneurial activities despite showing high entrepreneurial intentions. This is where this study positions, investigating student startup teams in

the stage immediately after a venture creating program by drawing on the predictive power of expectancy theory in the study of entrepreneurial motivation.

2.2. Expectancy theory in the context of student entrepreneurship

Expectancy theory has been widely used in the research field on motivation and organizational behaviour (Kanfer, 1990). For instance, in the context of entrepreneurship, particularly concerning the intention-behavior gap, the theory has been utilized, however to a lesser extent compared to the theory of planned behavior which is more prominent in this domain. The intention-behavior gap has been a widely discussed field in entrepreneurship research, especially in regard to student entrepreneurship. However, the cognitive process to make these decisions are often neglected (Barba-Sánchez & Atienza-Sahuquillo, 2017).

Vroom's expectancy theory mainly consists of three elements which serve as antecedents for motivation. Thus, the motivational force can be seen as the multiplicative function of valence, instrumentality and expectancy. The expectancy theory suggests actors to be actively thinking agents that constantly evaluate and assess the outcome of their potential behavior. Based on their subjective judgement they determine their decisions towards their actions. The choice to execute on not to execute specific actions is based on a) valence, indicating the value they attach to the goals and outcome, b) expectancy, the belief that specific actions and efforts are necessary to reach the intended goal and outcome, and lastly, c) instrumentality, the belief that putting more effort and reaching the expectation, will lead to higher rewards.

Renko, Kroeck and Bullough (2012) have systematically tested the elements of the expectancy theory in the context of nascent entrepreneurs and found that the expectancy constructs predict intention and startup behaviors on a high level. It is thus applicable to understand the variables as antecedents for the intended effort level and link the intended effort level to entrepreneurial behavior (Renko et al., 2012).

Barba-Sánchez and Atienza-Sahuquillo used the expectancy theory to investigate self-employment and found that the individuals' entrepreneurial motivation is a driving force to become and also to remain self-employed (Barba-Sánchez & Atienza-Sahuquillo, 2017). They concluded that "businesses are not only created by

those who have the ability and aptitude to do so but also by those with the motivation" (Barba-Sánchez & Atienza-Sahuquillo, 2017: p.1112) which goes in line with findings from Holland and Garrett who investigated the decision-making processes of entrepreneurs (Holland et al., 2015). Looking in the direction of entrepreneurial education, these findings show that a successful outcome of entrepreneurship courses is not only for students to become aware of their own entrepreneurial aptitude, but building entrepreneurial motivation can be equally important regarding potential venture creations.

Lloyd and Mertens suggest to include the social context in the application of the expectancy model for more significance (Lloyd & Mertens, 2018). This call will be matched with the paper, especially, as it takes a closer took on their social environment when the decision-making process takes place. In the case of students, it is especially interesting as they are in a stage of their life where they are exposed to many options regarding their life and career paths. The university and its environment provide a large amount of information and chances for future career paths (Phuong & Freiling, 2022). In order to cope with the information overload, they have to carefully evaluate all factors based on their own wishes, needs and ambitions. As this evaluation process is a central element for understanding students' decisions and behavior, the expectancy theory can provide a solid framework for understanding students' behavior in the entrepreneurial context by unraveling the process that the student undergoes to make a certain choice. Students, similar to nascent entrepreneurs, are motivated by various outcomes that they expect from pursuing an entrepreneurial project. Even if many studies have studied students' motivation and intention (Oosterbeek et al., 2010), only few have focused on the constructs of expectancy, valence, and instrumentality (Manolova et al., 2007). However, this can be meaningful, as it views the student as a passive person in the process who is not only impacted by different factors, but rather an active agent who use their judgment to select an option that they believe will result in the most favorable outcome for themselves. In order to gain a deeper insight into the intention-behavior gap, as well as the concept of student entrepreneurship itself, it is therefore crucial to understand the reasons behind their decisions as well as the

cognitive process, making the expectancy theory a promising lens to apply in this regard.

3. Research Design

A qualitative, inductive approach is chosen as qualitative research serves the purpose of in-depth analysis and is particularly advantageous in cases of early stages of research when little is known about a phenomenon (Marschan-Piekkari & Welch, 2004). The research is exploratory and aims to uncover the questions of "how" and "why" a specific social phenomenon operates within a specific context (Mohajan, 2018). In this line of reasoning, the inductive approach further allows the researcher to draw insights directly from the data without being framed by expectations or models beforehand (Thomas, 2006). Therefore, the approach is deemed suitable as it allows the author to examine students' thought processes and actions regarding entrepreneurial activities as a socially situated phenomenon.

3.1. Research Setting

The research setting is an entrepreneurial education program for master's students at a German university. The setting is chosen as it is deemed suitable in the light of the research aim and context with the focus on the particular group of students who actively decided to take the entrepreneurship course but without having decided on an entrepreneurial path for themselves.

The seminar trains students' abilities regarding entrepreneurial activities and the development of business fundamentals with students from different fields with a focus on business studies, business informatics, and engineering. The seminar can be attended as curricular but also as an extra-curricular course, depending on the study major, and therefore has both of these student groups. The seminar is designed as follows: In the beginning, all students get time to think about potential ideas which they will present in the form of an elevator pitch in the following lesson. During the session, all students can vote and distribute points based on how they like the idea. The best ideas are then worked on in the seminar. For this purpose, the students form teams around the chosen ideas according to their interests. In the further process, they further develop and validate the business idea. Meanwhile, they receive coaching sessions every two weeks and had milestone presentations

every other week to present their progress. The seminar is very interactive, as students get to experience the initial founding process from idea finding to getting in contact with relevant partners and potential customers and validating various aspects of the idea. The business model canvas is used as a frame of reference for the consecutive steps. Besides the introductory kickoff, students mainly work with their coaches and the feedback which they receive from the lecturers during their milestone presentations. At the end of the course, the business idea is pitched in front of the lecturers, coaches, and a jury consisting of external stakeholders from relevant institutions of the startup ecosystem.

3.2. Data Selection & Data Collection

Individual semi-structured interviews were conducted with two members of each startup team, in order to get a grounded insight into the team dynamics. Semi-structured interviews have been considered to be the appropriate method, as they have a conversational and informal tone (Longhurst, 2003) so that the students are more relaxed and willing to share their stories. Furthermore, the research method is especially suitable for the underlying research since it allows the interviewer to ask for interpretations of situations or motives for action in an open form, and to raise insights in an open manner (Hopf, 2012). The further benefit of semi-structured interviews is that the interviewees are not guided by suggestive questioning (Adams, 2015). This approach therefore aims to minimize the risk of biases or distorted responses. Furthermore, the flexibility in semi-structured interviews allows the researcher to cross-check and validate information from previous interviews (Bryman & Bell, 2015). The interview guideline covered extensive topics revolving around the development stages during the course, entrepreneurship, and especially their own perception on these and bordering topics.

Additional to the interviews as the primary source for data, secondary data, such as presentation slides of the lessons learned presentations and final pitches, observations from coaching sessions, social media channels, and other media coverage of the startup teams were taken into consideration.

The duration of interviews ranges between 45-80 minutes. The conversation language was German as students felt more comfortable in speaking in their native tongue. Table 1 shows the overview of the interviewees:

Startup	Startup Idea	Startup Status	Gender	Age
Startup A	Medical Innovation	Ongoing	Male	28
			Female	28
Startup B	Medical VR App	Dropped	Female	27
			Female	26
Startup C	Digitalisation Platform in	Dropped	Male	27
	Logistics		Male	27
Startup D	Recruitment App	Ongoing	Male	23
			Male	25
Startup E	Social Startup	Dropped	Female	24
			Female	26
Startup F	Lifestyle Gadget	Dropped	Male	28
			Female	27
Startup G	Sustainable Product	Dropped	Female	23
			Female	25
Startup H	Healthy Food Box	Ongoing	Female	25
			Female	24
Startup I	Sustainable Packaging	Ongoing	Female	25
			Male	25
Startup J	International Baking Box	Dropped	Female	25
			Female	24

Table 1: Overview of Interviewees

It is noteworthy that the author was involved as one of the coaches in the venture development course. Therefore, contact with students could be established directly. Furthermore, the author has a sound overview of the course structure as well as on the teams, and their startup progress which alleviated the selection process. The selection criteria were master students who attended the course in the past years. Specifically, teams were approached that showed a high conviction in their business idea. The selection further criteria include the development of entrepreneurial intention during the course which has been confirmed in a first conversation prior to the interviews. Consequently, a total of 10 teams have been approached and a total of twenty interviews have been conducted. The data collection took place in Late 2020 – Spring 2021 in face-to-face settings or via video chat.

Being a coach, but not belonging to the lecturer staff, gave the author a unique position to conduct the interviews. In this specific setting, students see the coach at

a similar eye level and the relationship is rather friendly and less authoritarian. Thus, they are more open and willing to share stories and insights which they might not have revealed in the face of the course lecturers to whom they maintain a more formal relationship.

All interviews were recorded, transcribed, and analyzed via MAXQDA while following the Gioia method for a systematic approach (Gioia et al., 2013). The approach allows to structure the data and provides clear visualization of the data progression. As the study embraces an inductive qualitative research method, there was no a priori category system. The Gioia approach allows the researcher to remain open to emergent themes and patterns within the data, allowing for a thorough exploration of the phenomenon, and thus, represents a suitable method in line with inductive qualitative research. The codings were purely derived from the analysis of the interviews in an inductive manner. Consisting of three steps, an initial coding has been done, while sticking close to the original wording of the interviewees. In a second step, 2nd order themes were formulated while employing the lens of expectancy theory. Using this theoretical lens does not interfere with the inductive nature of the research; rather, it serves as an orientation tool to better understand and interpret the emerging patterns. Building on the 2nd order themes, aggregate dimensions emerged by further contrasting the empirical data with existing literature. This process leads to the final data structure, comprising of 22 2nd order themes and nine aggregated dimensions.

4. Results

4.1. The Transition from Course to Reality

The first research question targets the decision-making process. In order to answer the research question, we will compare the two settings during the considered period in which the students find themselves in: the setting during the entrepreneurial course and after the course ended.

For this purpose, we will make use of the expectancy theory, and more specifically, its valence, instrumentality and expectancy model (VIE model) to map the change of circumstances, and consequently, the underlying assumptions for the foundation of the decisions made.

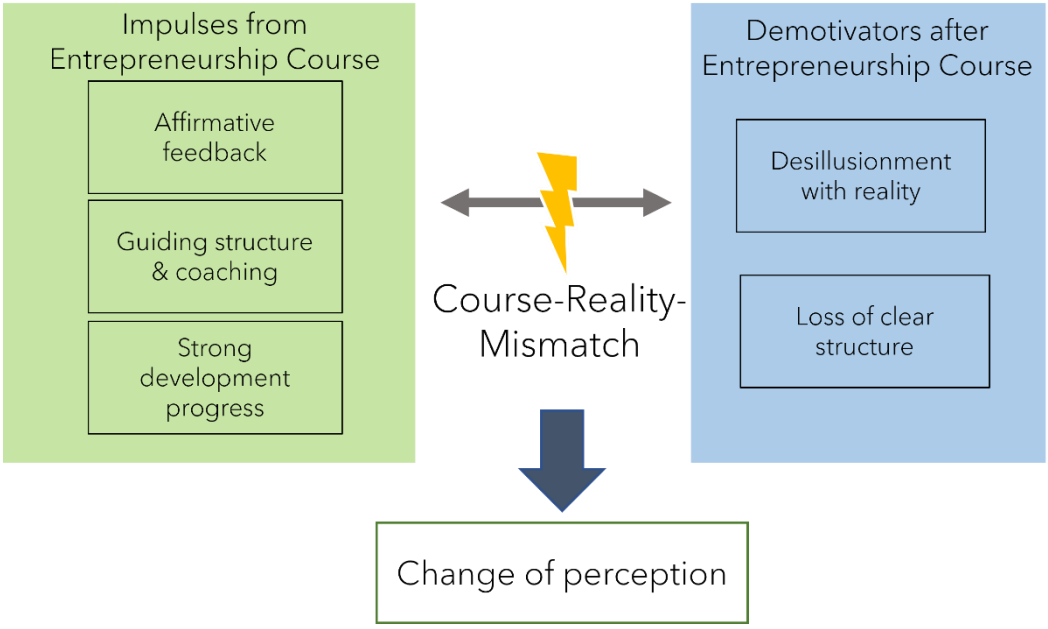

Figure 1: The Transition from Course to Reality (Own Illustration)

4.1.1. Impulses from the Entrepreneurship Course

In the course context, students experienced a number of impulses from the entrepreneurship course which led into the development of entrepreneurial motivation and intention as all students have stated in the interviews. Students have reached many milestones during the course. They have received a lot of positive feedback from their validation journey. As they have spoken to many potential customers and partners, they realized that their business idea is not only helpful on paper but can in fact be a pain killer for people in real life.

"Actually, the real passion and enthusiasm came when we conducted those very first interviews about the problem, when we interviewed the dog owners, talked to several dog owners. That's when we first noticed how enthusiastic they are about everything related to the lives of their dogs, that they are really deeply involved in it. I thought then: Oh wow, this is really of great interest, it's worth it. You can do something for it. This is fun." (Interviewee G2)

This realization that there is an actual demand for the product and service they have imagined has significantly boosted their self-confidence, motivation and conviction for the idea. They felt highly validated in their doing which increased the motivation to continue developing the idea. Besides positive feedback from their target group,

they have also received a lot of back-up and positive affirmation from peers, coaches and the external jury after the final pitch. Furthermore, constructive feedback has led some teams to pivots and iterations which further strengthened their idea. Overall, the combination of constructive criticism but mostly affirmative feedback reinforces their belief that they their project is relevant and worth pursuing.

By following the steps that have been set by the course, the course provided them with meaningful milestones that served as orientation. The students did not have to worry about what steps to do and what topics to deal with, as they have been already determined by the course structure itself. As the roadmap for their inquiry was already set, they could fully focus on delivering the content-related input for the next session. The frequent coaching provided them with methodological input for each step. The regular exchange with the coach gave them the opportunity for them to discuss the following steps, so that it prevented (or at least minimized the chance for) them to make significant mistakes along the way. The course frame therefore offered the students a guiding structure and coaching so that they did not lost orientation in the multitude of tasks that have to be done when developing a marketable business idea and model.

"You just knew: okay, you're now in the course and you have your sprint of two weeks, and afterwards you just have to have something that you can also present. And you also have your coaches, with whom you can talk and from whom you can seek advice" (Interviewee J2)

Following all these steps and continuously evolving their business idea, strong development progress has marked their entrepreneurial journey in the entrepreneurship course. The major progress paired with the continuous affirmation and positive feedback increased their entrepreneurial motivation and intention exponentially and boosted their self-confidence as well as the confidence in the business idea significantly.

Despite these strong entrepreneurial impulses coming from the course, the students have raised that one significant driver to perform well and to develop the business idea was it being embedded in the course. A fact not to be neglected was that a good performance also resulted in a good grade which is an additional major incentive.

A good grade was an objective that they never lost sight of during the whole journey. Therefore, they put in their greatest effort.

"And it was also a bit about getting a good grade, of course, and not just starting a business." (Interviewee A2)

"Because you are, effectively, doing your credit points. And that was one of the reasons why I said, OK, that is now really priority number one." (Interviewee C1)

RP1: Affirmative feedback, guiding structure and coaching, and the strong development progress throughout the entrepreneurship course motivated students to continue developing their business idea.

4.1.2. Demotivators after the Entrepreneurship Course

After the course was concluded, the routine changed drastically. When the course was over, the entrepreneurial motivation and intention did not yet disappear. The students were willing to continue. However, it was difficult to integrate it into everyday life which were considered as substantial demotivators. Firstly, the entrepreneurship course initially provided them with time and space which students could use to work on the idea. However, this time is now consumed by other new courses and therefore, the time available to work on the business idea became less. They now had to use their own free time on top of university-related assignments. Secondly, the fixed deadlines and milestones of the course provided them with a roadmap which they could follow. Now that the course is over, the students were overwhelmed by the number of tasks that had to be done. They started to waver as they did not know how to proceed. The student teams ended up not knowing in which direction to go. As the coaching have stopped with the end of the course, another challenge came up, as they did not know who to turn for advice and consultation for next steps.

This goes in line with the loss of external pressure and expectations. Besides giving a safe course frame and guiding, the entrepreneurship course also plays an important role as the deadlines, lecturers and coaches were considered as external sources of pressure. Since the students were aware that there were specific expectations towards them, it pushed them to make an effort. Students have described it

as a sort of positive pressure, as external incentives are perceived to be relevant for them to perform well. Now that this pressure and the expectations no longer exist, they claim it hard to motivate themselves to do the extra work on top of their studies.

"Yes, I think it was just important to take this time together. And also, these lessons learned presentations, which demanded a lot from you. Continuing to run a start-up like this requires a lot of self-discipline, and I think some of us have lost that." (Interviewee E2)

"I think it was like this…somehow we were kind of floating now and we didn't really know which direction we were swimming towards anymore and that's why we let it slip like that" (Interviewee E2)

RP2: The loss of clear structure weakens students' motivation to continue the entrepreneurial projects after the course has ended.

Despite the very practical orientation of the course with many validation loops, the development of a sound concept was in the foreground. This involved a number of testing and validating, but also had many creative aspects to it. However, the fun and creative parts became less after the basic framework of the business model was in place. Instead, tasks which are considered "less fun" became mundane. Especially when dealing with, for instance, legal and financial issues (e.g. Startup Team E&G).

The further it went into implementation, the more challenges emerged that could no longer be postponed. At the time of the interviews, *Startup D* and Startup *I* were struggling to implement their idea, as they lacked necessary IT skills. Despite a long-lasting search, they did not yet manage to find a suitable IT partners to cooperate with. *Startup G* faced grave challenges when they discovered that the materials, they planned to use to produce their product did not work as previously planned. The costs exceeded all calculations which ultimately would have caused their business model to fail. With increasing challenges, the progress slowed down significantly. This dynamic ultimately led to an increase in frustration with all team members. Paired with the lack of affirmation and rewards (not lastly due to stagnation), led to disillusionment with reality, as the entrepreneurial process does not at all resemble what they have learned and experienced in the course.

"[…] at the university you only get praise: great, perfect. Then you go off campus with the idea and you realize, it somehow goes completely down the drain" (Interviewee C1)

RP3: Disillusionment with reality slows down the process and increases frustration, weakening the motivation to continue the entrepreneurial project.

4.1.3. Course-Reality Mismatch

The disparity between the two settings during and after the entrepreneurial course show a course-reality mismatch, which ultimately triggers a change in perception within the student teams. The entrepreneurial project, which has been credited as one of the most fun projects during the course of study, became an additional pain point. Despite having self-chosen to continue the project, it started to feel like an obligation and an additional liability. The passion and conviction in the idea weakened as the students' doubts were growing, whether it is really worth the time.

"And that was super fun at first, but at some point it became such a pressure factor, because we were all still at university and then the module was still finished and other modules came along too" (Interviewee E1)

To summarize and connect the statements to the expectancy theory in this time period, the students' entrepreneurial motivation can be described by the VIE as follows:

	During the course	**After the course**
Expectancy *is the belief that if students act in a certain way, their efforts will result in the desired outcome*	The students make a great effort and go out of their comfort zones while working on their idea. Their goal is to develop a sound and promising business idea concept. Their goal is aligned with the assignment of the entrepreneurship course.	The student teams express doubts whether putting more time and energy into the project will lead them to overcome the challenges.
Instrumentality *is the belief that if they meet performance expectations, they*	In the entrepreneurship course context, students are aware that creating a successful business idea concept will lead to a good grade.	The student teams realized that leading a startup is connected to many sacrifices, especially in terms of free time.

will receive a greater reward		
Valence *Indicates the value that the students base on the reward*	Being a course, which is integrated in the students' study program, grading is a relevant factor for students. It is therefore important for them to receive a good grade in the first place and thus, in their opinion, successfully complete the course. A good grade is therefore considered as an attractive outcome, keeping them motivated to make big efforts in order to develop and validate the business idea.	The change in perception deals with the value the students perceive. Students express great doubts whether it is worth pursuing the startup project as the costs for continuing the project do not necessarily match the desired outcome.

Table 1: VIE Model on the Course-Reality Mismatch

It is observable that both the *instrumentality* and *valence* weakened significantly. The value students placed in their startup project is not eminent anymore. Further, they did not believe that putting in more effort would result in a satisfactory outcome. While the passion and conviction in the idea itself weakened, their motivational force lessened. The dynamic was even more reinforced by deadlines and work intensive assignments that were due in other seminars.

"Well, I think it would have been possible somehow. Of course, with the considerable extra effort, but it could have been implemented. I think personally why it didn't happen for us[…] probably really because it wasn't worth the extra effort...or not just probably. In any case it wouldn't have been worth it for us at that moment" (Interviewee G1)

The amount of positive feedback from different stakeholders during the course and the consistent progress, lead students into thinking that the business starting process can be done without major difficulties. However, after course end, they came into realization that this is not the case, and consequently, sobering them up from the excitement they had previously. The entrepreneurship course tries to offer a stage for the students to develop their business idea by mimicking real-life settings. Through the intensive coaching, it also offers a lot of help and guidance through the stage. Through this clear structure and guidance, they received the impression that

things are more doable. As students claimed to have lost their fear regarding entrepreneurial matters, they also build a particular naivety towards the complexity of the process. However, this naivety backfires once the guidance and affirmation stay away and they are left with less time and increasing challenges.

Interviewee C1 framed the course-reality mismatch as follows:

"You've been getting this praise for half a year and you thought, yes, everything will work out on its own now. This naivety, I would say, that you have somehow. Yes, maybe that's what ultimately tripped us up, why things simply didn't progress from a certain point onwards." (Interviewee C1)

RP4: The course-reality mismatch leads to a significant decrease in valence and instrumentality, diminishing students' motivation to continue the project after the course.

4.2. Influencing Factors

The second research question deals with the factors that impact students' decision process whether to drop or to continue the idea. Three major categories have been identified which are most relevant in students' evaluation process: *i) perception of feasibility*, *ii) comfort-zone behavior*, and, *iii) stimulating impulses*. Depending on how pronounced the characteristics are, students' decision will lean towards dropping or continuing the idea.

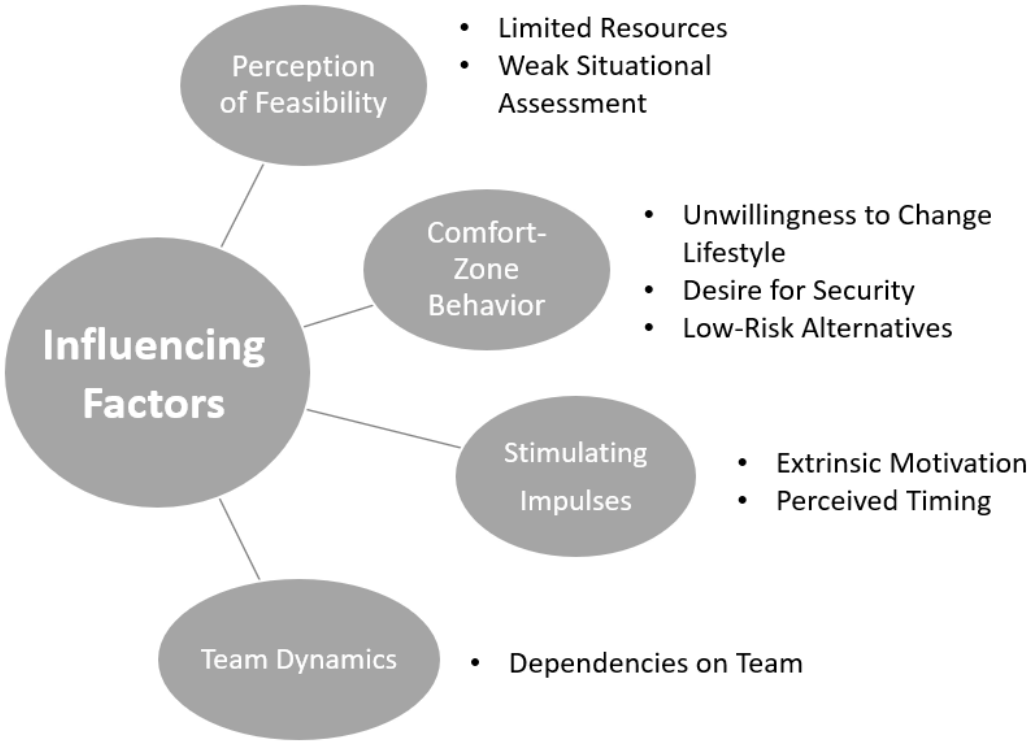

Figure 2: Factors Influencing the Transition (Own Illustration)

4.2.1. Perception of Feasibility

Limited resources are a critical concern that students have raised during the interviews. While the financial aspect is one issue, it is not the most relevant named in this relation. The students stated that taking a credit or going into debts is not an option. If the idea requires investing too much of their owns money in order to continue, they are most likely not willing to do so. As they do not have a stable financial basis, they rather focus on the job market, instead of spending their time on an entrepreneurial project whose future is uncertain. Contrary, it is interesting to note that almost all interviewees who are still working on their idea, have a financial coverage. The financial basis stems from self-employed activities, part-time jobs and scholarships (cf. interviewee A1, D1&2, I1&2), allowing to put working time into the project without worrying about covering their basic needs.

"And I think the scholarship is also extremely important. So now we really have financial security until, I believe, May.[…] I am simply secured, which makes it so much easier and also much more pleasant. You can really put all your capacities

into it and can say: Okay, I will continue with this. I'll try, I'll see what comes out of it. So it's gonna be an exciting time." (F1)

More notable is the fact that students raise time and energy as most lacking resources. Since they in the midst of their studies, a course end equals the beginning of a new course, bringing new assignments and group work to the fore. Especially while the course is situated in the master program, the master thesis is approaching. The university life leaves them with only little spare time. Furthermore, 15 out of the interviewed 20 students had part-time jobs, making their free time available even more less. Putting less time and energy into the courses would have resulted into bad grades or a prolongation of the duration of study. Both options are not desirable as students were interested in having a stable financial basis and thus, favored to transit into a money-earning state, rather than staying around on a low budget for too long. The awareness about their limited resources plays a vital role in their decision on how to continue after the course. Particularly the time constraint detains them from continuing the project as they consider their time at hand too less to progress the idea in a worthwhile way.

"So we said: Actually, we would like to, but we have no time at all. We're just finished with this topic. It was so intense in such a short time that we now need a bit of distance again. And then reality caught up with us again when all the other exams started" (Interviewee F1)

Another factor regarding their perception of feasibility is their weak situational assessment. Particularly teams with innovative ideas which require IT and professional expertise, felt overwhelmed by the complexity of the idea (for example team C). In the case of team B, their idea of a medical VR App was perceived to be too complex that the team had vast respect and fear of the implementability that no one could ease. As the team itself had too little technical expertise, it could not assess the extent itself, which in turn increased their reluctance towards the idea. They had not enough information to estimate their chances and did not know whom to ask as the assessment would have required professional input and intensive examination from different fields.

"What we had in mind was... I don't know how many years it would have taken just to program that, let alone validate it and bring it to the market and so on, and because this huge complication and complexity of the idea was so absolutely enormous, I always had a bit of respect for it." (Interviewee B2)

"Exactly, because it's a billion-dollar idea. So if it were to be properly implemented, it would be a really big deal. But I also had a lot of respect for it and decided for myself that I don't really see much success in it, because I believe that it will fail." (Interviewee C1).

As they felt the scope and extend of the idea was too big to handle, they have concluded the idea with end of the course. The lack of expertise and consequently, the difficulties in assessing the challenges in the first place is a hurdle which is hard to overcome, especially when teams do not know which person to turn to, and how to find the needed answer. This hurdle slows down the progress which ultimately demotivates the team and leads them to dropping the idea.

RP5: Limited resources and weak situational assessment negatively influence students' perception of feasibility, and thus, weaken their entrepreneurial motivation.

4.2.2. Comfort-Zone Behavior

In the same vein as safety is a basic need for everyone, it also holds true for students. Finalizing the studies is the overarching goal that all students coincided. The study degree is perceived as their insurance for the future (cf. Team C, D, E, F). With the degree being within their reach, the students wanted to focus on completing the studies successfully, instead of slacking, putting it on hold, or abandoning it completely. Furthermore, a consensus among the students prevails that the study is an investment towards themselves, and thus, is regarded as number one priority for the long run.

Teams that continued the idea also stated that having a safe financial basis was a major reason why they decided to test how far they can come.

"For me, I would have to say that if I didn't have financial security through my DJ business now, I would probably also say "Oh my God, I'd rather go the safe way" (Interviewee D1)

In the case of startup I2, the team has managed to get into an accelerator program shortly after the course ended. The participation in the accelerator program provided them financial input through a scholarship. It further gave allowed them to work on their idea while being in in a safe environment, similar to the entrepreneurship course before. Having coaches and mentors at their side who gave could support them in terms of content but also act as external motivation gave them the safety they needed to fully concentrate working on the idea. Conclusively, the financial aid and the support they could draw on through the accelerator program, mitigated the perceived risk for the team.

"And I think the accelerator was a good opportunity, because we were in a sheltered environment, so to speak, but we were still able to implement a risky idea. For me, it also gave me the security of knowing that we have people on hand who will help us if we don't get anywhere. We are not completely on our own." (Interviewee I2)

The decision to continue the entrepreneurial project after the course is made with a certain entrepreneurial intention that it will lead to a start-up foundation and that it can provide for one's living. However, it is noteworthy that students have many alternatives as career options in the job market. These options are less risky as they can guarantee regular and high income which not guaranteed when founding an own business. This is why students evaluate the decision in a detailed manner, while calculating opportunity costs. Being an entrepreneur brings many advantages as it is fulfilling to work on your own idea, being your own boss and having a flexible schedule (Alstete, 2008; Barba-Sánchez & Atienza-Sahuquillo, 2012). However, especially students have access to jobs with entrepreneurial character that offer a good salary. Interviewee C1 for example, settled for a job which he described as a hybrid solution.

"I was so skeptical that I said I'd rather do something else first, where I can also live this notion of start-ups, but on a smaller scale for the time being" (Interviewee C1)

Other students also indicated similar considerations towards low-risk alternatives for future career options, favoring employment fields such as Product or Business

Development. The course has brought them closer to the topic of founding. Thus, other jobs related to start-ups are also in consideration, for instance working in incubators or accelerators (Interviewee B2), as they can work with start-ups and watch them grow, instead of going through the whole process on their own. Since it combines a safe position as an employee while the job offers creative tasks and incorporates entrepreneurial aspects, they can have the best of both worlds. While part-time entrepreneurship has also been mentioned as an alternative, time- and energy constraints again have negated the option.

As often mentioned, students have little free time besides their studies and part-time jobs. Their little free time is often dedicated to friends, family, hobbies and social events. However, if working on an entrepreneurial project on top of their studies, the spare time falls short. Sacrificing their time left comes with neglecting their social connections, is a sacrifice not everyone is willing to make. On top of that, they are reluctant to suddenly having to bear such responsibility as it often involves giving up on other plans and projects that have been planned before (A2). These projects can be travelling plans (E2, D1), internships (A1, D1, J1), a semester abroad (D2, H1, H2..), but also everyday matters regarding to the designing their free time. Further, interviewee E2 does not want to compromise on her current lifestyle, habits and routines. Particularly the stage of being a student is important to explore new things. As she wants to travel for a few years and does not yet know where she will end up, it would interfere with her plan. Therefore, she does not to commit towards one project that would chain her down. Starting a venture, in her opinion, is something she wants to do later, when she has settled in life.

"So for me, it was just this commitment. If I found a company now, I can no longer lead my super free life." (Interviewee E2)

RP6: The interplay between students' unwillingness to change their lifestyle, their desire for security, and the availability of low-risk alternatives leads to a comfort-zone behavior, hindering a continuation of the entrepreneurial project.

4.2.3. Stimulating Impulses

One of the major demotivator has been identified as the absence of a clear structure as well as the lack of external pressure after the course. Both aspects interplay with

each other. Extrinsic motivation has been appointed to be a relevant factor for continuing the project by both group of teams. Students explained that they are in need of other people who encourages and pushes you. This motivation can be taken from deadlines, lecturers and coaches, but also from upcoming events or appointments by which you have to deliver something. Having a source of external motivation after the course helps the team to keep going. In case of team D, both interviewed members express a similar view.

"If investor A were to say, you have to have this and that all ready by this day, then at least you have set a limit like that. Because we don't have that much pressure yet, I'm not that effective and disciplined when it comes to working at this point." (Interviewee D1)

Despite ongoing discussion that "real" entrepreneurs are driven by the intrinsic motivation, stemming from the conviction in the idea (Yamini et al., 2022), it is easy to get distracted and quickly lose sight of the path. Especially as a student who has a wide array of options and constant new input through their studies and university life, they are even more exposed to the risk of distraction. Wanting to continue the project shows that students already have the intrinsic motivation. However, continuous external motivation is necessary to keep them going. Even so, finding the source of external motivation after the course often proves to be a challenge. The presence of external motivation thus can be crucial to whether the idea gets dropped or not.

"You need a spark of intrinsic motivation and the rest should be extrinsic […]. External people push more, as long as you somehow have interest in the subject." (Interviewee D2).

The second stimulating impulse is the perceived timing or more specifically, events that coincide with the time the course ends. These events serve as an extrinsic motivation, and it is crucial, whether opportunities exist when needed. Ending with a final pitch in front of the jury, students explained their motivation to be on the highest peak at that point. For team I, the deciding moment was the conversation with a jury member after the final pitch. He drew their attention towards a call of an accelerator program. Talking to a professional who believed in the idea and suggested

them to actively apply, made them realize that the project does not only have value as a course assignment but can also be transited into reality.

"My team mate and I went to the front and then spoke to him. And including a business card with a note about the deadline, that you could apply. I think that was a decisive point for me to get the whole thing rolling a bit more and to add more seriousness." (I1)

The availability of opportunities and incentives to immediately continue the project after the course is crucial for students. It enhances their perception about the timing as they wait for an opportunity to take on. University business idea competitions (Team A) and other validating events (Team H) are drivers that students consider helpful to develop the idea further. Therefore, they perceive the timing as favorable to continue working on the project.

Furthermore, political formalities can also play a role in how the timing is perceived. In case of team I, there have been new formalities that plastic packaging will be prohibited. As their business idea deals with sustainable packaging, they considered the time favorable to advance their idea as fast as possible and make it market ready.

RP7: Depending on the availability or absence of extrinsic motivation and other incentives, students perceive the timing as favorable or unfavorable for continuing the project immediately after the course.

4.2.4. Team Dynamics

The most relevant factor for students' decision on whether to continue with the entrepreneurial project or not, has proven to be team dynamics. The atmosphere in the team and team dynamics have been addressed in almost every interview and is almost an equally central aspect as the business idea itself. Depending on how other members of the team behave, it can result into dropping the idea or continuing the project. Students are primarily guided by the dynamics in the team. In the many cases of teams that have dropped the idea, reasons lie in the lack of necessary skills. Although the course is open to students from all study programs, it is primarily

integrated into the business curriculum. As a result, the majority of students participating come from business-related programs. Consequently, the students' skills and backgrounds tend to be quite similar, influenced by the course setting, where teams are formed not based on their competencies but rather on the ideas they have chosen. Especially when the idea is situated in specific sectors (e.g. medical sector) or requires IT expertise, relevant skills are mostly lacking. The search for the necessary expertise is often already a hurdle, so that the team soon quits.

The teams that continued, stated that the team was a main reason why they decided to continue as they had trust in the other members. In the case of team D, interviewee D2 explained that he wanted to work with his two team members, as they were professionals in their fields and he learned a lot from working with them.

"It was a purely people-based decision in the end. I decided against the internship because I wanted to work with person G and C. I was very happy with it." (Interviewee D2)

"I believe that I would have continued with other people who would have been as enthusiastic as I was, because I believe that there would have been a chance […] but I think everyone lacked a bit of passion in the end. And then also on my part. Because if everyone is no longer up for it, then I'm no longer up for it either." (Interviewee E2)

Students that are still lingering and playing with the idea of continuing the project, observe, how other team members act and feel regarding the project. Often, they are looking for an encouragement or stimulus coming from their team.

"I think I would have made it dependent on what the general dynamic in the group was like. And not just necessarily on my situation with the Master's thesis. If I had had the feeling that everyone else was putting in the same amount of energy and time, […] then I think that might have been an option for me, yes." (Interviewee H1)

Another example is provided by team H. The startup team consists of six members who worked together for the entrepreneurship course. After the course, the mem-

bers displayed interest in continuing the project. Despite ongoing attempts to initiate the conversation about the next steps, no clear commitment has been shown by the majority of the team members. This circumstance restrained the team members who were willing to move the project forward to act. As the group was too large, too many half-heartedly interested people hindered the decision-making process, causing the really motivated students to slowly grow weary. Consequently, the motivation declined over time.

"There are still six of us now. And I think if there were only two of us now, it would definitely be easier, because two of us can sit down and discuss the next steps - and so with six it's always just...you talk about: do we want to do this? Do we not want to do it? But never in such a precise way. It's always just: yes, we all feel like it, but we can have a look." (Interviewee H2)

It becomes obvious that team dynamics play a crucial role in students' decision process. Despite showing entrepreneurial motivation, they are indecisive and tend to not take action but wait for a group decision to be made. The general mood in the decides whether the project is continued or not. The result can consequently lead in both ways: When the prevailing mood in the team is in the direction of continuing the project, those students who have entrepreneurial motivation, but are a little more reserved get caught up in the energy in the team. Their insecurity gets overridden by the team dynamics and the team moves on working on the idea. However, team dynamics can also work the other way: when the team members stay interested but passive, while waiting out potential decisions, it can drain the energy from those students that are seriously considering to do the next steps. Having non-active members can impede potential progress, as it happened in team H. This outcome is not uncommon. The teams have been assembled prior for the university course with students that do not necessarily know each other beforehand. Each one has their own motivation and display a different level of commitment towards the idea. Students that have provided the idea has been observed to be more committed and leading during the groupwork. The disparity in commitment becomes more apparent after the course is over, as the overall objective of passing the course with a good grade is no longer present. Ultimately this causes teams to stagnate, as they do not come to a consensus efficiently.

Despite having the option to continue the entrepreneurial project alone, students tend to be averse towards the option. One possible explanation for why students place such a high value on the team aspect in their decision is provided by interviewee F1: *"And I have to say that I'm not the type to say that I think I'm involved in such a good idea that I'm going to drop everything and go to Silicon Valley with a loan of 50,000 euros that I'm going to borrow now. But as ...us as a group? Yes, I would say that with this group dynamic, I would definitely take this risk because I can trust the people there and they give me security." (Interviewee F1)*

"We complement each other, and that gives security that you can rely on the others. So they make up for my weaknesses. And I make up for theirs, of course." (Interviewee F1)

Having a team that compensates for the own weaknesses, skill- and character wise, the student feels more confident and equipped for future challenges. Thus, the perceived risk is lower, increasing the chance of continuing the project. Further, as discussed earlier, students deem security and plannability as relevant. Working in a team offsets the risk factor to some degree, especially when considering starting a venture. But even without having the immediate start-up within reach, one risk factor considered important by the students is minimized. The risk of losing time is reduced by the team, as the number of tasks is shared among the team members and does not depend exclusively on one person. In order to reduce the risk as much as possible, students therefore prefer the option of continuing the entrepreneurial project towards the foundation together with the team.

RP8: Team dynamics can influence students' motivation in both directions, playing a crucial role in their decision-making.

4.3. Other relevant insights

Despite mapping the decision progress and putting students' rationality to the fore, it is important not to neglect the emotional dimension. Students do not just evaluate their best options and run a cost-benefit analysis in their head, but also look at meaning behind it. Even though interviewee A2 was not averse to starting a business in general, she stated that she would not have wanted to be in the founding team of the idea that she had worked on during the entrepreneurial class.

"My spirit and my soul were not in there. My head was in there, and I was keen to join in. But it's just not a part of me and it's just a part of him, and I think that's what's special about starting up. Because it will probably make him happy forever if it works. For me however, it would just be a business that I started. And it wouldn't mean much to me." (Interviewee A2)

She further emphasized that she would likely consider to found as a student if the startup idea is connected with topics that are close to her heart and that she is passioned about. Despite seeing the potential of the idea, the valence to pursue this particular idea was not present as she cannot fully identify herself with the topic despite supporting it strongly. As the ideas in the course are usually brought in by one or two students, the idea often does not hold the same value for all group members. The emotional value and the attachment to the idea is therefore also a crucial factor regarding how students decide since a continuation of the project would mean for it to become a bigger part of students' life. Therefore, not only the rational evaluation but also their emotional attachment needs to be considered.

5. Discussion

The paper contributes to the current stream of literature in a threefold manner. First, it provides additional insights into the topic of students' entrepreneurial decision-making logics (Ilonen et al., 2018), especially during the crucial phase of deciding whether to transition their entrepreneurial project from the course to reality. Previous research has primarily focused on the time span during the course itself, not on the period afterwards when the actual decisions to continue or discontinue the project are made. This study offers new insights by taking the time span directly after course ends into consideration. The identification of the course-reality mismatch contributes to the current literature by highlighting the gap between classroom learning and real-world application, which has been underexplored in entrepreneurship education literature (Thomassen et al., 2020). Secondly, it adds to the call for "a richer understanding of process steps, necessary sequences and decision-making rationales" (Arend et al., 2015: p.646) by applying the expectancy lens and looking at students' behavior from a perspective which includes the actors' evaluation of perceived consequences. The use of expectancy theory in this case allows us to

understand how students' motivation is developed and how it develops in the decision-making process.

The findings go in line with previous research indicating that value perceptions are the strongest determinant of effort (Gao et al., 2012; Renko et al., 2012). Furthermore, results show that the discrepancy of course and reality have a significant negative impact on students' expectancy. A striking feature here is the abrupt drop in motivation after the end of the course. As stated before, the emotional high is strongest towards the end of the course. However, in this crucial moment, they got left alone without guiding support of how to proceed and what options they have. This leads to the disillusionment and a down-spiraling of their entrepreneurial motivation. It is therefore important to intercept the students at this point, in order to prevent the business idea from becoming sidelined by other university commitments. The availability of programs immediately after the end of the course (such as accelerator programs, business model competitions…) are important incentives that motivate students to persevere. Therefore, extrinsic motivation is highlighted as an important factor which matches the research on entrepreneurial intention which states that "individuals will stimulate their entrepreneurial potential once they accept they truly have the ability, that there are environmental possibilities and that there is social support" (do Paço et al., 2015: p.62).

Lastly, the paper identifies influencing factors and presents mechanisms working between entrepreneurship education courses and potential student entrepreneurs. This allows for a deeper understanding of how students make decisions regarding entrepreneurial issues and what reasons lie behind their behavior. Consequently, it adds empirical insights to the decision-making logic in the venture creation process which has not been done in recent research (Dutta & Thornhill, 2014). The paper offers a set of causalities that is relevant to future research as it can serve as a groundwork that requires more empirical research on its own. This is a necessary step to promote research on student entrepreneurship.

6. Conclusion

6.1. Implications

The identified course-reality mismatch raises a question and opens up a consequent field for implications. In order to mitigate or navigate the course-reality mismatch, it is important for students to maintain their momentum. But how? On the one hand, measures can be taken after course ends. These measures can include entrepreneurial support offers immediately after course ends, such as transitioning students into incubator or accelerator programs, where students can continue working on their idea in safe environment with guidance. On the other hand, it is worth considering whether introducing more real-world elements into the classroom could reduce the severity of the course-reality mismatch. This could be done by providing less structure and guidance to see how and what steps students pro-actively take in order to advance their idea. While these implications can be executed by lecturers and professors who are in charge of the entrepreneurship courses, it is important for policy makers on university level to be involved. As students do not only take course-specific factors into account but also include factors from the environment they are embedded in, the whole set of activities and offerings in terms of entrepreneurship support from the university should be considered, such as entrepreneurial courses, accelerator and incubator programs, and business plan competitions. The paper shows that it is essential for the universities to work out a unified entrepreneurial push strategy (Wegner et al., 2020). For this, it is necessary to sit down with all entrepreneurship-related instances and institutions of the university, as well as lecturers and professors of the entrepreneurship courses, and to coordinate the offered courses and programs with each other. This ensures that certain services are not offered twice, but that the services are based on each other, both in terms of content and time. This enables a continuous support pipeline for the students so that they do not feel abandoned in between and lose their entrepreneurial motivation and intention.

Last but not least, many identified factors under *comfort-zone behavior* and *stimulating impulses* are connected to insecurities that partly stem from the missing entrepreneurial culture at the university. Fostering entrepreneurial culture at the university is equally important to the endeavors to enhancing and increasing entrepreneurial education offers. “A university environment that recognizes the importance of entrepreneurship and supports entrepreneurial thinking among its members”

(Jansen et al., 2015) can dampen or negate students' perceptions of uncertainty, and consequently, have a positive impact towards students' entrepreneurial choice. Therefore, universities should actively work on cultivating an entrepreneurial culture by implementing measures to create awareness and to educate, e.g., by highlighting role models and success stories (Boldureanu et al., 2020), and stimulating and incubating students' entrepreneurial endeavors (Jansen et al., 2015).

6.2. Limitations

One limitation of the study is related to the setting and structure of the investigated course itself. Since the course is situated within the economics faculty, this has resulted in a rather homogeneous student body in terms of skills, potentially limiting the perspectives for continuation that more diverse teams might have. Furthermore, the team formation process is fixed, which means the teams were formed based on which ideas the students chose. This team formation process does not mirror the real world, where team members are typically chosen based on complementary competencies. This specific team formation mode is not unlikely for experiential entrepreneurship courses; however, it may have significantly impacted the team performance, and consequently, students' decision to continue the project outside the classroom.

Another limitation is that the study is dependent on students' perceptions of the factors. Perception is inherently subjective. This subjectivity means that the findings may not fully capture the objective reality of the entrepreneurial decision-making process. Additionally, the prevailing entrepreneurial culture at the university and the regional culture in Germany have not been taken into account, which could significantly impact students' perceptions and experiences.

Furthermore, the different cultural or socioeconomic backgrounds of the students have not been taken into account. These different backgrounds can again influence students' perception on valence, expectancy and instrumentality. By not considering these factors, the study may overlook important nuances, especially how students from the same team but from different cultural contexts perceive the same aspects differently. Future research should aim to include these dimensions to provide a

more comprehensive understanding of the factors influencing students' entrepreneurial journeys.

6.3. Future Outlook

The study opens up new avenues for future research, particularly by highlighting the concept of the course-reality mismatch. This mismatch, where there is a gap between classroom environment and real-world environment, warrants deeper investigation. Understanding this phenomenon more thoroughly can provide valuable insights into how educational programs can be designed or modified to better prepare students for the real-world challenges of entrepreneurship. Future research could explore the specific factors contributing to this mismatch, the ways in which it impacts students' entrepreneurial journeys, and the strategies that can be implemented to bridge this specific gap.

Stemming from the limitations of the study, researchers can further explore how cultural factors might impact students' perceptions of the influencing factors in different regions or countries. This kind of research can reveal how diverse cultural contexts shape students' views on entrepreneurship, potentially unveiling other unique influencing factors that were not identified in this study. Such insights can support the development of country-specific, tailored entrepreneurial education programs that address particular cultural needs and preferences.

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Paper 3

The Significance of Team Dynamics in Students' Entrepreneurial Decision-Making

Quynh Duong Phuong (University of Bremen)

Published in: European Management Studies, 22(1), 25-51.

DOI: https://doi.org/10.7172/2956-7602.103.2

Abstract

Purpose: The paper seeks to explore how team dynamics influence students' decisions to either pursue or abandon a business idea following their participation in an experiential entrepreneurship course.

Design/Methodology: The paper employs an inductive, qualitative approach to examine the team dynamics by exploring students' thought processes and actions regarding entrepreneurial activities as a socially situated phenomenon. 20 semi-structured interviews, observation and secondary data serve as data base, following the Gioia method for data analysis. **Findings:** Findings show that team dynamics have proven to be the most relevant factor for students' decision on whether to continue with an entrepreneurial project or not. Among various factors, reasons are rooted in the team membership decreasing uncertainty, students' decision dependencies on team members and the increased importance placed on the team relative to the idea.

Research Limitations/Implications: The study concentrates on team-related aspects in students' decision-making. While the factors have been examined in the study, other determinants may contribute to students' decisions which are outside the scope of the study. The study offers a set of causalities that offer a nuanced understanding of team dynamics and decision-making processes over an extended post-course timeframe.

Originality/Value: The study contributes to the current literature by unraveling the intricate relationship between team dynamics and entrepreneurial decision-making. It offers a nuanced perspective on the understanding of how collaborative contexts shape students' willingness to pursue projects beyond the entrepreneurship classroom.

Keywords: empirical paper, student entrepreneurship, team, team dynamics, decision-making

JEL: M, O

Part 3: Appendix

Appendix 1: Article Overview & Declaration of Co-Authorship

Article 1

Type	Journal Article (Blind Peer-Review)
Title	Student Entrepreneurship – The Impact of University Environment on Students' Starting Conditions
Authors	Quynh Duong Phuong (University of Bremen) Jörg Freiling (University of Bremen)
Place of Publication	„Problemy Zarzadzania (Management Issues)" Vol. 20, No. 1(95), p. 150 – 172
Date of Submission	20.09.2021
Date of Acceptance	10.03.2022
Date of Publication	25.05.2022
Author Contributions	Phuong: 80% Freiling: 20%
Contribution of Quynh Duong Phuong in Detail	• Literature review on student entrepreneurship • Connecting literature on Higher Educational Institutions and literature on entrepreneurial constructs • Development of research propositions • Manuscript writing • Revisiting the manuscript based on reviewers' comments

Article 2

Type	Journal Article (Blind Peer-Review)
Title	Bridging the Gap – Exploring students' Entrepreneurial Decision-Making from Classroom to Reality
Authors	Quynh Duong Phuong (University of Bremen)
Place of Submission	Journal of Entrepreneurship Education
Date of Submission	29.06.2024
Date of Acceptance	-
Date of Publication	-
Author Contributions	Phuong: 100%

Article 3

Type	Journal Article (Blind Peer-Review)
Title	The Significance of Team Dynamics in Students' Entrepreneurial Decision-Making
Authors	Quynh Duong Phuong (University of Bremen)
Place of Publication	European Management Studies (2024)
Date of Submission	10.08.2023
Date of Acceptance	25.01.2024
Date of Publication	10.7.2024
Author Contributions	Phuong: 100%

Proof of Publication/Submission

Article 1

„Problemy Zarządzania (Management Issues)"
Vol. 20, No. 1(85), p. 150–172, e-ISSN: 2300-8792
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Student Entrepreneurship – The Impact of University Environment on Students' Starting Conditions

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Submitted: 20.09.2021 | Accepted: 10.03.2022

Abstract

Purpose: The research aim is to identify how the university campus influences students' entrepreneurial starting conditions.

Approach: The underlying paper is conceptual. The focus is to propose new relationships among constructs and bridge existing theories. In this paper, the entrepreneurial constructs regarding the venture foundation process are linked to extant literature on Higher Educational Institutions and bordering topics. We develop research propositions by connecting these two topic streams through causalities.

Findings: We developed eight research propositions, arranged into two categories: university setting and student setting encompasses. The university setting comprises factors accentuating the specific, fertile university environment, whereas the student setting the specific status and related peculiarities.

Research limitations/implications: Limitations arise, as the conceptual paper does not refer to data. Thus, there is a risk of being incomplete and biased based on the theoretical lens. The study adds to the contextual view of student entrepreneurship. It offers a sound set of causalities as a base for future empirical research.

Practical implications: Through the insights, universities can adapt their offers in terms of support space and services and start tackling the students' needs, as well as their weak points in terms of entrepreneurial starting conditions.

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Article 2

Thank you for submitting Manuscript

AB

Allied Business Academies <entrepreneurshipedu@abacademies.org>
An Allied Business Academies

Antworten | Allen antworten | Weiterleiten | ...

Sa 29.06.2024 13:56

Allied Business Academies

Dear Dr. Quynh Duong

Your submission entitled **BRIDGING THE GAP â EXPLORING STUDENTSâ ENTREPRENEURIAL DECISION-MAKING FROM CLASSROOM TO REALITY** has been received by Journal of Entrepreneurship Education

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Article 3

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The Significance of Team Dynamics in Students' Entrepreneurial Decision-Making

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Submitted: 28.09.2023 | Accepted: 25.01.2024

Abstract

Purpose: The paper seeks to explore how team dynamics influence students' decisions to either pursue or abandon a business idea following their participation in an experiential entrepreneurship course.
Design/Methodology: The paper employs an inductive, qualitative approach to examine the team dynamics by exploring students' thought processes and actions regarding entrepreneurial activities as a socially situated phenomenon. 20 semi-structured interviews, observation and secondary data serve as data base, following the Gioia method for data analysis.
Findings: Findings show that team dynamics have proven to be the most relevant factor for students' decision on whether to continue with an entrepreneurial project or not. Among various factors, reasons are rooted in the team membership decreasing uncertainty, students' decision dependencies on team members and the increased importance placed on the team relative to the idea.
Research Limitations/Implications: The study concentrates on team-related aspects in students' decision-making. While the factors have been examined in the study, other determinants may contribute to students' decisions which are outside the scope of the study. The study offers a set of causalities that offer a nuanced understanding of team dynamics and decision-making processes over an extended post-course timeframe.
Originality/Value: The study contributes to the current literature by unraveling the intricate relationship between team dynamics and entrepreneurial decision-making. It offers a nuanced perspective on the understanding of how collaborative contexts shape students' willingness to pursue projects beyond the entrepreneurship classroom.

Keywords: empirical paper, student entrepreneurship, team, team dynamics, decision-making.

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Appendix 2: Academic Contributions

1. Publication Activities

Journal Articles

- Phuong, Q.D., (submitted) Bridging the Gap – Exploring Students' Entrepreneurial Decision-Making from Classroom to Reality. Submitted to: *Journal of Entrepreneurship Education* (Submission date: 29.06.2024)
- Phuong, Q.D. (2024). The Significance of Team Dynamics in Students Entrepreneurial Decision-Making. *European Management Studies*, *22*(1), 25 51. https://doi.org/10.7172/2956-7602.103.2
- Baron, T. Phuong, Q.D., Freiling, J. (2022) Inno-Quarter: Open Innovation Quarters for quick end-user feedback at European Festivals.
- Phuong, Q. D., & Freiling, J. (2022). Student Entrepreneurship – The Impact of University Environment on Students' Starting Conditions. *Problemy Zarządzania (Management Issues)*, 20(1), 150–172.
- Freiling, J., Baron, T., Phuong, Q. D., & Elsner, J. (2021). Inno-Quarters – mit Living Labs auf Festivals zur Validierung neuer Geschäftsmodelle. *Austrian Management Review*, 11 (1), 58 – 71
- Phuong, Q.D., & Harima, A. (2019). The Impact of Cultural Values on Vietnamese Ethnic Entrepreneurs in Germany. *Journal of Entrepreneurship, Management, and Innovation*, 15(2), 85-115.

Book Chapter

- Phuong, Q.D., Mayer, S., Theohavora, V., Harima, A., & Freiling, J. (2019). Provoking Gender-related Institutional Changes: A Case of a Returnee Female Entrepreneur in India. In M. I. Yenilmez & O. B. Celik (Eds.) A comparative perspective of women's economic empowerment. Routledge: New York, NY.

2. Conference Participation

- Phuong, Q.D., The Significance of Team Dynamics in Students' Entrepreneurial Decision-Making, 7th International Conference on Entrepreneurship for the XXI century. Images and perspectives, 26.-27. October, 2023, Warsaw, Poland.
- Phuong, Q.D., Exploring Entrepreneurial Competences in the Context of Rapid Validation Programs, RENT 2022 – XXXVI Research in Entrepreneurship Conference, 16.-18. November, 2022, Naples, Italy.

- Phuong, Q.D., Entrepreneurship Education as a Stage – Implications on Student Entrepreneurship, ENTIME 2022 – Entrepreneurship in Modern Economy Conference, 21.-22. April 2022, Gdansk, Poland.

- Phuong, Q.D., Entrepreneurship Education as a Stage – Implications on Student Entrepreneurship, RENT 2021 - XXXV Research in Entrepreneurship Conference, 18.-19. November, 2021, Turku, Finland.

- Phuong, Q.D., Entrepreneurship – The Impact of University Environment on Students' Starting Conditions, 6th International Conference on Entrepreneurship for the XXI century. Images and perspectives, 21.-22. October, 2021, virtual.

- Phuong, Q.D., Mayer, S., & Theohavora, V., Indian Female Entrepreneurs Returning Home, International Conference on Migration and Diaspora Entrepreneurship 2016, 28.-29. November, 2016, Bremen, Germany.

- Phuong, Q.D., The Impact of Networks on the Absorptive Capacity of Diaspora Entrepreneurs, International Conference on Migration and Diaspora Entrepreneurship 2015, 14.-15. December, 2015, Bremen, Germany.

Appendix 3: Selbstständigkeitserklärung

Hiermit erkläre ich, dass ich die vorliegende Arbeit ohne unerlaubte Hilfe angefertigt habe. Es wurden keine anderen als die angegebenen Quellen und Hilfsmittel benutzt. Die den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen wurden als solche kenntlich gemacht. Eine Überprüfung der Dissertation mit qualifizierter Software im Rahmen der Untersuchung von Plagiatsvorwürfen ist gestattet.

Bremen, 01.07.2024

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(Unterschrift)