

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 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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Originality/value: The paper contributes to the current literature by presenting relations between the university environment and student entrepreneurship – the two areas 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

Przedsiębiorczość wśród studentów – wpływ studiów na kształtowanie ich planów i możliwości przedsiębiorczych

Streszczenie

Cel: celem badania jest określenie, w jaki sposób studia wyższe wpływają na warunki rozpoczęcia działalności gospodarczej przez studentów.

Metodologia: praca ma charakter koncepcyjny, skupia się na zaproponowaniu nowych relacji między koncepcjami i na połączeniu istniejących teorii. W niniejszym opracowaniu koncepcje przedsiębiorczości dotyczące procesu zakładania przedsiębiorstw są powiązane z istniejącą literaturą na temat instytucji szkolnictwa wyższego i na tematy pokrewne. Opracowano propozycje badawcze, łącząc te dwa nurty tematyczne poprzez związki przyczynowo-skutkowe.

Wyniki: opracowano osiem propozycji badawczych, podzielonych na dwie kategorie: środowisko uniwersyteckie i środowisko studenckie. Pierwsza z nich obejmuje czynniki akcentujące specyficzne, sprzyjające rozwojowi środowisko uniwersyteckie, natomiast druga – szczególnie status studenta i związane z nim uwarunkowania.

Ograniczenia/implikacje badawcze: ograniczenia wynikają z faktu, że praca koncepcyjna nie odnosi się do danych. W związku z tym istnieje ryzyko braku obiektywności ze względu na teoretyczne ujęcie. Badanie wzbogaca kontekstualne spojrzenie na przedsiębiorczość studentów. Zaprezentowano w nim rzetelny zestaw związków przyczynowo-skutkowych jako podstawę dla przyszłych badań empirycznych.

Implikacje praktyczne: dzięki zawartym spostrzeżeniom uczelnie mogą dostosować swoje oferty w zakresie przestrzeni i usług wsparcia oraz zacząć zajmować się potrzebami studentów z uwzględnieniem ich potencjalnych trudności związanych z warunkami rozpoczęcia działalności gospodarczej.

Oryginalność/wartość: artykuł wnosi wkład do obecnej literatury, przedstawiając relacje między środowiskiem uniwersyteckim a przedsiębiorczością studentów – dwoma obszarami, które wcześniej nie były ze sobą zestawiane. Pozwala to na głębsze zrozumienie sposobu, w jaki studenci radzą sobie z kwestiami przedsiębiorczości i jakie przyczyny leżą u podstaw ich zachowań w tym zakresie.

Słowa kluczowe: przedsiębiorczość studentów, uniwersytecki ekosystem przedsiębiorczości.

1. Introduction

While founding ventures is a matter of the entire society, campuses can be main drivers of startup entrepreneurship (Jansen et al., 2015). The dialogue between students and academicians and a far-reaching learning environment, offering knowledge on current societal, environmental, cultural, and technical issues, may prepare a fertile ground for venture-prone students and cause bandwagon effects to involve other students to follow venturing initiatives. A high density of young, ambitious people,

and interdisciplinary encounters interweaved with the universities' mission to generate something new, add to the driving potential of universities as fertile soil for entrepreneurship (Sherwood, 2018).

Policymakers have acknowledged the need for entrepreneurs and have made an effort to develop and promote entrepreneurship education, mirrored in the increase of programs in entrepreneurship education in schools and, especially, in HEIs (Higher Educational Institutions) in the US and Europe (European Commission, 2016; EIM Business and Policy Research, 2012; Kuratko, 2005; Politis, Winborg, & Dahlstrand, 2012). To promote young entrepreneurial talent, measures have been taken to include entrepreneurial components into the curricula of universities and provide appropriate facilities for supporting entrepreneurial endeavors (Ayob, 2021a). However, this raises the question what the premises are and how much does the university with its infrastructure, relations and ambiance matter when it comes to promoting student entrepreneurship.

As entrepreneurship does not happen in isolation (Bergmann, Hundt, & Sternberg, 2016), this holds for student entrepreneurs, too (Politis et al., 2012). Human and social capital is built continuously in the course of their student life. Through the learning environment and study programs, but also on the campus through the interactions between peer-students and faculty members or even venture supporters on campus, students are sensitized to the problems of society, which makes them a community of problem-solvers with diverse skills and specialized knowledge. Through their embeddedness in the university as a highly knowledge-intensive context (Politis et al., 2012; Link & Sarala, 2019), student ventures are typically knowledge-intensive. These ventures may shape and alter the competitive landscape and have a significant impact on society and the economy. By spilling over the knowledge, student entrepreneurs are important connectors between the university and the economy as they “play an important role as promoters of knowledge-intensive entrepreneurship in regionally embedded innovation systems” (Feldman, 2000; Politis et al., 2012, p. 666).

With these developments in mind, the issue of circumstances in which students become entrepreneurial emerges with entrepreneurial intentions and the intention-behavior gap at the front-seat (Shirokova, Osiyevskyy, & Bogatyreva, 2015). Neither do entrepreneurial intentions unfold, nor do they necessarily lead to foundations. Thus, this paper seeks to identify factors explaining the run of events. Focusing on the front end, it will not explicitly investigate the topic of students' entrepreneurial intentions but rather explore the conditions surrounding the students and impacting their entrepreneurial starting conditions.

The according research question is: How does the university environment impact students' entrepreneurial starting conditions? In line with the above-mentioned goal of the paper, the results aim to provide a systematic framework with causal relations and multi-level insights into the topic of

student entrepreneurship. The study contributes to the current research in three ways. Firstly, it offers a set of causalities on the starting conditions of nascent and potential student entrepreneurs. This allows a deeper understanding of how students deal with entrepreneurial issues and what reasons lie behind their related behavior. Particularly with regard to practical implications, this paper may offer valuable insights, as it enhances the contextual understanding of student entrepreneurship and provides insights to the university-based mechanisms that trigger chances and barriers for students with entrepreneurial intentions.

The paper is a conceptual one. As such, it can propose new relationships among constructs and bridge existing theories in insightful ways (Gilson & Goldberg, 2015). By developing research propositions, we derive distinct facets from literature as initial approximation to uncover peculiarities of students becoming entrepreneurs, while considering the university and student-life as most important variables that constitute students' peculiarities. The paper will proceed with a conceptual part, which gives a brief overview on the current state of student entrepreneurship and the venture creation process. Subsequently, propositions for student entrepreneurs will be derived by connecting these with different facets of the university context through causalities to answer the research question. The last section outlines theoretical contributions, practical implications, limitations, and future outlook.

2. Literature Review

2.1. The Current State of Student Entrepreneurship

Along with entrepreneurship education becoming more prominent in research and HEIs, research on student entrepreneurship is also progressing. So far, only little efforts have been made towards a clear distinction between student entrepreneurs and non-student entrepreneurs (e.g. Politis et al., 2012). However, this differentiation is meaningful as contexts largely differ (Bergmann et al., 2016) besides being an important facet of entrepreneurship (Welter, 2011). Studies reveal that students form their intention and attitude towards entrepreneurship during their academic years (Shirokova et al., 2017). Several studies have started examining contextual factors on students' entrepreneurial intentions, taking into account the national culture (Bae et al., 2014), regional culture (Liñán et al., 2011) and gender (Nowiński et al., 2019) among others. Using an institutional perspective, Oftedal, Iakovleva and Foss (2018) found that potential student entrepreneurs do not act separately from their structural context and it is not possible to capture their nature without looking at their context (Oftedal, Iakovleva, & Foss, 2018). Against this background, it is relevant to continue exploring contextual influences from the university environment (Ayob, 2021a) and examine its impact on student entrepreneurship.

Student entrepreneurship refers to “an attempt or eventual startup initiated by a student or a group of students during their studies” (Ayob, 2021b, p. 663). Previous research on student entrepreneurship have focused on investigating personal attributes and personality traits (Gerry, Marques, & Nogueira, 2008), and internal factors of student entrepreneurs, such as family background (Georgescu & Herman, 2020). Findings conclude that male students and students with an entrepreneurial family background display a greater propensity to founding a business. Character traits such as high self-efficacy and locus of control are strongly related to entrepreneurial intention risk aversion (Sesen, 2013), while attitudes towards risk aversion tend to negatively influence students’ decision regarding entrepreneurship.

Another major research stream focuses on students’ entrepreneurial intentions. As intention is considered as the most important variable for predicting the behavior of entrepreneurs (Adam & Fayolle, 2015), we need to understand how it is formed and how it translates into behavior. In this regard, the current literature examines how entrepreneurship education influences students’ entrepreneurial motivations (Oosterbeek, van Praag, & Ijsselstein, 2010) and intentions (Wilson, Kickul, & Marlino, 2007; Nabi, Holden, & Walmsley, 2010; Martin, McNally, & Kay, 2013; Walter, Praveen, & Walter, 2013; Sieger, Fueglistaller, & Zellweger, 2014; Fellnhofner, 2018). Examples of positive outcomes are an increase in entrepreneurial intentions (Bae et al., 2014) or increased optimism (Fayolle, Gailly, & Narjisse, 2006). Findings suggest that the influence of entrepreneurship education is variable and can even lead to a decrease of entrepreneurial intentions (Nabi et al., 2018). Reasons for this lie mainly in the development of knowledge in the area of financial risk and the growing understanding of the complexity of the entrepreneurial process.

Graevenitz, Harhoff, and Weber (2010) found a declining intention despite receiving positive effects on students’ self-assessed entrepreneurial skills (Oosterbeek et al., 2010; von Graevenitz, Harhoff, & Weber, 2010).

In this line, research has identified a gap between intention and behavior (Shirokova, Osiyevskyy, & Bogatyreva, 2015). Even though a large number of students display an entrepreneurial intention, the percentage of students who have founded is comparatively much smaller (Bergmann & Golla, 2020). Despite the consideration that students may not start their business directly during their study time at the university, there is still no comprehensive explanation why students sometimes take the step of founding a company and why not. Both Pittaway and Cope (2007) and Nabi et al. (2017) confirmed in their systematic literature analyses that there is still a lack of research towards an understanding of whether and how intentionality transits into behavior. To understand the entrepreneurial process, it is necessary to consider unfolding contexts in which the entrepreneurial steps take place (Donaldson, Liñán, & Alegre, 2021)

Likewise, the effect of institutions on student entrepreneurship is only scarcely researched (Ayob, 2021a). Despite the progress in research on

the effect of entrepreneurship education on students, the effect of the university environment as a whole has not been considered in detail. There is still little knowledge on the circumstances of students who will take action to start a venture (Bergmann et al., 2016). Particularly students' specific circumstances provide significant evidence about the nature of student entrepreneurship. 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). This particular environment that students are embedded in shapes their perspective on entrepreneurship and consequently the nature of student entrepreneurship itself. Given that they are embedded in the university context at that stage – with the university playing a central role in their lives – the exposure to different factors will impact their entrepreneurial conditions and behavior. With special emphasis on this stage, the paper will examine factors in the light of entrepreneurship specifically in the context of university environment. These factors apply to all students and thus, allow a broader understanding for nascent and potential student entrepreneurs.

Drawing on social learning theory, environmental factors have an impact on cognitive processes, and consequently, the resulting behavior (Bandura, 1977). Environmental factors thereby include formal and informal elements (Liñán et al., 2011). University environment in this context shall be understood as the internal and external factors that relate to being a student at a university. This encompasses all influences exposed to and involved in the university, as well as tangible and intangible assets and experiences provided by the university. This paper will extend the current status by looking from a broader scope and providing a more holistic comprehension.

2.2. The Venture Creation Process

The nascent entrepreneurial process itself is a social process and comprises many steps (Brixy et al., 2012). Activities range from opportunity recognition (Ardichvili, Cardozo, & Ray, 2003), market research (Kim & Mauborgne, 2000; Witell et al., 2011), to developing and refining the idea and finally developing the product. All these processes require a constant exchange with potential target customers for validating purposes (Cespedes, Eisenmann, & Blank, 2012) and do not follow a strict run but are iterative processes. Other time-consuming steps can also include finding suitable team members (Forbes et al., 2006), acquiring resources (Zhang, 2010; Newbert & Tornikoski, 2013), such as expertise and finance, as well as the resulting paperwork. Besides, building up a network of relevant stakeholders for business development takes time and effort (Greve & Salaff, 2003).

To deal with these tasks, entrepreneurship education programs equip students with the required skills and competencies. These entrepreneurial

competencies, defined as “a specific group of competencies relevant to the exercise of successful entrepreneurship” (Mitchelmore & Rowley, 2010), are crucial prerequisites for venture management and performance. Mitchelmore and Rowley (2010) cluster entrepreneurial competencies into four categories: entrepreneurial competencies, business and management competencies, human relations competencies, and conceptual and relationship competencies (Mitchelmore & Rowley, 2010). Next to managerial competencies, particularly entrepreneurial competencies are vital for venture performance. Building on literature, we also consider the key competencies of opportunity recognition (Shane & Venkataraman, 2000) and problem-solving (Kim et al., 2018). Despite their importance in the venturing process, there is still a lack of research on whether entrepreneurship education can improve students’ opportunity recognition process (Kim et al., 2018). Opportunity recognition as the ability to recognize new opportunities (Shane & Venkataraman, 2000) requires the entrepreneur to take into account many complex factors, handle information asymmetries, and “conduct evaluations several times at different stages of development” (Ardichvili et al., 2003). Thus, a trained critical thinking skill can alleviate this process and help the entrepreneur reflect on information thoroughly. For this reason, critical thinking can be seen as a beneficial premise for opportunity recognition. Another essential dimension for opportunity recognition is prior knowledge (Shane, 2000) as well as entrepreneurial alertness (Kirzner, 1973). While prior knowledge is vital for entrepreneurs to identify specific opportunities as well as recognize the value of the information as such (Shane, 2000), entrepreneurial alertness is defined as “a propensity to notice and be sensitive to information about objects, incidents, and patterns of behavior in the environment, with special sensitivity to maker and user problems, unmet needs and interests, and novel combinations of resources” (Ray & Cardozo, 1996). As a third dimension, Arenius and De Clercq (2005) have added a network-based approach to opportunity recognition, emphasizing the importance of social capital in the opportunity recognition process. Networks and social capital allow entrepreneurs to bridge structural holes when acquiring resources and information, and thus, enable them to access knowledge that otherwise would not be available to the entrepreneur (Granovetter, 1973; Arenius & De Clercq, 2005).

Being potential or nascent student entrepreneurs, they maneuver through these entrepreneurial steps during their studies (Løwe Nielsen & Gartner, 2017). In 2015, Jansen et al. (2015) concluded that classroom teaching is not enough for successful university entrepreneurship and already proposed a three-stage framework for universities to guide students through the entrepreneurial process. Nevertheless, we see the importance to take a step back and look deeper into the starting conditions in order to understand which conditions students start this very process with.

3. Methodical Approach

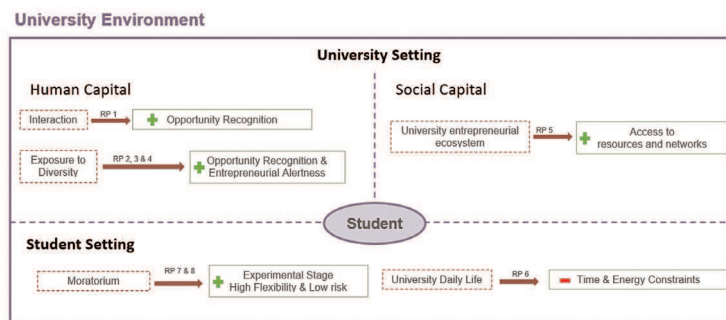
Given the early state of research and the meaningful body of different research streams relevant to the university environment, this paper adopts a conceptual procedure. As there is no common theory addressing the setting entirely, the paper seeks to connect different streams, to condense prior knowledge and to work deductively. It informs research for follow-up studies to confront reality with the deduced considerations.

As the focus is laid on potential and nascent student entrepreneurs, the attention is turned to the early-stage venture creation process. In this paper, we use the previously introduced entrepreneurial concepts that are most relevant in the latent and early stage of the venture creation process and combine them with literature on student and university constructs where we derive environmental factors from. By linking these two research streams, we generate causalities, building on established concepts. By doing so, we extend the knowledge about the entrepreneurial process through incorporating student-relevant aspects that derive from their embeddedness in the university environment. Accordingly, eight research propositions have been developed that aim to answer the above-stated research question, unveiling the impact of environmental factors on students' entrepreneurial starting conditions.

4. Findings

The findings are arranged into two categories: university setting and student setting. The university setting comprises factors from the university environment itself. The factors encompass dimensions of (i) interaction, (ii) exposure to diversity, and (iii) university entrepreneurial ecosystem. The student setting exhibits two status factors, namely (i) the university daily life, and (ii) the moratorium. Figure 1 shows an overview of the findings, explained in the next section.

Figure 1
Overview of findings



Source: Own illustration.

4.1. University Setting

4.1.1. Interaction

Campus life facilitates various types of interactions at the university, which results in students' socialization in the unique culture that characterizes the university's environment. This leads to the development and refinement of particular skills, such as critical and problem-solving thinking (Smith & Bath, 2006), which are favorable for entrepreneurial activities. There are two main types of interactions in the university environment: (i) interactions with other students, and (ii) interactions with the faculty and other institutes, in and outside the classroom context (Pascarella, 1980).

First, student-student interaction outside the classroom, but also especially in learning situations, primarily involves dealing with discussions between peers. As their opinions and conclusions are challenged by other people, students have to seek further information, take the reasoning and perspective of others into account, and consider further reasoning processes which ideally lead them to another level of insight (Johnson, 1981). Hence, student-student interaction promotes critical thinking skills through loaded discussions.

Second, researchers have found that the faculty also has a major impact on students through interaction (Pascarella, 1980; Cotten & Wilson, 2006; Cox, 2011; Schreiner et al., 2011), as they are similarly "important agents of non-classroom socialization on campus" (Pascarella & Terenzini, 2009; p. 31). Interaction between faculty staff and students takes place both inside and outside the classroom: in the classroom, lecturers and professors confront students with challenging questions. The peculiarities of the academic debate and the emerging discussions with the staff allow students to review critical issues and learning contents frequently. Furthermore, lecturers and tutors provide students with qualitative feedback on their results, which allows students to reflect on their work and process. Outside the classroom, where learning content and performance are not in the focus, conversations with the faculty staff obtain a personal note. Especially in these informal interactions and through the relaxed and more intimate nature of the conversation, students are influenced by faculty attitudes and intellectual values (Rossi, 1966), which comprise reflection and critical thinking.

Critical thinking is a skill that needs to be developed, practiced, and continually integrated (Snyder & Snyder, 2008). Through exposure to an environment, where a constant critical examination of topics is required, students become accustomed to receiving and evaluating information in a reflective manner and thus develop critical and problem-solving thinking into a mental habit. As critical thinking enables students "to deal effectively with social, scientific, and practical problems" (Shakirova, 2007, p. 42), it plays a major role in their opportunity recognition process and consequently, their startup ideas. We propose:

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.

4.1.2. Exposure to Diversity

Particularly the university and the campus provide manifold opportunities to get in touch with diversity which thereupon fosters four major elements in students: *knowledge-gain* (Gurin, Dey, & Hurtado, 2002; Laird, 2005), *open-mindedness* (Laird, 2005), *social sensitivity* (Adams & Zhou-McGovern, 1994), and *social agency* (Laird, 2005) which again promotes students' ability to recognize opportunity. Not only does the university provide a unique socializing environment on campus where students can interact with peers from different backgrounds, but also offers a range of initiatives to promote diversity on campus as well as curricular opportunities addressing diversity (Adams & Zhou-McGovern, 1994; Gurin et al., 2002; Laird, 2005; Hurtado, 2007).

Gurin et al (2002) identified three kinds of diversity, which students encounter: structural diversity, informal interaction diversity, and classroom diversity. Structural diversity describes the diversity within the student body, for instance, the percentage of students from different backgrounds. Informal interaction diversity refers to the quantity and quality of students' informal interactions. Classroom diversity encompasses in-class experiences, where students are confronted with different types of knowledge and perspectives (Gurin et al., 2002; Laird, 2005). Particularly this knowledge diversity stems from the interdisciplinarity, which can be found in both the study subjects and throughout the university (Chettiparamb, 2007; Denson & Bowman, 2013). Laird further states that "exposure to diversity provides the challenge that is necessary for the development of [...] more complex cognitive structures" (Laird, 2005, p. 366) which are fundamental assets for efficient opportunity recognition.

Firstly, diversity fosters knowledge gain. By interaction with diverse peers, students learn about perspectives and experiences that they have not yet come in touch with. Therefore, these interactions consequently lead to an increase in knowledge. A broader knowledge base allows the student to access a greater amount of information for the opportunity recognition process and thus, enables a greater scope of action.

Secondly, diversity fosters open-mindedness. Laird (2005) explains open-mindedness as the "willingness to be tolerant of diverse perspectives and open to the possibility of her or his own biases" (Laird, 2005, p. 374). Open-mindedness is particularly pronounced when the students have close interactions, where they engaged in personal, meaningful, and honest discussions. Through these engagements with diversity of different kinds, students enhance their level of tolerance towards new ideas and viewpoints. For the opportunity recognition process, this means that students have

a wider range of perspectives that they can draw on. Through knowledge gain and open-mindedness, students broaden their prior knowledge base. As students have learned to be more open and to be critical, even with their own already established opinions, they are in a position to analyze and synthesize these newly acquired viewpoints to create completely new and innovative approaches and solutions.

RP2. Diversity fosters knowledge gain and open-mindedness, which broadens students' prior knowledge base for opportunity recognition.

Thirdly, diversity fosters the development of social sensitivity. The university campus offers a great potential to diverse social and interdisciplinary encounters (Denson & Bowman, 2013). As students' knowledge of different perspectives increases with encounters and engagements with diversity, their awareness and understanding of cultures, lifestyles, and ideas, other than their own, grow (Pascarella, 2006). Due to their open-mindedness and exposure to the new contexts and other realities of the world (Umbach & Kuh, 2006), their perception towards delicate topics raises. This refined skill of social sensitivity again fosters students' ability to be more perceptive towards their environment, and thus, to identify relating problems and opportunities. This sensitivity corresponds to entrepreneurial alertness. Through the refinement of their social sensitivity, students are in a state of high alertness to information, which increases the likelihood of identifying promising opportunities.

Given these points, it is evident that diversity has a major impact on the foundation of opportunity recognition. As students are in constant exposure to diversity in the university environment, they are strongly shaped by its above-named spillover effects. As diversity enlarges students' prior knowledge base through knowledge gain (Gurin et al., 2002; Laird, 2005) in diverse and often divergent directions and increases their entrepreneurial alertness, it contributes to two crucial elements of opportunity recognition and consequently broadens the scope for the identification of new chances and opportunities.

RP3. The exposure to diversity on campus fosters social sensitivity, which cultivates students' entrepreneurial alertness.

Finally, diversity fosters social agency, which refers to students' belief to take action in order to improve society (Laird, 2005). Engagement with students from contrasting backgrounds or non-privileged fellow students can spark students' social responsibility and determination to take action. Social agency finally translates their awareness of the disparities in the world into a desire to act, and thus, an active search for problem-solvers. Therefore, social agency can be seen as an impulse for opportunity recognition.

RP4. Diversity promotes social agency, which gives students the impulse for their opportunity recognition to be an active and conscious act.

4.1.3. University Entrepreneurial Ecosystem

The university provides students not only with human capital, as outlined before, e.g., in terms of knowledge, but also multiple kinds of assets that grant students significant advantages when conducting entrepreneurial activities in terms of resources and social capital.

Considering the university as an ecosystem on its own is a view that has been adopted by more and more researchers in recent years (Miller & Acs, 2017; Kobylińska & Lavios, 2020) as it has plenty of common features with an ecosystem. Similarly to other regional entrepreneurial ecosystems, it holds a diversity of contexts, stakeholders, and multi-level processes (Isenberg, 2011), as well as cultural, social, and material attributes that help nurturing entrepreneurial endeavors (Spigel, 2017). What qualifies a university to be an entrepreneurial ecosystem is a “series of interactions and interrelationships occurring within this environment, as well as their ability to provide information and resources essential for the success of a company” (Kobylińska & Lavios, 2020, p. 120).

Being a member of the university grants many benefits. Apart from in-depth specialized knowledge in the field of study, the university grants access to the latest information on the state-of-the-art solutions in different fields, networks to other institutions, access to experts in forms of faculty members and professors, research and experimental labs, technical facilities, libraries, workspaces etc. (Morris, Shirokova, & Tsukanova, 2017). Particularly, access to upfront technologies and university-based technologies have played an important role for university spin-out companies (Smilor, Gibson, & Dietrich, 1990). Furthermore, extracurricular and co-curricular courses allow students to obtain additional competencies (Miller & Acs, 2017). Access to agglomerated knowledge about research status and new technologies enables them to quickly identify and set new trends in the market. Furthermore, beyond the usual assets of a university, more and more universities are increasingly offering and establishing entrepreneurship-focused programs and institutions which support entrepreneurial activities (Hofer & Potter, 2010; Morris, Kuratko, & Cornwall, 2013). 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 available only to higher education students.

As students have access to a solid fundament of resources, the university entrepreneurial ecosystem facilitates their entrepreneurial activities in the early phase.

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.

4.2. Student Setting

4.2.1. Student Daily Life

Establishing a business, starting from the first thoughts until the actual foundation, takes a significant amount of time (Brixy et al., 2012). However, embedded in the university context, students are mostly occupied with their university daily life and cannot bring up the necessary amount of time to dedicate to the start-up process as university and course-related responsibilities and part-time jobs can hamper students' entrepreneurial aspirations in their execution.

Firstly, being a full-time student usually results in not having enough time for issues that are not course-related. Secondly, 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 (Carney, Mcneish, & Mccoll, 2005; Bradley, 2006). 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.

Based on the two above-mentioned reasons, students can only conduct entrepreneurial activities with limited time at hand. Therefore, they have to decide "how much capital to invest and what proportion of time to spend in business" (Petrova, 2012, p. 493). Previous studies on part-time entrepreneurship have indicated that part-time entrepreneurs make their decision whether to become full-time entrepreneurs or abandon the activities based on their success or lack thereof (Petrova, 2010). Due to the above-mentioned student responsibilities, the development of the students' business can be progressing slowly, which again increases the possibility of feeling unsuccessful. As the entrepreneurial process is not straightforward, it often requires the entrepreneur to face challenges and eventually take setbacks during the process (Renko, 2012). However, not only failures but also stagnation in the process can reduce the motivation to continue. While at the university, the amount of time at hand is limited for students from the very beginning, which makes it difficult to focus on their entrepreneurial undertaking and invest the necessary time to fully become an entrepreneur.

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.

4.2.2. Moratorium

The moratorium is a transitional phase between adolescence and adulthood. This stage of life is described by the psychologist Erikson as a psychosocial moratorium (Erikson, 1946), a very sensitive period where the final stage of identity development takes place. Adolescents in moratorium have (made) no commitments yet and are in a stage of active exploration in search and development of their identity (Meeus, 1996; Cramer, 2017). From a temporal view on their stage of life, students are in the time frame of the moratorium. They are still in the process of finding and establishing their values, attitudes, and roles for themselves, to build their identity. HEIs offer the ideal time and place for this (Gurin et al., 2002). As it provides input and numerous opportunities for students to experiment with new ideas, relationships, and roles, being embedded in the university expands the set of options for future commitments (Gurin et al., 2002). Without experiences, input and ideas, given through the university environment, adolescents run the risk of making commitments to attitudes or roles without being able to explore options (Laird, 2005).

The experimental character of the moratorium stage can lead to students' experiments with entrepreneurial activities. While still being at a crossroads to decide on a future path for themselves, they explore different options (Laird, 2005). Thus, students are testing career paths that they have maybe not considered before. Besides the common path of employment, entrepreneurship offers an attractive alternative. The time and space provided by the moratorium and higher education allows students to try their hands at entrepreneurial projects. This grants them the opportunity to test their entrepreneurial skills and explore their entrepreneurial aptitude.

The university environment allows students to live out the experimental character of the moratorium on an extensive scale, and thus, to experiment with entrepreneurial activities. Even if it does not influence students' entrepreneurial aptitude, it enables students' first contact with entrepreneurship and consequently the chance to take a liking to entrepreneurship and decide to follow this path or at least to continue their entrepreneurial project.

RP7. The moratorium at the university grants students time and place to experiment and explore options and allows getting in touch with entrepreneurial paths that they have not considered before.

As the moratorium implies a certain disembeddedness, one major characteristic of the moratorium stage is the absence of commitment. The social environment of the students has changed significantly with the entry into the university. On the one hand, the majority of students have had a major move to another city for the sake of visiting the university. On the other hand, the second and equally substantial change is the transition from school to university which throws them into an unknown territory where

they are expected to take academic responsibility for their lives (Lowe & Cook, 2003). As a result, the family recedes into the background, and also substitute parental figures such as other relatives or teachers cannot be sought (Rizzo, 1967). Detached from their families to a certain extent, students do not have pending responsibilities or commitments in terms of family issues, thus the feeling of disembeddedness. Significant relationships, coming to the fore, are peers, role models, friends, and partners.

This disembeddedness enables students to take more risks when conducting entrepreneurial activities. Comparing to other types of entrepreneurs who are financially responsible for family (members), students have a hypothetically lower risk when starting businesses, as failures do not bear existential consequences. Therefore, they have a slight advantage in flexibility as they only need to calculate their own risk when making important decisions. Unlike entrepreneurs with family obligations, they do not have to be concerned about potential family members and take financial consequences into account, which may endanger the existence of the family. Thus, they can take larger entrepreneurial risks, which may bear greater rewards.

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 flexibly regarding entrepreneurial decisions and take risks.

5. Discussion and Conclusion

5.1. Research Contributions and Practical Implications

This study contributes to the current research on student entrepreneurship in a threefold manner. Firstly, it connects relations between the campus and entrepreneurial concepts that have not been connected before, adding to the discussion of special conditions of student entrepreneurship. Secondly, through this connection, the paper offers a set of causalities that constructs the subject of student entrepreneurship in a systematic manner. This paper identified eight student-specific causalities which have direct and indirect implications on their entrepreneurial conditions in the early and nascent stages. Literature has already proved that entrepreneurial behavior can be better understood when taking the context in which it is embedded into account (Welter, 2011), particularly as context and embeddedness create special conditions for students which shape the uniqueness of student entrepreneurship. However, despite its relevance, research on contextual factors was undertaken only very sporadically (cf. Bergmann et al., 2016). This paper, therefore, fills this research gap by outlining distinctive factors which affect the conditions of student entrepreneurship.

This study identifies which entrepreneurship-related settings can be influenced by the university setting, as well as the student setting. Current research is mainly focused on investigating the resource perspective in terms of resources and knowledge (Bergmann et al., 2016). This paper grants a more holistic view of factors with relevance to students' entrepreneurial first steps. It depicts which settings and starting conditions for nascent student entrepreneurs can be altered through the impact of the university setting, as well as the student setting. This may open a new discussion on the significance of university context for student entrepreneurship as it can alter students' conditions and settings for entrepreneurship considerably through mechanisms such as offering more opportunities to encounter diversity or opportunities to gather practical experience and foster the exchange between students and agents from different industries.

Lastly, the paper contributes to the understanding of student entrepreneurship by adding a contextual perspective to the topic. Of particular interest is the consideration of the time dimension in connection with the university context, which opens many opportunities for students to test out entrepreneurial endeavors. This possibility is not granted for all young people in this age range and serves for instance as differentiation to other concepts such as youth entrepreneurship. This study can enhance the contextual understanding of student entrepreneurship and provide insights into the university-based mechanisms that trigger chances and barriers for students with entrepreneurial intentions.

5.2. Limitations

As the research propositions are derived through literature, they require field validation. Entrepreneurship and particularly student entrepreneurship are highly context-sensitive. This paper has focused particularly on university and student-specific aspects. However, it should be noted that the (social) backgrounds of students also play an important role in entrepreneurial behavior. Students can be of different ethnicity, culture, gender, and socio-economic status. There can be vast differences in family backgrounds (Pascarella et al., 2004) which also affect their attitude towards entrepreneurship. Given another cultural or regional context, other values might come into play, and thus, alter the character of family embeddedness and consequently its implication on students' entrepreneurial behavior. As we generate causalities without reference to data, there is a risk of our research being biased and incomplete. However, the study is meant to offer major factors for future research, which may reveal other areas of concern on a closer look.

5.3. Outlook

This paper has investigated many different aspects of student and university life and has derived implications for entrepreneurial action. In this article the perspective was set on opportunity recognition. However, diversity, open-mindedness, and the set of skills mentioned in this paper, can also act as enablers to create opportunities. With our dominant perspective being laid on opportunity recognition, opportunity creation can be a subject to follow-up discourses. For future research, it could be beneficial to examine individual aspects more closely. It seems appropriate to address each aspect mentioned in this paper independently to understand the multiple facets of student entrepreneurs. It is particularly recommendable to conduct empirical research to check and modify or specify the set of propositions. This helps in understanding the mechanisms which bear entrepreneurial consequences. Furthermore, it would be interesting to conduct comparative studies to pinpoint the distinctiveness of student entrepreneurship. As the notion of context regarding entrepreneurship is receiving more and more attention over the last years (Welter, 2011), student entrepreneurship offers numerous opportunities, as it is still underexplored. For a more holistic picture, it is also necessary to look at the relationships and structures not only narrowed to the university campus but on an extensive scope, as students' life outside the university can also bear strong influences (e.g. role models).

Likewise, it is also interesting to examine the other perspective and investigate how student entrepreneurship impacts the university context. It is important to note that influences can be recursive (Welter & Smallbone, 2011). In the same vein, as contexts influence student entrepreneurship, students' entrepreneurial behavior can also impact the contexts that they are embedded in, and thus, alter it in the long run. Lastly, it could be insightful to investigate the profile of student entrepreneurship in different regions. The results can reveal future scenarios of how entrepreneurship in certain region will manifest.

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