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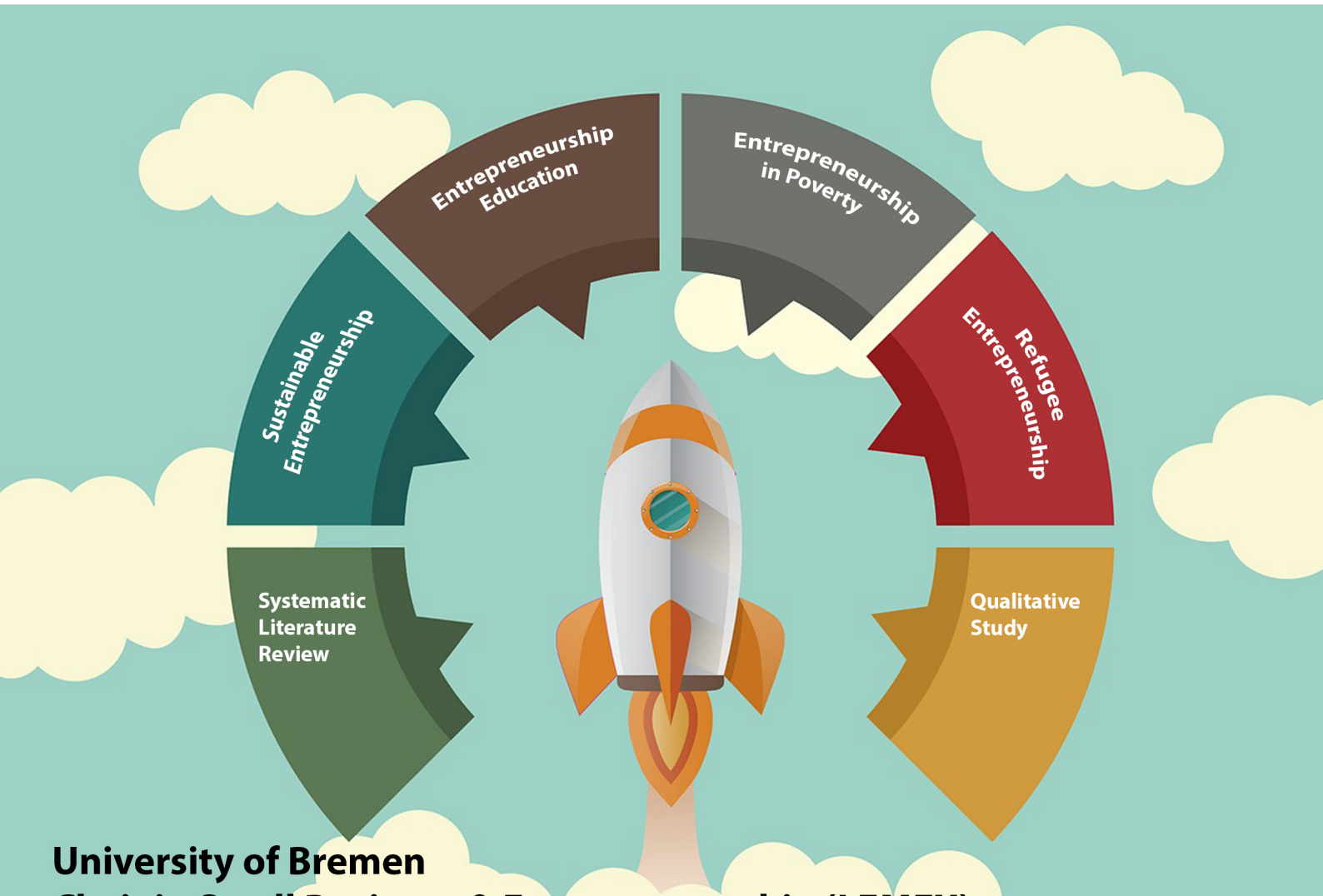

University of Bremen
Chair in Small Business & Entrepreneurship (LEMEX)
Chairholder: Prof. Dr. Jörg Freiling

Contents

Editorial Remark

It is with great pleasure to introduce the fifth issue of the LEMEX Research Papers on Entrepreneurship: 'Current Issues in Entrepreneurship Research.' The LEMEX Research Papers series publishes a selection of working papers developed by students at the Chair in Small Business and Entrepreneurship (LEMEX) at the University of Bremen, Germany.

This issue contains articles that master students have developed during the research courses 'Pre-Seminar' (winter term 2019/2020) and 'Main Seminar' (summer term 2020) lectured by Dr. Aki Harima and Dr. Thomas Baron. In the Pre-Seminar, master students conduct a systematic literature review on a recent topic of entrepreneurship research. The main seminar introduces conceptual work where students deductively derive research propositions by applying a pre-selected theory or concept to a current research phenomenon.

Despite adhering to the tradition of making promising research articles of our students visible to the international audience, it is worth noting that the articles in this issue were developed under unique circumstances: The COVID-19 pandemic and the related lockdown forced our team to move our interactive physical research seminars to sole online formats. Despite these distinctive conditions, which made group work coordination and consultations far more complex, we are delighted that our students passionately dived deep into their research topics and developed remarkable research papers.

This issue deals with recent entrepreneurship research topics that receive increasing attention from both practitioners and the research community.

1. The article "Internal and External Drivers of Sustainable Entrepreneurship" by Burcu Bakni, Burcu Sahin, Elif Köm, Jennifer Le, Kamal Yousef, and Yannic Kosak sheds light on the factors fostering and hindering the emergence of sustainable entrepreneurship.
2. Agnieszka Kroczak, Dana Fuhs, Felix Paul, Jessica Gießelmann, and Lina Schlicht investigate in their paper „Entrepreneurship Education at School – A Literature Review" the different contents and benefits of entrepreneurship education on Pre-, Primary- and Secondary School level and gather students' perceptions and attitudes towards entrepreneurship education systematically.
3. The research paper 'Entrepreneurs in Poverty: Coping with Resource Constraints through Bricolage' written by Luca Fommer, Jannes Nazarek, Felix Paul, and Lina Schlicht examines how entrepreneurs employ entrepreneurial bricolage to overcome poverty.
4. Anastasia Konek, Fidan Meta, Malcolm Nyantakyi, Petra Pantelic, and Jannik Stein address in their article 'Refugee Entrepreneurship and Resilience' the enabling factors of refugee entrepreneurs to overcome obstacles and develop entrepreneurial careers.

The articles advance the current knowledge in their particular research fields and may stimulate a prolific discussion.

Baron

Dr. Thomas Baron
Bremen, 13 November 2021

Information on Contributions

Internal and External Drivers of Sustainable Entrepreneurship

Submitted by Burcu Bakni, Burcu Sahin, Elif Köm, Jennifer Le, Kamal Yousef, and Yannic Kosak as group assignment in the Proseminar Gründungs und Mittelstands-Management at the Chair in Small Business & Entrepreneurship (LEMEX) in 2019/20

Entrepreneurship Education at School – A Literature Review

Submitted by Agnieszka Kroczak, Dana Fuhs, Felix Paul, Jessica Gießelmann, and Lina Schlichting as group assignment in the Proseminar Gründungs und Mittelstands-Management at the Chair in Small Business & Entrepreneurship (LEMEX) in 2019/20

Entrepreneurs in Poverty: Coping with Resource Constraints through Bricolage

Submitted by Luca Frommer, Jannes Marc Nazarek, Felix Paul, and Lina Schlichting as group assignment in the Hauptseminar Gründungs und Mittelstands-Management III - Current Issues in Entrepreneurship Research at the Chair in Small Business & Entrepreneurship (LEMEX) in 2020

Refugee Entrepreneurship and Resilience

Submitted by Anastasia Konek, Fidan Meta, Malcolm Nyantakyi, Petra Pantelic, and Jannik Stein as group assignment in the Hauptseminar Gründungs und Mittelstands-Management III - Current Issues in Entrepreneurship Research at the Chair in Small Business & Entrepreneurship (LEMEX) in 2020

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Internal and External Drivers of Sustainable Entrepreneurship

Burcu Bakni, Burcu Sahin, Elif Köm, Jennifer Le, Kamal Yousef[1], Yannic Kosak

Abstract

Despite the fact that many researchers have emphasized the importance of sustainable entrepreneurship, there is still a hazy grasp of the notion. In today's society, progress in the direction of sustainability is critical. That is why it is essential to understand what inspires and drives entrepreneurs to undertake sustainable business activities. Therefore, this systematic literature review identifies and summarizes the individual drivers of sustainable entrepreneurship and categorizes them into internal and external ones. This study classifies four (values, corporate image, financial factor, and employees) vital internal drivers and five (competitors, geographical area, customers, communities, government) external drivers of sustainable entrepreneurship. Furthermore, this study also addresses several barriers, each attributed to a specific driver.

Keywords: *Sustainable Entrepreneurship, Internal and External Drivers, Systematic Literature Review.*

1 Introduction

1.1 Practical Relevance

The development towards sustainability plays a decisive role in today's society. Daily reports on climate change, increasing carbon dioxide (CO2) emissions, and biodiversity loss show the negative consequences and impacts on the environment (Shepherd & Patzelt, 2010). In the prevailing literature, corporate actions are considered to play a key role in sustainable change. They can help counteract the problems condemned by pollution, emissions, and excessive resource consumption (Sanwar & Cheng, 2017). Furthermore, entrepreneurial actions can improve people's education, socio-economic status, and physical and mental health (Shepherd & Patzelt, 2010). Currently, there is no clear definition of the concept of sustainable entrepreneurship.

The United Nation (UN) Commission defines sustainable development as 'the development that meets the needs of the present without compromising the ability of future generations to meet their needs (Brundtland, 1987). Dean and McMullen (2007) also use this definition for the term sustainable entrepreneurship. Masurel (2006, p. 191) defines sustainable entrepreneurship as 'leading the firm in making balanced choices between profit, people, and the planet.' The concept is popularly referred to as triple-bottom-line (e.g., Schlange, 2006). In both cases, it is daunting that sustainable entrepreneurship combines the economy, ecology, and society. In order to promote sustainability in the three areas, it is essential to know what motivates and drives entrepreneurs to undertake sustainable business activities (Schlange, 2006). In addition, this can provide better knowledge about setting the right incentives for policy-makers to drive change towards sustainability (Tranfield, Denyer, & Smart, 2003; Parrish, 2010).

1.2 Current Research Status

The literature on sustainable entrepreneurship is still tiny at present yet increasingly developing (Patzelt & Shepherd, 2010). Gast, Gundolf, and Cesinger (2017) also reflect this in the systematic literature review on sustainable entrepreneurship. Gast et al. (2017) found that research in this area has two particular focuses. On the one hand, special attention was paid to drivers of conducting business in an ecologically sustainable way and, on the other hand, to strategic actions of ecologically sustainable enterprises. The literature so far did not identify all the single drivers in an aggregated way. A Google Scholar search for ‘sustainable entrepreneurship’ indicates increasing attention for

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the broader literature since the late 90s, as indicated by figure 1. This confirms results by Gast et al. (2017), who also found increasing attention since 1996.

1.3 Research Question and Aim

The present systematic literature review examines the internal and external drivers of sustainable entrepreneurship and, if applicable, what potential obstacles are mentioned in the literature. This systematic literature review aims to summarise the individual drivers of sustainable entrepreneurship

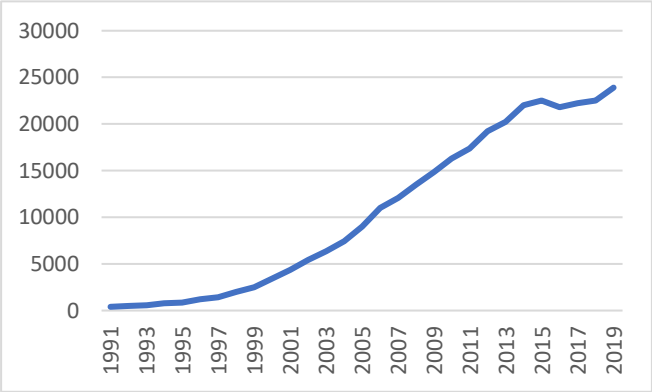

Figure 1: Google scholar results for "sustainable entrepreneurship"
Source: Google scholar

identified and categorize them into internal and external ones. We also identified barriers, where applicable. Thus, the already predominant literature on the topic of sustainable entrepreneurship shall be aggregated at a higher level. Knowing what constitutes internal and external drivers may help policymakers set the right incentives since external incentives (taxes, subsidies) might not work effectively if drivers are mainly internal and vice versa.

1.4 Structure of the Paper

The following section two explains the research design and clarifies what a systematic literature review is and why this form of the review was chosen. Subsequently, the selection criteria for the articles are depicted, and the term 'sustainable entrepreneurship' is defined.

An overview of the selected articles is given in the third section, and descriptive properties are presented graphically. In the fourth section of the review, the results collected in the research are presented, and the research question is answered. The literature is then critically reviewed, and weaknesses are identified. The last section summarizes the systematic literature review and is intended to close the research gap. In addition, an outlook for further research is given and linked to the previous weaknesses from section four.

2 Methodology

2.1 Research Design

The research approach is the systematic literature review. According to Cook, Mulrow, and Haynes (1997), it offers a replicable, transparent, and scientific process, minimizing error and bias. Furthermore, it aims to answer specific, often narrow, questions in depth.

Denyer and Neely (2004) and Thorpe et al. (2005) called for more methodological rigor in conducting literature reviews in management science. For example, reviews in the management literature are usually 'narrative' and tend just to describe the literature. They are based on discretion and biases of the individual researcher (Fink, 1998; Tranfield, Denyer & Smart, 2013). In contrast, the systematic review enhances the legitimacy and authority of the resulting evidence (Tranfield et al., 2003). By systematically conducting our review, we decided to follow that call to increase methodological rigor.

Our research aims to address the gap of aggregating the literature dealing with drivers on a higher level to give a thorough overview of what drives sustainable entrepreneurs. This overview gives helpful guidance for policymakers in incentivizing sustainable entrepreneurship. The overview also intellectually expands the academic literature. According to Tranfield et al. (2003), the systematic approach aims to inform policymakers and practitioners and enhance the knowledge base. Therefore, a systematic literature review is well suited regarding our research gap and twin ambition to be practically relevant for policymakers and to aggregate the academic knowledge one level higher.

2.2 Selection Criteria

The selection of relevant literature was carried out based on several criteria. In the process of the selection, criteria such as time, language, journal, ranking, methodology, synonyms, and databases were used. Regarding the time criteria, only

literature from 1996 onwards was considered. Gast et al. (2017) indicated that the broader topic of ecologically sustainable entrepreneurship received increasing scholarly attention from 1996 onwards. The notion of increasing scholarly attention since 1996 is also consistent with a google scholar search for 'sustainable entrepreneurship'. Therefore, we settled for 1996 as our beginning date. Only English literature was used, as the selection of literature was not country-specific but international. In the quest for literature, we only considered peer-reviewed journals. The rankings were deliberately disregarded since the research area of the present systematic literature review is very young and therefore immature. Regarding methodology, no restrictions were made. Methodologies cover qualitative, quantitative, conceptual, and mixed methods, qualitative studies being the most dominant. The literature search took place on Google Scholar, Science-Direct and jstor. The literature search was conducted using combinations of the following keywords and synonyms. Only articles containing the word 'driver' - or a synonym, such as 'motivation' - were selected.

Drivers	Sustainable	Entrepreneurship
why	environmental	entrepreneurs
driving forces	green prison	business
factors	ecological	management
influence	ecopreneurship	ecopreneurs
reason	social	SME
motivation	corporate social responsibility	

Table 1: Keywords used in the search process
Source: Own visualization

2.3 Research Procedure

2.3.1 PRISMA Flow Diagram

As depicted in our PRISMA flow diagram (figure 2), 66 non-duplicate citations were screened using the keywords external-/internal drivers' and combinations of the keywords. After title, abstract,

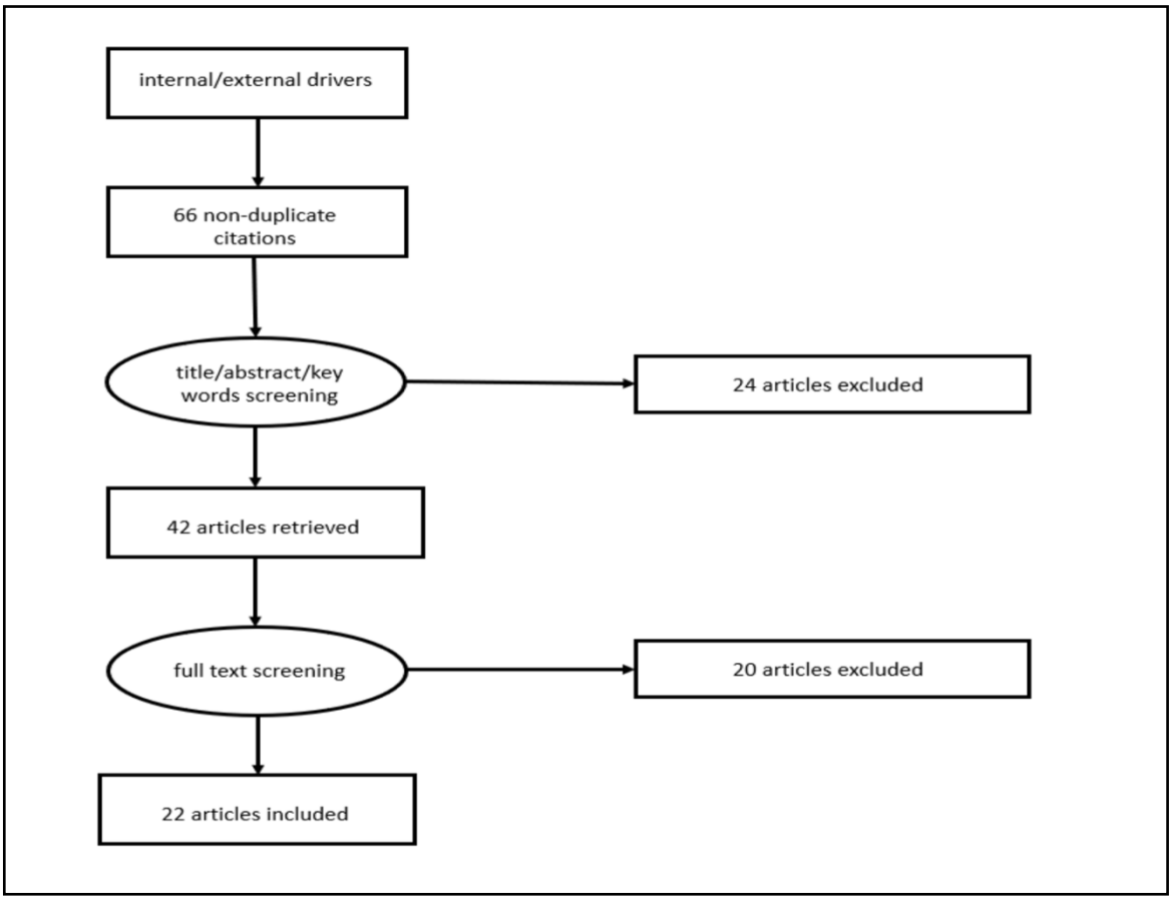

Figure 2: PRISMA flow diagram
Source: Own visualization

and keyword screening, 24 articles were excluded, and 42 articles remained. The next step was a full-text screening. In this step, 20 articles were excluded. Finally, 22 articles remained.

2.3.2 Data Analysis

Several authors distinguish between internal and external drivers (e.g., Lee, 2009; Lozano, 2015) or a synonym of drivers, such as 'triggers' (e.g., Azzone & Noci, 1998), 'forces' (e.g., Pastakia, 2002) and 'influences' (e.g., Schlange, 2006), while having different or no definitions of the terms. Gast et al. (2017) speak of micro-level drivers, which can be regarded as internal, and meso- and macro-level drivers, considered external.

In this paper, based on Gast et al. (2017) and Pastakia (2002), internal drivers refer to the entrepreneur's ideals and the strategic approach within the company's organization, and external drivers refer to the environmental factors in which the business is embedded.

We chose the construct of drivers being either 'external' or 'internal' since policymakers (e.g., EU) regularly must decide on incentives for sustainable entrepreneurship. If the drivers are predominantly external, financial incentives (tax breaks, subsidies) would be more effective than education about sustainable entrepreneurship. If the drivers are predominantly internal, then financial incentives could be ineffective. In the case of drivers being prevalently internal, education in schools about sustainability might pose the most effective way of tackling sustainability-related issues. A systematic literature review might solve this task. For example, Tranfield et al. (2003) stress how systematic literature reviews pose reliable information that is especially suited for policymakers since the systematic nature of the review yields reliable information.

3 Selected Articles

The final sample consists of 22 articles. The first article in the sample was written in 1998. Subsequently, the literature needed some time to take off. There seems to be no growth trend in the literature dealing with drivers, as indicated by a somewhat steady growth of published papers. This is contrary to the broader trend of sustainable entrepreneurship literature receiving increasing attention. However, in 2009, 2010, and 2011 there is a peak with three papers published each year. The most dominant journal is the Journal of Business Venturing (five articles), one of the prime journals in the field. Two articles have been published each in the Journal of Cleaner Production, Entrepreneurship: Theory and Practice, Greener Management International, and

Small Business Economics. Regarding the methodological mix of the sample, eleven papers are using a qualitative approach (figure 3). Five papers applied a conceptual method, while four papers applied mixed methods. Only two papers utilize quantitative methods. The relative overweight of qualitative and conceptual studies, as opposed to quantitative studies, hints that our field of literature is still young and undeveloped. Qualitative studies are most relevant for dealing with areas that lack theoretical deepness (Edmondson & McManus, 2007).

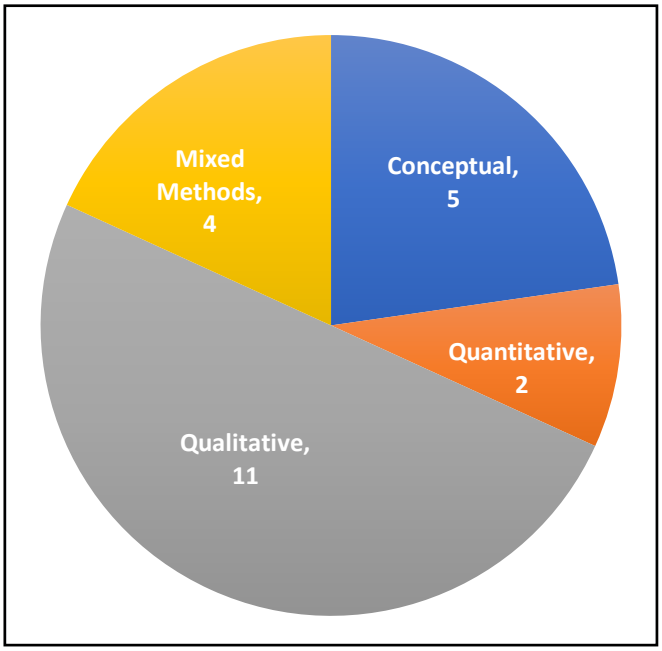

Figure 3: Descriptive analysis of the final 22 articles
Source: Own visualization

The literature has an international focus, with no single country standing out. Six papers have no country focus since they are conceptual studies. Five papers deal with an international sample, meaning a sample spanning several regions. The international literature is consistent with the notion

that sustainability issues (e.g., climate change) are international issues that naturally ignore borders. In the sample, emerging countries (e.g., Nigeria, India, Tunisia) are as present as developed countries (e.g., Switzerland, Finland).

The drivers identified were government (eleven articles), individual values (eight articles), customer (ten articles), financial reasons (six articles), brand image and reputation (five articles), communities (four articles), competitors (five articles), geographical influence (three articles) and finally employees (three articles).

4 Results

Figure 4 visualizes the internal and external drivers identified in the literature. The red lines indicate drivers that were identified, besides being drivers, as potential barriers.

tranquillity between the entrepreneur and other people and nature. By being in this relationship of equanimity, enterprises serve as effective means of enhancing and sustaining the quality of human and natural resources. In India, for example, entrepreneurs who believe humankind should live in harmony with nature reject chemical farming which means that their sustainable engagement is triggered by their ethical values and traditions (Pastakia, 2002). Ecopreneurs can be motivated by spreading their green values through educational strategies (Kirkwood & Walton, 2010).

On the other hand, an entrepreneur becoming aware of environmental issues and embeds sustainability in the company can feel morally and ethically obligated. Thus, the entrepreneur contributes to corporate sustainability (Lozano, 2015). Patzelt and Shepherd (2010) highlighted the role played by personal threats. They stressed how

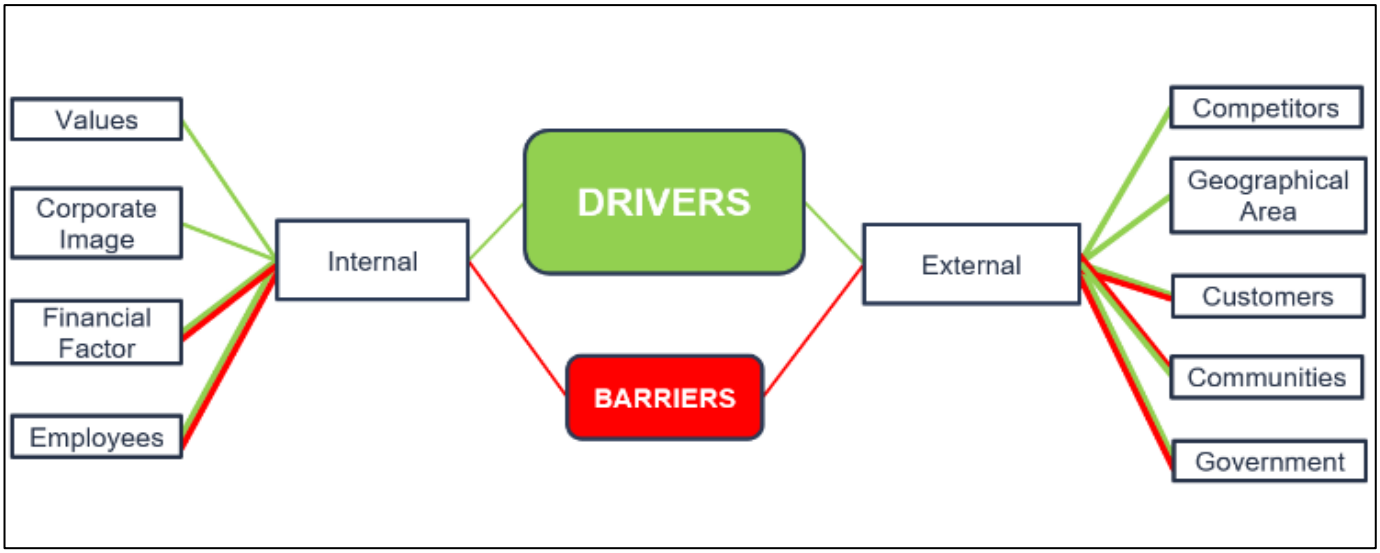

Figure 4: Internal and external drivers and barriers of sustainable entrepreneurship
Source: Own visualisation

4.1 Internal Drivers

➢ ***Personal Values***

The driver named most often is the personal values of the entrepreneur. This driver can be looked at from different views. On the one hand, a sustainable enterprise can be led on the basis of individual values that include sustainability (Spence, Gherib, & Biwole, 2011; Shepherd and Patzelt, 2011). Their values can be described as 'the desire to change the world and to improve the quality of the environment and life' (Linnanen, 2002). Parrish (2010) highlights the value set of

entrepreneurs' increased knowledge about sustainability increases their threat awareness and drives them to sustain the business.

➢ ***Employees***

Several authors stress the role employees play as a driver for sustainable entrepreneurship. Zhang, Bi, and Liu (2009) identified employee demand as one of the drivers to engage in green management initiatives. Sustainability can lead to better working conditions and, therefore, satisfy employees' needs and expectations and reduce the ratio of employee turnover (Masurel, 2006; Lee, 2009). According to

Masurel (2006), it also leads to an improvement in the motivation of the employees.

➢ ***Financial Factor***

The financial factor as a driver can be looked at from two perspectives: the entrepreneur and the enterprise. From the entrepreneur's perspective, the desire to make money can be a driver (Linnanen, 2002). Kirkwood and Walton (2010) suggested that the financial aspect for ecopreneurs is about making a living and not about large financial gain. In their case studies, examining ecopreneurs companies in New Zealand, the respondents found it important to make enough money to be sustainable and to support their families and lifestyle. From the perspective of the enterprise, Lee (2009) and Zhang et al. (2009) name cost savings/reduction as a driver, which results from eco-efficiency. This aspect, therefore, is a competitive advantage and overlaps with the driver competitors. Furthermore, Zhang et al. (2009) also consider costs as a barrier.

➢ ***Corporate Image***

Having a green brand image (Gandhi, Thanki, & Thakkar, 2017) or improving the corporate image (Masurel, 2009) or reputation (Zhang et al., 2009; Lawal, Rowland, & Omisade, 2016) is another internal driver. A sustainable company can be viewed as a company that cares not only for the customer but also for the environment, which creates a green corporate image (Pastakia, 2002).

4.2 External Drivers

➢ ***Government***

In our sample, the external driver for sustainable entrepreneurship named most often is the government (e.g., Masurel, 2006; Schlange, 2006; Lee, 2009; Lozano, 2015). Environmental regulations have increased rapidly over the past 25 years (York & Venkataraman, 2010). The government's goal is to improve and nourish the environment by enacting laws and regulations and enabling policies (Pastakia, 2002; Zhang et al., 2009; Hoogendoorn, Guerra, and van der Zwan, 2014). For instance, adopting environmental certification such as international organization for standardization (ISO), which gives a framework for firms when implementing environmental practices, is intended as a significant contribution to reduce environmental footprints (Azzone & Noci, 1998).

Moreover, the government can also positively affect sustainable entrepreneurs through government support, such as subsidies and taxes (Zhang et al., 2009). Spence, Gherib, and Biwolé (2011) stress how while internal drivers are prevalent among sustainable entrepreneurs, they might be insufficient if not paired with governmental (external) incentives.

➢ ***Customers***

Customers can be an external driver of sustainable entrepreneurship by demanding eco-friendly products (Zhang et al., 2009; Lee, 2009; Hoogendoorn et al., 2014; Pastakia, 2002). The increasing environmental awareness of customers leads to the rising interest in green products and services (Linnanen, 2002; Gast et al., 2017). Sustainable businesses aim both to keep the current clients by offering products matching their needs and expectations and attracting new customers by building a sustainable image (Masurel, 2006). Lee (2009) also states that key buyers request that manufacturers provide proof that their products are eco-friendly, for example, in the form of the ISO 14001 certification. Through this requirement, some businesses will be reluctant to adopt green practices (Lee, 2009). Thus, it is conceivable that the driver government also influences customers and negatively impacts firms in its decision to implement sustainable behaviours.

The information available to the customer about the products and services offered also plays a role since information asymmetries can lead to market failure and thus to a loss of customers (Dean & McMullen, 2007). As a result, they stress that sufficient customer information about products and services from companies can ensure that companies can concentrate on certain competitive advantages to expand or develop them.

➢ ***Community***

Another influence may be the company's environment since the demand and pressure from local communities can drive companies to go green (Zhang et al., 2009; Lawal et al., 2016). Also, pressure groups can influence businesses by activism, e.g., by non-governmental organizations

(NGOs) (Azzone & Noci, 1998; York & Venkataraman, 2010). NGOs aim to address the concerns, such as environmental pollution and climate change, directly. These organizations believed, among other things, that firms do not take enough responsibility for environmentally harmful practices and that the government failed to prevent this behaviour (York & Venkataraman, 2010).

- ***Competitors***

The competitors' behaviour can drive firms to behave more sustainably by adopting environmental-friendly practices. Companies can create differentiation and get a competitive advantage (Zhang et al., 2009; Pastakia, 2002; Lee, 2009). Furthermore, the implementation of eco-friendly practices can reduce costs and risks (York & Venkataraman, 2010). The achievement of environmental performance opens up opportunities for businesses by concluding new business contracts and increasing sales (Lee, 2009). Hence, businesses try to identify green opportunities by developing eco-friendly alternatives such as the zero-emission car or the packaging solution to minimize waste through creative design (Pastakia, 2002). Similar to this notion, Cohen and Winn (2007) examined how market imperfections (for example, ignorant competitors) can foster sustainable entrepreneurship opportunities.

- ***Geographical Area***

The environment a company operates in can also be a driver of sustainable entrepreneurs. In this context, a differentiation between local, regional, and global environmental problems can be made (Schlange, 2006). A local issue is, for example, wastewater treatment or pollution. Global environmental concerns are, for instance, climate change (Linnanen, 2002). Sunny and Shu (2019) examined geographical clustering dynamics. Their findings suggest that the regional clustering of sustainable entrepreneurs sets a reinforcing relationship between capital and firm formation in motion due to spill-over in knowledge, human capital, and service networks.

4.3 Interrelation Between Drivers

The notion that internal drivers and external drivers influence each other is glaring. For example, if high external drivers for sustainable entrepreneurship exist, they could affect internal organizations and entrepreneurial values (Pastakia, 2002). Entrepreneurs now have the incentive to reshape their internal values and internal organizational structures. Conceptually, Pastakia (2002) suggested that external drivers might change the vision of entrepreneurs. The argument can also be turned around. Internal drivers might translate to higher external drivers. For example, the government and, therefore, the people influence tax incentives and subsidies. If personal values about sustainable entrepreneurship persist in society, they might translate to higher external pressure.

The (quantitative) issue of ranking drivers has been dealt with several times in the literature (e.g., Masurel, 2006; Hoogendoorn et al., 2014; Gandhi et al., 2018). Masurel (2006) identified employees ('working conditions'), government ('legislation'), and individual values ('moral duties') as being the most important drivers for small and medium-size enterprises (SMEs). Examining a sample of Indian manufacturing SMEs, Gandhi et al. (2018) found brand image, government ('legislation'), and individual values ('management commitment') to be the most important drivers.

4.4 Barriers

- ***Financial Factor***

A barrier mentioned in the literature is the issue of the 'Green Prison dynamic.' According to this dynamic, green entrepreneurs bear the cost of sustainable behavior but benefit society as a whole (Pacheco, Dean, & Payne, 2010). From a strict game theory perspective, the individual rational behavior would not sustain the business, thereby reaping a cost-benefit. This dynamic naturally poses a barrier to sustainable entrepreneurship. Pacheco et al. (2010) foremost dealt with the issue of escaping this dynamic and derived several solutions. For example, businesses should set up individual industry rules with competitors. The rules increase credibility and brand image, and the green behavior pays off.

Linnanen (2002) and Zhang et al. (2009) also determine costs as a barrier. On the one hand, difficulties for ecopreneurs can arise when searching for investors who believe in their visions. On the other hand, many investors believe that environmental businesses lack knowledge of

financial markets and therefore do not pursue the investor's interests (Linnanen, 2002).

- ***Government***

Although the government might be one of the key external drivers of sustainable entrepreneurship, it can also be a barrier to it at the same time. Zhang et al. (2009) name the absence of legal demand or the lack of government support as barriers against engaging companies in environmental initiatives. In addition, comprehensive legislation can serve as a barrier. Pastakia (2002) gives the example of numerous tests for bio-efficacy that must be carried out by recognized research facilities and financed by the entrepreneur. This barrier, therefore, can overlap with the barrier Financial Factor.

- ***Consumers***

When consumers are not aware of the consequences of their environmentally harmful acts, it can be challenging to convince them to buy green products or services (Linnanen, 2002). Even if there is high awareness, such as in countries like the USA, there are low percentages of green consumers (Pastakia, 2002). According to Pastakia (2002), this could be due to consumer resistance to green products and services during the market entry. Consumers are less likely to switch to eco-friendly products if these also require a change in their 'entire system', regarding the product or even a change in the consumer's lifestyle.

- ***Employees and Communities***

Furthermore, Zhang et al. (2009) suggest that barriers to sustainable entrepreneurship for SMEs lie in the lack of demand from employees and local communities. Since employees or pressure from communities has also been previously named drivers, the literature indicates that several internal and external drivers can also function as barriers.

4.5 Critical Reflection of the Existing Literature

It is evident and stressed in the literature that the whole field of sustainable entrepreneurship is still in an early stage but emerging (Patzeld & Shepherd, 2010). Consistent with that notion, the lack of quantitative methods in the narrower literature dealing with drivers hints at undeveloped literature. Qualitative studies are most relevant for dealing with areas that lack theoretical deepness (Edmondson & McManus, 2007). For example, Linnanen (2002) lacks rigor in describing how the data were gathered. Pastakia (2002) suggested that internal drivers might be more superior when driving sustainable entrepreneurship. However, the interrelatedness assesses whether internal or external drivers are more important.

5 Conclusions

5.1 Research Contributions

We aggregated the single drivers on a higher level and categorized them as internal or external. The classification between internal and external helps policymakers to incentivize sustainable entrepreneurship most effectively. The literature rarely deals with the issue of whether external or internal drivers are more important. A notable exception is Pastakia (2002). While he suggested that internal drivers might be more critical, we convey the idea that internal and external drivers are interchangeable. External drivers (e.g., incentives) might change internal company structures, such as personal values. The other way is also possible: Internal drivers (e.g., personal values, etc.) will influence external forces (e.g., government policy) via channels such as democratic elections. The drivers cited most often are government, customers, and individual values. As anecdotal evidence, this indicates their relative importance among other drivers. Quantitatively, the literature ranked individual drivers against each other (e.g., Masurel, 2006; Hoogendoorn et al., 2014; Gandhi et al., 2018). Employees, government, and individual values were consistently found to be the most important drivers. We identified several barriers which can be all assigned to a specific driver.

It has emerged that the absence of a driver can be a barrier. Whereas, for example, the demand of customers for eco-friendly products can drive a sustainable business, the lack of demand of customers, in turn, can prevent a business from becoming sustainable.

5.2 Future Outlook

The issue of differences between developing and developed countries needs to be addressed by future research. The question remains whether the

same drivers are important in undeveloped countries such as Nigeria or Tunisia, as in developed countries like Canada or Switzerland. Scraping the surface of this question, some quantitative studies looking at different countries distinguish their results depending on the region. For example, Hoogendoorn et al. (2014) found that environmental practices by SMEs are more present in northern European states, as opposed to southern- and eastern European states. However, the different results from different regions are not the focus of their work. Therefore, work dealing singularly with differences among drivers depending on the region remains to be done.

The literature dealing with the narrow topic of drivers needs to catch up to the faster-emerging literature dealing with sustainable entrepreneurship in general. The growth trend of the broader field is not reflected in the narrower field dealing with drivers.

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Entrepreneurship Education at School – A Literature Review

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Abstract

Entrepreneurship education at school is critical in determining the future budding entrepreneur. Currently, 20% of students who receive Entrepreneurship Education in school choose to start their businesses; teaching entrepreneurial skills can have a real-life impact on children and young adults. However, there is a need for a more thorough inventory analysis of existing research in Entrepreneurship Education at the school level and an examination of the representative results. Therefore, this study aims to conduct a systematic literature review to determine which aspects of Entrepreneurship Education in schools have been studied and how they are classified and linked. This study identifies that the entrepreneurship education content is categorized into three school stages: preschool, primary school, and secondary school. Furthermore, the study discovers a distinction between different school levels, which appears to be significant given the vast differences in teaching content.

Keywords: *Entrepreneurship Education, Entrepreneurship Education at School, Systematic Literature Review.*

1 Introduction

The European Commission represents an important point of view concerning entrepreneurship at school as it provides an incentive to teach entrepreneurship in schools. The teaching of entrepreneurial skills should start in preschool and continue until pupils reach high school level even before they might actively engage in this topic at university. As 20% of students receiving Entrepreneurship Education at school decide to start their own businesses, teaching entrepreneurial skills can have a real-life impact on children and young adults (European Commision, 2016). Therefore, the European Commission highlighted the political relevance of Entrepreneurship Education to secure economic growth (Commission of European Communities, 2006).

For the definition of Entrepreneurship Education at School, the topic is based on two aspects that need to be specified. Firstly, we limit the definition of school to the levels from preschool to secondary school. Not included are therefore universities, vocational schools, and kindergartens (Gries, Lindenau, Maaz & Waleschkowski, 2005). Secondly, in accordance with Korhonen, Komulainen, and Räty (2012), we further define the topic of Entrepreneurship Education as a wide-ranging subject area where skills can be taught using different methods for various school types and levels. Therein, Entrepreneurial Education can lead to the achievement of hard as well as soft skills (Korhonen et al., 2012).

Gorman, Hanlon, and King analyzed in 1997 Entrepreneurship Education in a ten-year literature review by focusing on the topic of entrepreneurship, enterprise, and small business management education. With their literature review, they pointed out the problem of differentiation, because entrepreneurship, enterprise, and small business education so far had not been separated from traditional management education. They found a research gap regarding a multidisciplinary approach towards the theory of Entrepreneurship Education in primary and secondary schools. As a future outlook, they suggested enhancing the methodology and research design. Furthermore, future research should concentrate more on primary and secondary school. Based on this literature review, there is a need for a further inventory analysis of existing research in Entrepreneurship Education at school and the examination of representative results. This literature review builds on these previous findings by Gorman et al. (1997) and connects different aspects of research done so far. Finally, this paper

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answers the question, which aspects of Entrepreneurship Education at school have been investigated so far and how they are classified and connected.

To answer the question, the results are split into contents of, benefits arising from and perceptions and attitudes towards Entrepreneurship Education. These three research fields emerged during the analysis of the current literature. The methodology applied in this research paper will be presented in the second chapter. After that, the descriptive data will be shown in chapter 3 followed by the results in chapter 4 and a concluding summary of the findings in chapter 5.

2 Methodology

Our study is based on the systematic literature review (SLR) method. SLRs are commonly used in psychology, medical and social science to provide a profound answer to specific research questions (Tomé, Scavarda & Scarvada, 2016). It is considered a standardized method for literature reviews because it is repeatable, transparent, objective and unbiased which is a huge advantage compared to other approaches for conducting literature reviews (Boell & Cecez-Kecmanovic, 2014). When conducting the SLR, it is necessary to define explicit inclusion and exclusion criteria to evaluate each potential primary study (Fink, 2020). Therefore, we set several inclusion and exclusion criteria which will be explained in the following. Papers selected for inclusion in this review were restricted to those published from 1997 to 2019 as we wanted to build on the literature review from 1997: Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten-year Literature Review by Gorman, Hanlon, and King. Another inclusion criterion was the school form as this SLR focuses on the pre-, primary, and secondary school contexts. Contrary to that, every other school type such as vocational school and higher educational institutions like universities were excluded.

To eliminate any potential language barriers, the selected language for the research papers was English. The methods used by these papers could be of qualitative as well as quantitative origin. In terms of publication, the selection of papers was limited to academic papers, dissertations, peer-reviewed books, and working papers in order to ensure contributions of high quality. Moreover, in order to ensure good comparability, this SLR does not include papers that refer to developing countries as Entrepreneurship Education has a different status in these countries. Thus, it is often conducted and considered separately from regular schooling. In addition, only papers that are accessible in databases such as Google Scholar, EBSCOhost, WileyLibrary, researchgate or the Staats- und Universitätsbibliothek Bremen were considered.

According to the outlined criteria, the research project proceeded as follows. After a first keyword search, 70 articles represented a potential pool of papers for further analysis. The keyword search included the following keywords: Entrepreneurial, Entrepreneurship Education and Curriculum, Primary School, Middle School, High School, Teaching Methods, Benefits, Early Stage, Strategies. Every article was entered into an excel table to give an overview of relevant information such as country, research aim and question and the methods which were used in the articles. All the articles were collected in Zotero. This provided access for every group member to every article and supported the exchange about the articles. Furthermore, Microsoft Teams and other communication instruments were used to ensure an exchange on topics beyond physical group meetings.

The next step was to look at the titles of various papers related to the research topic of entrepreneurship at school. Using this screening process, 15 of these papers could be eliminated, as they were not relevant due to the title. In the following, the relevance of the 55 papers was tested by reading their abstracts. As a result, another 21 papers could be excluded. In the subsequent and final step in the research process, the entire text of the 34 remaining studies was read in order to gain a precise understanding concerning which of the remaining studies exactly met the previously defined criteria. In taking notes about each paper read, the group was able to lead a discussion regarding the relevance of the research papers in terms of this study based on the explained criteria. The documentation used to identify the relevant articles also served to categorize the papers concerning the main topics addressed. As a consequence, 17 articles were selected for the final

set of articles for the SLR. Figure 1 summarizes the article selection process in a Prisma flow chart.

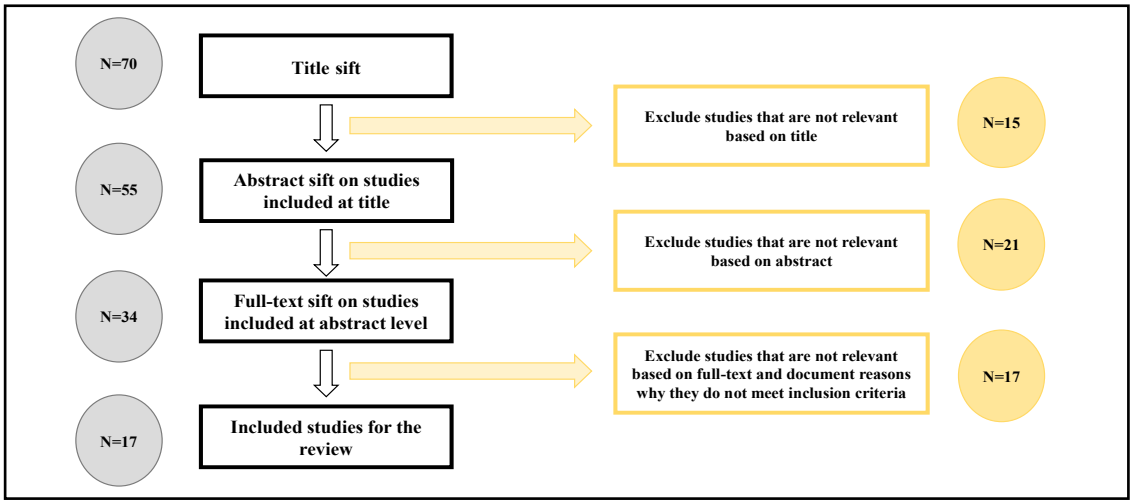

Figure 1: PRISMA flow chart
Source: Own visualization

3 Descriptive Data Presentation

The literature on Entrepreneurship Education in schools has been systematically reviewed based on the previously mentioned exclusion and inclusion criteria. Overall, we have identified 17 articles related to our topic. In the following, several characteristics from the final set of articles are visualized. The schools discussed in the articles are mainly schools in the European Union, although most of them focus on schools in the Scandinavian countries, such as Sweden and Finland. Papers discussing schools in South America and the United States represent the minority of papers with only one article each (Figure 2: Countries).

With regard to the school level, the final set of articles mainly encompasses secondary schools with 15 papers followed by primary schools with 4 papers and only 2 articles focusing on preschools (figure 3).

Based on the above-described SLR procedure, we identified the three main categories under the topic of Entrepreneurship Education as shown in Figure 4: content-driven, benefit-focused, and perception-related research approaches. These topics will be explained in more detail in chapter 4.

Figure 2: Countries
Source: Own visualization

In further analysis, the papers can be distinguished in terms of the methods used, their chronology, and their publication. Research contributions using a quantitative approach (10 articles) slightly

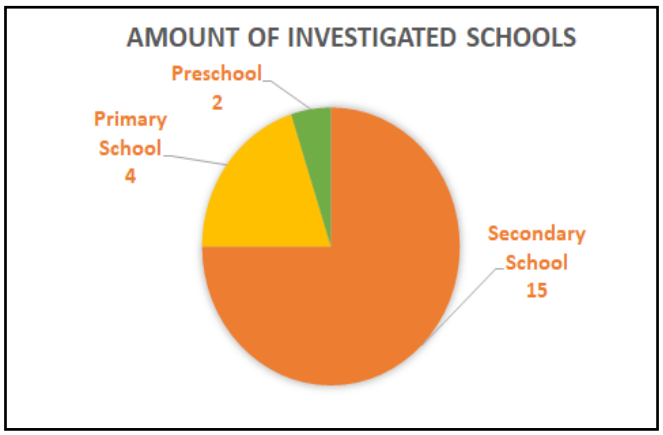

Figure 3: Amount of investigated schools
Source: Own visualization

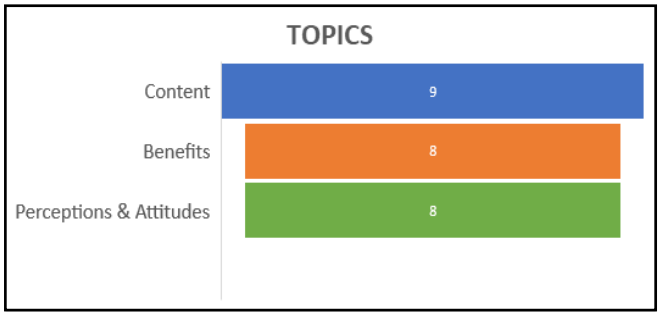

Figure 4: Topics
Source: Own visualization

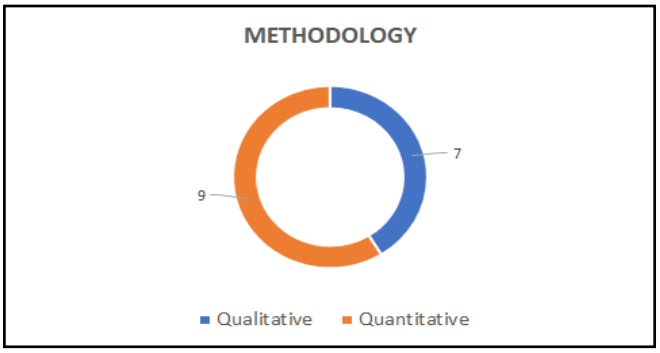

Figure 5: Methodology
Source: Own visualization

outweigh those using a qualitative approach (7 articles). The corresponding figure can be found in figure 5. Even though the inclusion criteria allow for a research period starting with the year 1997, the first articles included in our SLR are from 2003.

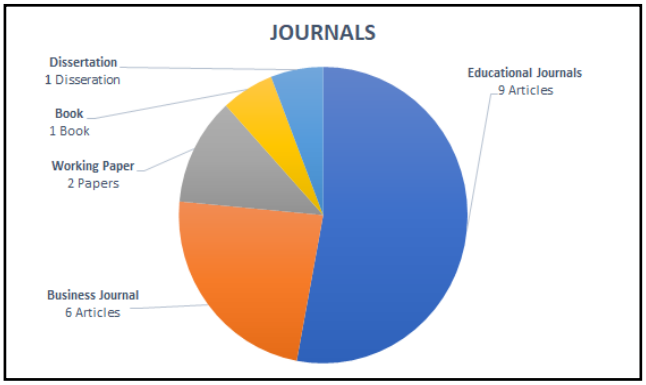

Figure 6: Published articles between 2003-2018
Source: Own visualization

Until 2017, we found two articles each year qualifying for the final set of articles. 2018, the last year included in our final SLR, has the highest number of publications with 3 articles (figure 6).

Due to the fact, that this research topic is a combination of business as well as educational issues, our set of articles entails papers published in business (4 articles) and educational journals (9 articles). Furthermore, one dissertation, one peer-reviewed book, and two working papers are included (figure 7).

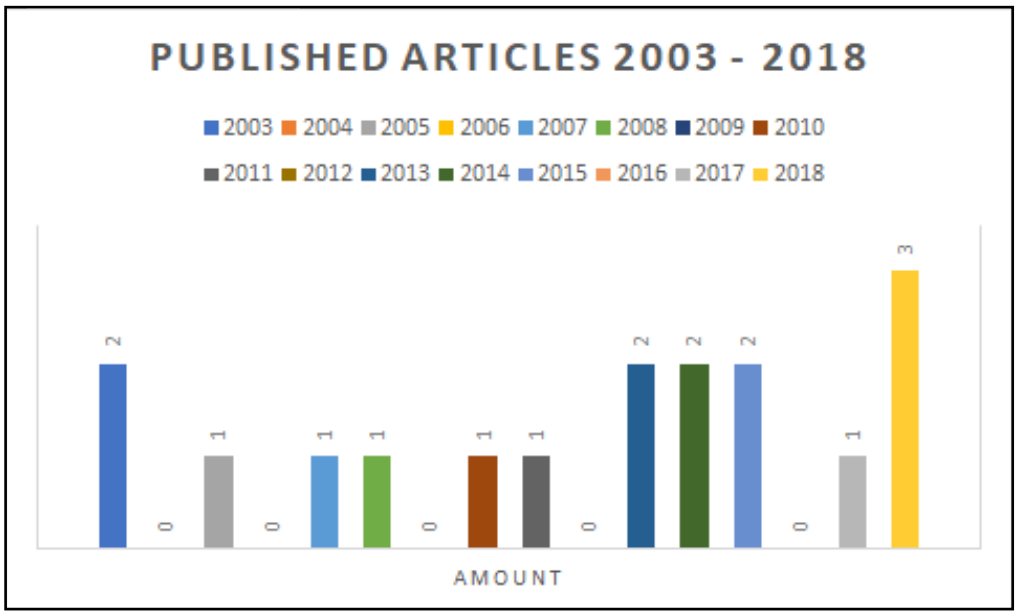

Figure 7: Journals
Source: Own visualization

4 Results

4.1 Content of Entrepreneurship Education

The content of Entrepreneurship Education explained below relates on the one hand to the curriculum and on the other hand to the applied teaching methods. In addition, the content differs depending on preschool, primary school, and secondary school.

- ***Preschool***

According to Axelsson (2017), there is no definition of Entrepreneurship Education content in preschools. Rather than a fixed curriculum, children develop entrepreneurial characteristics through interaction with preschool teachers. This can be by asking questions to find solutions instead of receiving a fixed explanation and finding mistakes by themselves with the teacher's support (Axelsson, Hägglund & Sandberg, 2015).

The support of teachers influences the learning process of children. Being patient and listening to the children creates a successful entrepreneurial learning situation that makes teachers reflect more about children's learning. Also, teachers reflect individually and together on what, how, and why they have done certain things in different learning situations (Axelsson et al., 2015).

- ***Primary School***

In primary school, awareness of entrepreneurship is created (van der Kuip & Verheul, 2003). Hereby, the curriculum is more defined compared to preschool and divided into specific and core subjects. Specific subjects are offered through interdisciplinary projects with the aim to promote entrepreneurial skills in children (Denegri et al., 2018).

Core subjects integrate entrepreneurial skills into subjects non-related to entrepreneurship with the aim, to encourage students' soft skills such as creativity in learning and critical thinking (Denegri et al., 2018; Palmér & Johansson, 2018). An example of a core subject is mathematics. According to Palmér and Johansson (2018), the integration of entrepreneurial competencies into mathematics lessons creates a win-win situation for the students. Students are not only developing entrepreneurial skills such as problem-solving but change their minds about the possibilities for learning mathematics. Van der Kuip and Verheul (2003) stated that teachers encourage students in primary school to take responsibility for their own learning process. An active and experimental approach of learning supports the development of students' competencies such as creativity and initiative. Furthermore, entrepreneurial teaching stimulates students to think and act entrepreneurially.

- ***Secondary School***

In secondary school, students have the opportunity to try themselves out as entrepreneurs and to develop entrepreneurial skills and motivation (van der Kuip & Verheul, 2003). The curriculum for Entrepreneurship Education in secondary schools is based on internal entrepreneurship, in order to develop soft skills, and external entrepreneurship, where hard skills are taught (Korhonen et al., 2011).

The teaching of both, soft and hard skills, is integrated into specific entrepreneurial and other subjects (Johansen & Schanke, 2013). According to Axelsson (2017), the content of specific subjects is an explicit linkage of entrepreneurship to business and startup activities. Regarding the integration of entrepreneurship courses in other subjects, Johansen and Schanke (2013) name Social Sciences or Food and Health as examples. Furthermore, the integration of entrepreneurship in projects is mentioned in papers. Projects are hereby either offered interdisciplinary or as a separate subject (Johansen & Schanke, 2013; Ruskovaara & Pihkala, 2013; Zupan, Cankar, & Cankar, 2018). As an example, Zupan et al. (2018) describe a project, where students had to solve the problem of poor-quality lockers. Therefore, students developed their entrepreneurial mindset by designing and building a new prototype. At the end of the project, students presented their lockers to the school, parents and the local community.

The teaching methods in secondary schools are further developed compared to preschools and primary schools. Teachers use the 'Design Thinking Method' concept, where students build their own startups within projects. The method aims to develop students' entrepreneurial mindset (Zupan et al., 2018). To show students the practical

relevance of entrepreneurship, teachers offer an active approach. The practical connection to Entrepreneurship Education is established through these student projects, visits by entrepreneurs, and excursions to enterprises. Students gain a more practical insight by addressing the importance of entrepreneurial skills and presenting 'real-life'-references (Axelsson, 2017; Ruskovaara & Pihkala, 2013).

4.2 Benefits Arising from Entrepreneurship Education

Many academic papers also deal with the outcomes and benefits arising from Entrepreneurship Education as part of their research, but only a few focuses on this topic or, as with the content of Entrepreneurship Education, differentiate between and relate to different school forms. Overall, the outcomes that have been identified and investigated can be classified into non-cognitive skills and cognitive skills (Rasheed & Rasheed, 2003; Fuchs et al., 2008; Huber et al., 2014). In addition, measurable outcomes on the market in the form of start-up foundation, performance, and success are examined. It is, therefore, interesting to subdivide these investigated outcomes and benefits in this context, especially concerning the respective school level. As already described, the different learning contents and teaching methods differ strongly per school level. Hence, the connections and relations between the examined school forms and their particular teaching methods and curriculum and the resulting outcomes are identified here.

- ***Primary School***

Analyzing the effectiveness of early Entrepreneurship Education in primary school, Huber et al. (2014) categorize achievable outcomes of Entrepreneurship Education on a primary school level in non-cognitive skills, entrepreneurial intentions, and entrepreneurship knowledge. Non-cognitive entrepreneurial skills are defined as skills relevant for entrepreneurial activity, such as creativity, self-efficacy, need for achievement, risk-taking, pro-activity, persistence, motivating, social orientation, and analyzing. Whereby only motivation and social orientation are found to be not promoted through the Entrepreneurship Education program. In addition to these non-cognitive skills, it is also explored that the development of entrepreneurial knowledge, defined as general business knowledge, is unaffected by existing Entrepreneurship Education programs, whereas the entrepreneurial intentions of the children to choose an entrepreneurial career are even affected negatively through the education program (Huber et al., 2014). These results fit in with the current teaching methods and curriculum whereby the focus of early Entrepreneurship Education is on the development of non-cognitive skills rather than on teaching explicit entrepreneurial knowledge (Denegri et al., 2018; Palmér & Johansson, 2018). An essential limitation of the results and difficulty in research, however, is the general development of the participants during primary school, which implies that the entrepreneurial skills they have developed may also be due to the general development of their personalities in the context of school education even without participating in an Entrepreneurship Education (Huber et al., 2014). However, the current research on primary school Entrepreneurship Education only examines the short-term direct effect and disregards possible long-term effects.

- ***Secondary School***

The majority of scientific articles dealing with the topic focus on the investigation of possible outcomes and benefits for participants in entrepreneurial education during secondary school (Rasheed & Rasheed, 2003; Fuchs et al., 2008; Lepoutre et al., 2010; Moberg, 2014; Elert, Andersson & Wennberg, 2015). Examining the benefits of entrepreneurial education within secondary schools, Rasheed and Rasheed (2003) follow the concept of measuring the impact by examining their influence on psychological attributes. These non-cognitive skills include achievement motivation, personal control, perceived self-esteem, and innovation. Their empirical results provide evidence for the positive impact of Entrepreneurship Education on entrepreneurial characteristics given an increase in the motivation to achieve, a higher sense of personal control and self-esteem, and higher scores in innovation compared to pupils not participating in entrepreneurship programs (Rasheed & Rasheed, 2003). Based on this understanding of entrepreneurial characteristics, Fuchs et al. (2008) use a more advanced understanding of non-cognitive skills and divide the non-cognitive

outcomes into the following three different categories. *The vision* includes all characteristics related to an entrepreneur's idea development and thinking; *volition* covers the character traits relevant for implementation and perseverance, whereas *tools* encompass all skills related to thinking, working methods, and competencies.

Besides these entrepreneurial skills as benefits, Fuchs et al. (2008) also understand the main outcome of entrepreneurial education for secondary school pupils in a higher awareness and propensity towards self-employment and concrete knowledge about running a business on their own. According to Lepoutre et al. (2010), those entrepreneurial intentions and the self-perceived feasibility to start a business are strongly promoted by entrepreneurship programs during secondary school. The effectiveness and strength of the outcomes thereby depend on the particular teaching method, showing that a more experiential design and a higher level of intensity positively impact the observed benefits (Lepoutre et al., 2010). Moberg (2014) found similar supporting evidence on the differing influences entrepreneurship programs can have, depending on the applied approach. Their results show that education programs preparing for entrepreneurship, focusing on content and cognitive entrepreneurial skills, have a positive impact on pupils' entrepreneurial intentions, while programs with an experience-based approach and a pedagogical focus and promotion of non-cognitive entrepreneurial skills can harm students' entrepreneurial intentions by giving pupils a more realistic view on being an entrepreneur (Moberg, 2014).

Besides these short-term effects of entrepreneurial education programs, only Elert et al. (2015) focuses on examining the long-term impact of entrepreneurial education on a secondary school level on the actual entrepreneurial performance. Analyzing the effect on the probability of starting a new firm, the entrepreneurial income, and the firm's survival, the conducted research shows that the participation in Entrepreneurship Education programs in High Schools has a significant positive impact on each of the three examined outcomes (Elert et al., 2015).

4.3 Perceptions and Attitudes towards Entrepreneurship Education

The third category identified among the current research status entails the perceptions and attitudes towards Entrepreneurship Education. A central contribution herein is the research paper by Birdthistle, Hynes, and Fleming (2007). They established a multi-stakeholder view on educational programs that highlights how these different stakeholders experience the dimensions of these programs. Van der Kuip and Verheul (2003) already acknowledged the relevance of this topic. The authors highlighted a further need for research about the different perceptions of entrepreneurial education at a school level as there are different opinions regarding entrepreneurial skills. Zupan et al. (2018) add that to enable the development of an entrepreneurial mindset amongst pupils, factors such as the perception of these programs and their outcomes play an important role. Schools' and parents' attitudes towards these outcomes are highly relevant for their success.

- ***Secondary School***

With regard to this topic, most research contributions focus on the secondary school level. The main stakeholders identified are teachers, schools, parents, and pupils (Birdthistle et al., 2007). In terms of the 17 articles selected within this literature review, the group of teachers has been the one investigated most.

Birdthistle et al. (2007) identified a need for more teacher training. The quality of entrepreneurial programs depends on educators' skills, and according to them, teachers wished for more training to be better prepared. Additionally, overloaded curricula and intense timetables put further stress on the teachers. Schools have to compensate for extra time spent on these programs, and that entails additional funding. Zupan et al. (2018) found the same reservations regarding Entrepreneurship Education. In contrast, Korhonen et al. (2012) discovered in a study conducted in Finnish secondary schools varying opinions by teachers. Some voices were critical with regard to what these programs might imply, i.e., that schools have to compete for business-related sponsors. Teaching business skills was not considered something that secondary education should be about and might not work alongside the traditional

values portrayed by schools. At the same time, other teachers were skeptical at first but understood the program's value and how it could benefit the education of a child and its development. Axelsson (2017) even presented evidence that teachers had a positive attitude towards entrepreneurship learning and were not concerned with potential problems.

As for the stakeholders of parents and pupils, not many research papers provide insights into their perceptions and attitudes towards the topic. Birdthistle et al. (2007) find that most parents believe entrepreneurial programs should be provided for all students, although many parents are not even aware of the programs offered to their children. When it comes to the actual skills taught, parents rank self-confidence as the most important skill and teamwork as the least important to be learned from these programs. Concerning the pupils' perception, Fuchs et al. (2008) analyzed via self-assessment how the participating pupils believed entrepreneurial skills could be developed in school and whether differences concerning diverse teaching methods arise. According to the students, critical thinking, creativity, and teamwork were perceived as well-taught skills in such programs. More detailed analyses of these stakeholder groups are not available to this point.

The question arises: Why is there a need for more detailed research regarding the perceptions and attitudes towards Entrepreneurship Education. One important factor can be derived from the findings concerning the stakeholder group of teachers. The above-described findings show how many teachers appear to be overwhelmed by the workload they face when it comes to business-related curricula. Detecting these sentiments can be crucial to control the outcomes of entrepreneurial programs at school. If teachers do not receive suitable support when applying more complex teaching styles, success may not be forthcoming (Frank, Korunka, Lueger & Mugler, 2005). Ruskovaara and Pihkala (2013) find that teachers' perceptions of their skills often decide whether and how they include entrepreneurial education in their schedules. Therefore, that indicates the need for sufficient training. The majority of teachers in their study had no or only some training. Moberg (2014) supports these findings by analyzing perceived teacher support. The teacher's role is very important as the teacher often decides about the teaching methods, which results in different learning outcomes. Therefore, the quality and thoughtfulness of teaching methods need to be discussed in specific training sessions.

The importance of feedback from teachers, parents, and pupils therein is part of a successful circuit of Entrepreneurship Education. Only when potential reservations, as shown with the example of teachers, can be detected, they can be addressed and resolved.

4.4 Critical Reflection and Model

In order to further understand the connection between the three categories, a model is used to indicate existing and missing links:

The model shows the three identified categories and how current literature has been addressing them. As a basis, the school levels explored are added to address the differences in educational programs investigated. The red, striped arrows imply further need for research, and the green, dotted arrows indicate well-explored and interrelated research topics.

As presented in chapter 4.1, Content of Entrepreneurship Education, the depth of research about different school levels can be detected most clearly concerning teaching methods and curricula. Consequently, these findings imply a need to transfer these insights to the other two topics as well. If a difference in content is mandatory to create valuable educational programs in Entrepreneurship Education, benefits and attitudes need to be separately discussed for different age groups. The research contributions within the benefit-focused category show that there is only a limited distinction between school levels and a severe focus on secondary schools. Further research, therefore, is specifically needed about benefits derived from preschool and primary school teaching projects. The category of perceptions and attitudes to this date lacks a similar differentiation between school forms. These findings are directly linked with why the differentiation between school and university programs is important. The different needs of pupils compared to university students can be derived from the varying needs among the school levels as these focus groups respond very differently to teaching methods that result in a multitude of varying benefits (Axelsson et al.,

2015; van der Kuip & Verheul, 2003; Palmér & Johansson, 2018; Denegri et al., 2018).

The upper level of the model shows the already connected topics of teaching methods, curricula, and benefits. Many research papers differentiate between different learning outcomes and benefits derived from different teaching approaches (Moberg, 2014; Korhonen et al., 2012). The interrelation arises because teaching methods and curricula with the strongest benefits will be chosen. A prominent feature is the category perceptions and attitudes, as it appears to be highly disconnected. Chapter 4.3, Perceptions and Attitudes towards Entrepreneurship Education, has highlighted that this topic is rather unexplored even though its importance is evident. It could be easily integrated into future research projects in terms of feedback included in research studies, focusing on the views of different stakeholders on entrepreneurial programs (Birdthistle et al., 2007).

question, which aspects of Entrepreneurship Education at school have been investigated and how they are classified and connected. To address this question, the content of Entrepreneurship Education, the benefits arising from Entrepreneurship Education, and the perceptions and attitudes towards Entrepreneurship Education were analyzed. The paper presents evidence for a connection between the three topics. All results are shown in the model in chapter 4.4.

The content of Entrepreneurship Education can be split into three school stages: preschool, primary school, and secondary school. In preschool, entrepreneurship is not defined as a subject, but the teachers used different teaching methods like asking the children questions and listening to their ideas. Primary schools already create more awareness of entrepreneurship by integrating interdisciplinary projects into their curriculums. Nevertheless, secondary schools showed the

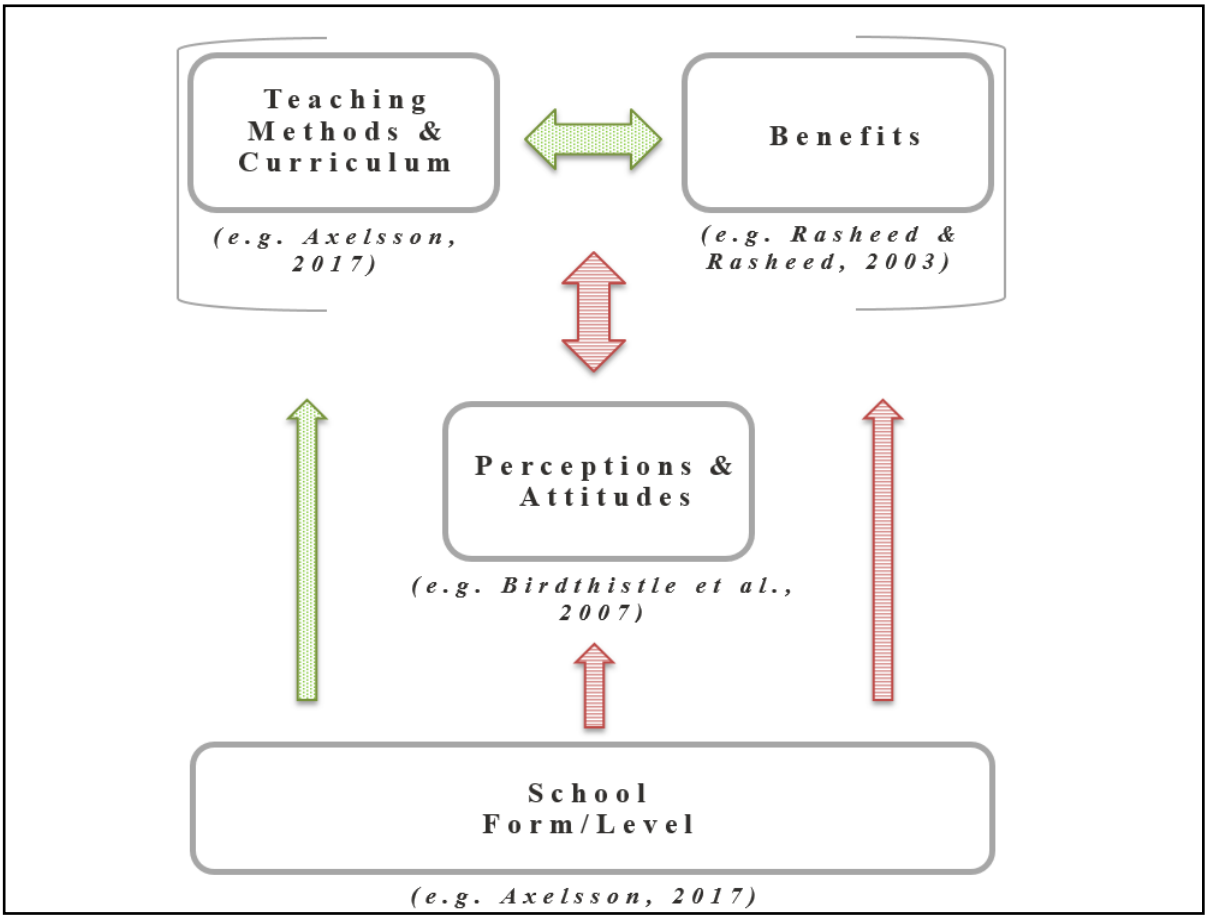

Figure 8: Research fields in current literature
Source: Own visualization

5 Conclusions

This paper aims to highlight the findings from current research papers to answer the research

highest level of integrated Entrepreneurship Education in the curriculum. The curriculum

therein includes internal as well as external entrepreneurship teaching soft and hard skills.

The analysis of the benefits and outcomes of Entrepreneurship Education can be divided into findings regarding cognitive, non-cognitive skills, and actual outcomes on the market. Furthermore, the distinction between different school levels appears to be relevant as the taught content differs strongly. In detail, a positive impact of Entrepreneurship Education on motivation, personal control, and innovation was observed among the studies. The effectiveness of Entrepreneurship Education nevertheless depends on the teaching method. As an example, more intensive training and an experimental teaching design have a more substantial positive impact on the pupils.

The perceptions and attitudes towards Entrepreneurship Education have been discussed, though rarely, from a multi-stakeholder view on these programs and how important Entrepreneurship Education is for different stakeholders like teachers, parents, or pupils themselves. The teachers and their attitudes are very important for the success of these programs. Parents favor entrepreneurial skills being taught to all students and ranked self-confidence as the most important skill. A common problem appears to be the missing support for the teachers concerning how to include entrepreneurial education in their classrooms. Analyzing the state of current research about this specific topic highlighted the existing research gap that includes a detailed analysis of the differences amongst school levels and how pupils and third parties perceive these entrepreneurial programs.

Overall, the model in chapter 4.4 shows the different connections identified in the current state of literature concerning Entrepreneurship Education at school. The model describes how the topic of content Entrepreneurship Education is very well analyzed. Opposite to that, the benefits arising from Entrepreneurship Education lack this degree of detailed analysis as the studies mostly analyzed this topic for the secondary school level. Also, the connection between these two topics needs more research because exploring the benefits is often not linked with the teaching method. The model in chapter 4.4 and the results in 4.3 highlight that perceptions and attitudes are nearly unexplored. Future research could analyze the perceptions and attitudes towards Entrepreneurship Education as well as the correlation between the perceptions and attitudes with the already explored research fields and the connection with the different school levels.

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Entrepreneurs in Poverty: Coping with Resource Constraints through Bricolage

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Abstract

Existing literature discussed entrepreneurs' bricolage potentials and often showed that it supports underdeveloped countries' and poverty reduction. However, more research is needed to better understand the multiple dimensions of poverty and how entrepreneurs employ bricolage to overcome poverty. Therefore, this paper aims to examine entrepreneurship in poverty through the theoretical lens of bricolage. This study will further elaborate on creating a better understanding of coping with various forms of poverty through entrepreneurial bricolage, including integrating and defining poverty dimensions from the bricolage lens. This study exhibits the four bricolage dimensions developed by Baker and Nelson (2005); education poverty, financial poverty, material poverty, and infrastructural poverty. The study further derives five research propositions reflecting on these dimensions. The results show that it is not useful to use bricolage within the multiple poverty dimensions simultaneously over a long period in the form of parallel bricolage, as it can hinder the escape from poverty.

Keywords: *Entrepreneurship, Bricolage, Poverty, Entrepreneur in Poverty.*

1 Introduction

1.1 Practical and Research Relevance

Poverty is a topic that is quickly forgotten in western countries because it is not visible. However, according to the United Nations (UN), it is probably the biggest problem in our society worldwide. For this reason, goal number one of the sustainable development goals of the UN is to end poverty in all its forms everywhere (United Nations, 2020). The organization for economic co-operation and development (OECD) assistance committee defines poverty as a state in which the people are incapable of attaining economic, social, and other well-being standards, i.e., they cannot meet basic human needs due to various types of deprivation (OECD, 2001). Currently, 7.8 billion people live on earth and almost half of them, around 3.4 billion people, struggle to satisfy their basic needs, living on less than 5.50 US-Dollars a day (Worldbank, 2020). The worst form of poverty, thereby extreme poverty, is where you have to get along with less than 1.90 US-Dollars a day. Currently, 734 million people live in extreme poverty, which is 10 % of the world's population (Worldbank, 2020). However, poverty does not only include financial poverty. There are different forms of poverty, including various dimensions like educational, infrastructural, and material poverty (Dalglish, 2008; Ellis, 1983; Goel & Rishi, 2012; Obi, 2015; Wu & Si, 2018). In the context of entrepreneurship, financial poverty often exists in undeveloped or developing regions where people have only money to afford their living and cannot raise financial resources (Goel & Rishi, 2012).

Simultaneously, educational poverty is about whether people can gather needed skills such as managerial skills to run a business (Dalglish, 2008). Infrastructural poverty includes underdeveloped infrastructure (Wu & Si, 2018) and the lack of infrastructural facilities (Ezegbe, Eskay & Anyanwu, 2013) as well as bad governance, which is linked to poor macro-economic and monetary policies. Material poverty thereby focuses on the limited access of people to material means of surviving (Obi, 2015).

Poverty thus appears to be linked to resource scarcity or limited access to needed resources. Bricolage, as a concept, is often referred to in these resource-poor environments. In the context of entrepreneurship, Baker and Nelson (2005) defined bricolage as creating something from nothing by making do and using resources at hand by

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combining them for new purposes. They split bricolage into physical, skill, and labor input and customer and institutional environment bricolage (Baker & Nelson, 2005).

Existing literature already discussed entrepreneurs' bricolage potentials and showed that they could apply it to their business in several different areas (Desa, 2012; Holt & Littlewood, 2017; Linna, 2013). It also shows that it supports underdeveloped countries' development and poverty reduction (Bacq et al., 2015; Sarkar, 2018). Additionally, people suffering from poverty are often engaged in entrepreneurial activities. "In general, the poor have lower labor skills and capital and, as a result, the option to be self-employed is easier than finding a remunerated stable job." (Amorós & Cristi, 2011, p.210). Amorós and Cristi (2011) show that poverty and income inequalities push people in developing countries into necessity driven entrepreneurship (Amorós & Cristi, 2011). Their research demonstrates that necessity-based entrepreneurship activities have a positive effect on reducing poverty over time. The current literature thereby often equates poverty with financial poverty or considers it a general condition of scarce resources. However, research is needed investigating the different dimensions of poverty, how they influence entrepreneurship through resource constraints, and how they can use bricolage in the respective poverty dimension to overcome poverty.

To close this research gap, we first want to identify the relevant poverty dimensions and derive resource constraints from the respective poverty dimension. Our next step is to identify the bricolage dimensions and individual methods. Our research focuses on answering how entrepreneurs cope with different types of resource constraints emerging from poverty using bricolage. To answer this question, the next chapter of this paper presents the conceptual background to the research objective of poverty and entrepreneurship and the theoretical lens bricolage. The development of the research propositions and our model will be presented in chapter 3, followed by the discussion and conclusion in chapter 4.

2 Conceptual Backgrounds – Review on Entrepreneurship in Poverty & Bricolage

2.1 Contextualization

This paper's conceptual background begins defining poverty and entrepreneurship's meanings based on the current state of research to understand the connections between poverty, entrepreneurship and the concept of bricolage for our further research aim. The paper follows four dimensions of poverty: educational, financial, infrastructural, and material deprivation. Throughout the literature review, these poverty dimensions have been identified to understand how entrepreneurship can act to cope with people living in poverty. The conceptual background ends with bricolage. The concept of bricolage explains how entrepreneurs cope with different resource constraints that emerge through poverty's dimensions. It can support, for example, the development of underdeveloped countries or contribute to reducing poverty by using what is at hand (Baker & Nelson, 2005).

2.2 Poverty and Entrepreneurship

According to the Ministry of Welfare and Social Security, poverty is the inability to meet the minimum necessities of life for individuals that preserve or conserve religion, mind, money, and soul (Elhadary & Samat, 2011). Essentials include access to food, public transportation, owning or renting a house, health services, and life security (Zainol et al., 2014). According to the current research, poverty lacks either physical or non-physical basic needs of people living in developing countries.

Entrepreneurship is a process that is initiated and carried out by individuals and serves to identify, evaluate and exploit business opportunities or business ideas. Accordingly, poverty as a resource-scarce environment has an essential impact on entrepreneurship, where the combination of resources to create value is the core activity.

In the context of entrepreneurship and poverty, the current literature already shed light on entrepreneurship as a way out of poverty and investigated the relationship between entrepreneurship and poverty reduction, focusing on wealth creation in developing countries

(Alvarez & Barney, 2014; Bruton, Ketchen & Ireland, 2013; Ifeoma, Purity & Emmanuel, 2018). Thereby the literature to date has mainly concentrated on factors of support, identifying which educational and institutional regulations can be favorable for the promotion of entrepreneurship in poverty (Edgell, 2013; Garba, 2010; Goel & Rishi, 2012; Mensah & Benedict, 2010; Si et al., 2015). Thereby poverty is generally examined as a general condition. To investigate how people in poverty can act as entrepreneurs, overcome resource constraints and poverty, one must take different forms of poverty into account. The identification and classification of poverty dimensions are not clear and change over time (Ellis, 1983). Depending on the research focus, the sizes range from educational to social and health poverty (Halim et al., 2014). To stay within this paper's scope, we will focus on the dimensions that directly affect entrepreneurship: educational, financial, infrastructural, and material poverty.

Educational poverty means people have little or just limited access to education, which mostly leads to not gaining the necessary skills to run a business (Goel & Rishi, 2012). Education can affect national development (Obi, 2015) and can cope with partially educational poverty by initiating successful business activities (Obi, 2015). Resource constraints emerging from educational poverty are having no or limited access to knowledge and entrepreneurial skills and the lack of access to skilled human capital, such as the countries' absence of financial resources to drive educational programs (Dugguh, 2014).

It is not always easy to distinguish between the various dimensions of poverty. It can also relate to educational poverty, defined as poverty that happens when people's earnings are just not enough for livelihood. Resource constraints are identified as having no or not enough money to start a business or securities to get loans (Goel & Rishi, 2012). In India, female daily laborers and housewives, for example, did not have access to capital to start small business ventures (Kolloju, 2016).

Typical resource constraints have no or limited access to infrastructure and markets (Wu & Si, 2018). As the last of the four dimensions of poverty, material poverty can be described by focusing on people who have little or no access to material means of surviving. This living state results in hard access to either needed technologies or input materials (Obi, 2015). As an example, looking at Sub-Saharan Africa, there are more than 620 million people living without access to electricity (Gordiievska, 2015).

2.3 Bricolage

The French ethnologist Claude Lévi-Strauss (1908-2009) developed bricolage as a concept. In his research on indigenous tribes in the Amazonas, published in 1966 in *"The Savage Mind,"* Lévi-Strauss describes the approach of the people as bricolage, in which the actor, defined as a bricoleur, solves problems with the available resources at hand instead of using special tools and equipment designed for the specific problem. The process of bricolage thereby consists of three parts. The first step is defined by acquiring a repertoire consisting of knowledge about materials, uses, and methods characterized by extensive or only limited know-how. The second step follows a dialogue in which different repertoire elements are actively linked to achieving the targeted outcome. Finally, the third step includes developing the process, although the actual outcome may differ widely from the intended outcome (Lévi-Strauss, 1966).

Based on the theory of bricolage developed by Lévi-Strauss (1966), the concept of improvisation and the use of resources outside their intended purpose have been adopted from anthropology in various fields like information technology and sports, linguistic, or architecture. In the economic context, Baker and Nelson (2005) applied the concept to the entrepreneurial area. In their research work "Creating Something from Nothing: Resource Construction through Entrepreneurial Bricolage," the authors use bricolage to explain how entrepreneurs successfully gather and utilize resources in an environment of limited resources. Providing an overview of the existing multidisciplinary literature on bricolage, they thereby define bricolage as a process of creating something from nothing by either making do, recombining resources for new purposes or using the resources at hand. The term "making do" implies the tendency to work with the resources available and the active engagement with problems instead of calculating possible outcomes. The recombination of resources for new purposes assumes the use of existing elements instead of

starting from scratch. Using resources at hand, Baker and Nelson (2005) extends the original understanding of Lévi-Strauss (1966) of only using resources at hand by including resources available for free or very cheaply. Using this definition of bricolage, Baker and Nelson (2005) used data from 29 small resource-constrained firms in their research to investigate whether the use of bricolage has an impact on the firm's success and growth. They thereby identified different domains in which the application of bricolage, the creation of something by nothing, can be found: physical-inputs, labor-inputs, skills-input, customer, and the institutional environment. Regarding the usage and intensity of the applied bricolage, it can differentiate two forms: parallel bricolage and selective bricolage. While parallel bricolage, as an intricate pattern, is characterized by multiple ongoing projects relying on bricolage, the pattern selective bricolage refers to the concept's particular, short-term application. The study results show that parallel bricolage allows companies to survive and sustain but offers only limited growth opportunities. In contrast, the selective use of bricolage leads to company growth (Baker & Nelson, 2005).

The findings and theories developed and presented by Baker and Nelson (2005) have been used as a basis in many subsequent studies for exploring different relationships between bricolage and entrepreneurship, and the application of a bricolage lens to investigate various entrepreneurship objectives has become increasingly prominent (Fisher, 2012). As one of the main contributions, Senyard, Baker and Davidsson (2009) started to deductively test the relationship between firm performance and bricolage in their study, whereas the theory was previously mainly applied qualitatively and inductively (Senyard et al., 2009). Taking the low-resource environment of Baker and Nelson (2005) as a starting point, bricolage has also been adopted in other environments such as unfavorable institutional surroundings (Desa, 2012) and empirically tested and set in contrast to other theories like optimization (Desa & Basu, 2013). In the context of entrepreneurship and poverty, Linna (2013) specifically investigated the impact of bricolage on local entrepreneurs in developing countries. Based on Baker and Nelson's (2005) previous findings, Linna (2013) recognized further different types of bricolage: the social mindset combined with resourcefulness, making do with resources at hand, and improvisation.

This study will investigate the opportunities for an entrepreneur in poverty to overcome different poverty dimensions through bricolage. We will focus on the bricolage dimensions developed by Baker and Nelson (2005). Since these dimensions refer to a general environment of resource constraints and not, as in Linna (2013), only the innovation process of a firm, these dimensions offer the opportunity to investigate bricolage in the context of poverty as a cause of several resource constraints. Therefore, this study will apply bricolage in the dimensions of input, customer, and institutional environment. The input dimension thereby includes physical bricolage, such as using old disposable materials to create newly identified resource constraints. In contrast, the institutional environment dimension refers to bricolage in a regulatory setting, disregarding standards, and regulations (Baker & Nelson, 2005). This study will examine the different poverty dimensions using the bricolage concept. In this context, parallel bricolage is defined as the simultaneous application of bricolage in various projects and poverty dimensions over the operation's whole time (Baker & Nelson, 2005; Fisher, 2012). These dimensions and patterns are used in this study as a basis for the identification of different methods of bricolage to cope with the identified resource constraints.

3 Development of Research Propositions

3.1 Developing a Framework

In this chapter, we present our conceptual model, showing the interrelations between poverty and bricolage usage, and supporting the coping with resource constraints created by poverty. After a short description of the model's development, we present our research propositions from the view of each of the four dimensions of poverty. In the end, we develop one final research proposition, which sheds light on potential adverse long-term effects through the usage of bricolage.

As illustrated in figure 1, our conceptual model explores different ways of how entrepreneurs cope with resource constraints using different types of bricolage.

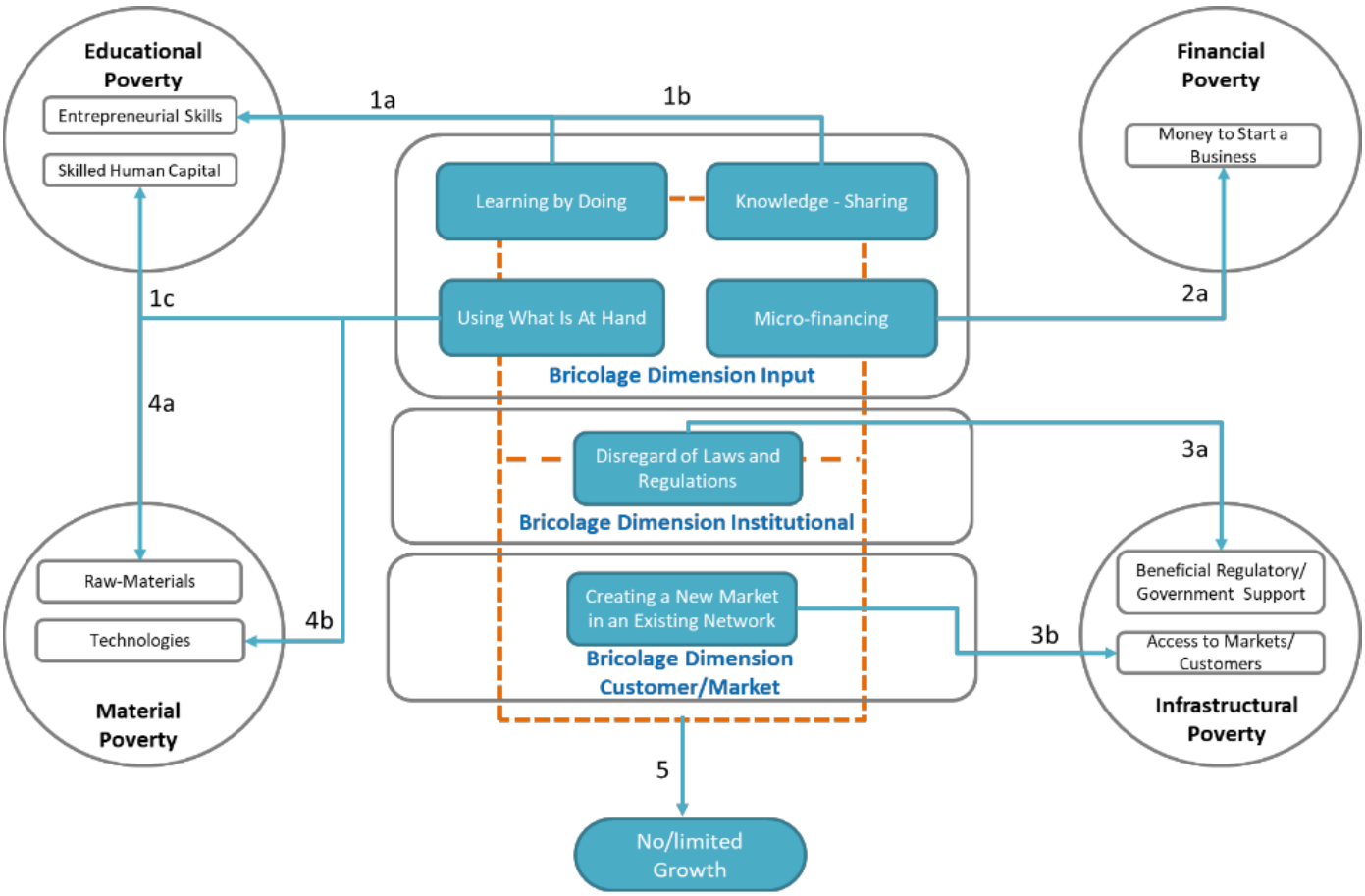

Figure 1: A Framework of the interdependencies of bricolage and poverty
Source: Own visualization

In the model, each of the four previously identified dimensions of poverty are pictured. The environmental dimensions in which bricolage was used, according to Baker and Nelson (2005), are inputs, customers, and institutional environment. With the help of the bricolage dimensions and the literature's conclusions, different types of bricolage actions are identified (blue boxes) and put into relation with resource constraints.

3.2 Educational Poverty

The first poverty dimension we derived research propositions from is educational poverty. It is described in the entrepreneurship context as a lack of entrepreneurial skills to start or maintain a business and a lack of skilled human capital needed for the business.

Entrepreneurial skills contain technical skills (e.g., organization, presenting technological know-how), business management skills (e.g., starting and developing a business), and personal entrepreneurial skills (e.g., innovativeness, taking) (Ogundele, Akingbade & Akinlabi, 2012). These skills are vital in developing prosperous businesses (Hoque, Khan, & Mohammad, 2015). *They are* usually enhanced "through structured training and institutional building programs" (Ifeoma et al., 2018, p.80) that lay their focus on individuals who pursue the goal of starting a business. However, as described in chapter 2.2, poverty-stricken environments often lack this kind of program. In these regions, entrepreneurs can deal with a lack of educational resources by applying input bricolage. Ilemona, Akoji, and Matthew (2013) found out that entrepreneurs acquire skills through apprenticeships in small and medium scale enterprises (Ilemona et al., 2013). Here the process of observing and learning by doing plays a key role. Tonelli and Dalglish (2011), who studied the skill acquisition of micro-entrepreneurs in Mozambique, Sigalla and Carney (2012) further, support the aspect of "learning by doing" (Sigalla & Carney, 2012; Tonelli & Dalglish, 2011). In both cases, NGO based training schemes encourage future entrepreneurs to develop entrepreneurial skills such as "income generation skills" (Sigalla & Carney, 2012, p.348) and budgeting skills through the process of learning by doing. Another way to

develop skills is the aspect of knowledge sharing. Kolloju (2016) found that self-helping groups (SHG) play an essential role in the development of financial awareness and management of financial resources (Kolloju, 2016). However, entrepreneurs do not only learn about financial aspects. SHGs also function as a "knowledge-sharing platform on topics such as handicraft making, farming, and healthcare awareness" (Li et al., 2011, p.3). Through learning by doing and knowledge sharing, entrepreneurs acquire self-taught skills that they can use in the development of their own business. Therefore, our first two research propositions are as followed:

RP-1a: Educational poverty leads to missing or limited entrepreneurial skills, which can be trained through the method of learning by doing as input bricolage.

RP-1b: Educational poverty leads to limited entrepreneurial skills, which can be overcome by knowledge sharing in SHGs as input bricolage.

Educational poverty can lead to a lack of skilled human capital needed for the business. Human capital describes a collection of skills and characteristics that help increase a worker's performance within an organization and is an essential factor for the economic development of a region (Ifeoma et al., 2018). When there is no or limited access to skilled human capital, entrepreneurs can manage a lack of skilled workers by applying bricolage in the input domain labor. In Shah and Saurabh's study from 2015 on women entrepreneurs in developing nations, a female entrepreneur started a business with her husband's help. She benefited from her husband's experiences gathered through his job as a local businessman (Shah & Saurabh, 2015). Baker and Nelson (2005) argued that labor inputs could be created by involving friends or family members (Baker & Nelson, 2005). From this example, we derived the third research proposition:

RP-1c: Educational poverty leads to limited access to skilled human capital, which can be overcome by directly involving family members in the entrepreneurial activity as a form of input bricolage.

3.3 Financial Poverty

The second dimension in our model is the dimension of financial poverty. The research proposition connects the constraint of having limited or no access to financial resources with the input bricolage activity of micro financing, which can defeat financial poverty.

Financial poverty can be described as a lack of access to financial resources to meet basic human needs. If entrepreneurship is combined with financial poverty, such as too little financial resources or lack of creditworthiness, the problems become apparent. In many developing countries, people do not have the option the get a loan from the bank or family to start a business to overcome poverty. As credit securities are missing or the family is also suffering from poverty and, thus, cannot support a family member to start their own business (Alvarez & Barney, 2014). This constraint of a lack of financial resources can be defeated through the usage of input bricolage. For instance, the option of using micro-finance to get the money to start a business could help to surmount the constraints of having no or limited access to financial resources (Alvarez & Barney, 2014). Micro-finance loans can be described as very small and unsecured credits to people who have the intention to start a small business or increase their existing business (Khavul, 2010). Another point is the duration of the loans, which is usually relatively short (Bruton et al., 2013). For example, micro-finance loans can be a way of input bricolage as people spend their financial resources on people living in poverty who want to start a business (Desa & Basu, 2013). Linking this example from Desa and Basu (2013) with Baker and Nelson's (2005) definition of physical input bricolage, it is visible that the poor people who get the money through a micro-loan can start or increase their business by using the financial resources they have at hand. Therefore, we propose:

RP-2: Financial poverty leads to entrepreneurs having no or not enough money to start a business, which can be defeated by micro financing as input bricolage.

3.4 Infrastructural Poverty

The third dimension in our model is the dimension of infrastructural poverty, and the research

propositions connect the constraints of having limited or no access to beneficial governmental support and access to customers and markets with institutional bricolage activities like disregarding regulations, and customer bricolage activities such as creating new markets in existing networks which can defeat the constraints of infrastructural poverty.

Infrastructural poverty can be described as the existence of underdeveloped infrastructure (Wu & Si, 2018). Linking the infrastructural poverty with the aspects of entrepreneurship resource constraints in the current literature, several relations become visible. The first constraint deals with the limited beneficial governmental support, as a way of infrastructural poverty, due to the lack of infrastructural facilities (Ezegbe et al., 2013). It could characterize the lack of beneficial governmental support as high market entrance barriers or no governmental support for starting a business (Mensah & Benedict, 2010; Yu et al., 2019). In this struggle, the entrepreneurs need to escape market competition related to high barriers (Yu et al., 2019). The usage of institutional bricolage can surmount this constraint. Baker and Nelson (2005) identified the "get away with" solution, which means that the entrepreneur disregards the existing laws in a way that they do not get in trouble with the regulators or governmental organizations (Baker & Nelson, 2005). Therefore, our first research proposition for infrastructural poverty is:

RP-3a: Infrastructural poverty leads to no or limited beneficial regulatory or governmental support, which can be defeated by disregarding laws and regulations and using the "get away with" solution as a way of institutional bricolage.

Other resource constraints from the current literature about the infrastructural poverty for the entrepreneurs are identified in no or limited access to customers and markets due to the underdeveloped infrastructure and the lack of infrastructural facilities (Ezegbe et al., 2013; Wu & Si, 2018). An example is rice farmers in India who do not invest money to increase their production due to the missing access to new markets and customers (Li et al., 2011). The resource constraints can be defeated using the customer bricolage dimension (Baker & Nelson, 2005). Another example is creating new services and products in existing organizations (Zaefarian, Tasavori, & Ghauri., 2015). Linked with the idea of creating a new market in an existing network, Yu et al. (2019) presented the idea that one can create a market by transferring private relationships into business relationships (Yu et al., 2019), categorized as customer bricolage. Therefore, our second research proposition for infrastructural poverty is:

RP-3b: Infrastructural poverty leads to no or limited access to markets and customers, which can be improved by creating new markets in an existing network as a way of customer bricolage.

3.5 Material Poverty

The last poverty dimension focuses on resource constraints regarding physical products. In environments where poverty exists, people often suffer from a lack of physical resources needed to create a business. These can be tools such as technical equipment, facilities such as offices, workshops, or resources that directly function as raw materials to create products. One example for the latter is given in a study on Kenyan micro-entrepreneurs published by Holt & Littlewood in 2017. Here, businesses were based on the idea of recycling waste materials and using them to make money. The usually free materials were either prepared for reselling or used as raw materials to create new products (Holt & Littlewood, 2017). When viewing this example through Baker and Nelson's framework on bricolage dimensions, the application of bricolage in this area becomes visible: The micro-entrepreneurs saw an opportunity in materials that presumably only had a single-use and made money with them. They turned "valueless or even negatively valued resources into valuable" (Baker & Nelson, 2005, p.349) into physical inputs for their business. Following these considerations, we developed the following research proposition on how entrepreneurs can overcome a lack of physical resources:

RP-4a: Material Poverty leads to limited access to resources, which can be substituted by using discarded materials as physical input.

In another case, entrepreneurs do benefit from cheaper alternatives to existing technology to generate income. In the paper of Zaefarian et al. (2015), the International Development Enterprise in India brought cheaper, simpler versions of water pump to local farmers. These water pumps helped the farmers reduce their agricultural costs, which led to an increase in earnings (Zaefarian et al., 2015). In this example, the farmers were already farmers before being provided with cheaper technology. However, when looking at Baker & Nelsons (2005) term of "using what is at hand," one could argue that one opportunity for entrepreneurs could be to seize the opportunity of cheap technology provided from the outside to create a business based on this technology to escape from poverty (Baker & Nelson, 2005; Kickul et al., 2018). Therefore, we propose the following research proposition regarding the use of technology:

RP-4b: Material Poverty leads to no or limited access to technology, which can be defeated by using cheaper alternatives to existing technologies provided from the outside as a form of input bricolage.

3.6 Parallel Bricolage

The potential negative aspects of bricolage are shown in the last research proposition of the model. The research proposition deals with bricolage's problematic usage simultaneously in more than one poverty dimension over time.

Baker and Nelson (2005) defined parallel bricolage as applying bricolage to several projects in a company simultaneously. A result of parallel bricolage is the restricted innovation success, which could be the problem of being trapped in bricolage (Fisher, 2012). Additionally, parallel bricolage means the acquisition of different skills at the same time by bricolage methods that could lead to a hindered development of expertise by the entrepreneur over time, limiting their skills (Ilemona et al., 2013; Sigalla & Carney, 2012; Tonelli & Dalglish, 2011). Another potential negative aspect of parallel bricolage is the period of time an enterprise uses more than one manner of bricolage, as an extensive usage of bricolage could hinder the company's growth (Baker & Nelson, 2005). These aspects are visible at different examples from the literature regarding the poverty dimension and prevent the overcoming of various dimensions of poverty (Baker & Nelson, 2005; Fisher, 2012). For example, one possible problem could be the combination of disregarding laws within the "get away with a solution" and the input bricolage of self-taught skills or learning by doing, limiting the growth of the business (Baker & Nelson, 2005). Another problem that could occur as high usage of bricolage could disregard markets and new opportunities (Kickul et al., 2018). Therefore, the research proposition is:

RP-5: The application of bricolage methods within multiple poverty dimensions, not rejecting it at a later phase once the business is established and the needed resources are gained, leads to limited opportunities to escape poverty.

4 Conclusion

This paper aims to examine entrepreneurship in poverty through the theoretical lens of bricolage to answer our research question and close the research gap, how the different poverty dimensions influence entrepreneurship utilizing resource constraints, and how they can be coped with the usage of bricolage. To close this gap, we created a conceptual model, which illustrates the relations between the different dimensions of poverty and bricolage. From the mentioned poverty dimensions, we derived five research propositions specialized on these dimensions.

During the development of our conceptual model and the propositions, some key results were discovered. Regarding educational poverty, the missing skills can be coped with by the method of learning by doing. Another way of dealing with educational poverty could be knowledge sharing in self-helping groups as input bricolage, and lack of human capital can be compensated by involving family members in the business activity. Concerning financial poverty, the use of short-term micro financing is a way to overcome the access to limited financial resources or the unavailability of money. Furthermore, it can face the absence of beneficial regulatory or governmental support in the infrastructural poverty dimension by disregarding the law using the "get away with" solution. The lack of support can be characterized as high market entrance barriers and hinders entrepreneurs from founding a business and reaching customers, which can be coped with by

creating new markets in an existing network. Given material poverty, limited material resources can be substituted using discarded materials as physical input. The limited access to technology can be defeated by using cheaper alternatives to existing technologies provided from the outside. Overall, the results show that it is not useful to use bricolage within the multiple poverty dimensions simultaneously over a long period in the form of parallel bricolage, as it can hinder the escape from poverty.

In this research paper, we elaborated on creating a better understanding of how to cope with different forms of poverty through entrepreneurial bricolage, including the integration and definition of poverty dimensions from the view of bricoleurs. To create a more realistic picture of poverty, it needs to be seen in its different aspects and not overall. Entrepreneurship needs to be examined in individual areas to see connections. We developed, therefore, causal relations between these topics, which we also visualized in our conceptual model. Especially parallel bricolage shows that bricolage can be negative when applied to all aspects of poverty and does not help to overcome poverty. Therefore, it is necessary to look at a single dimension of poverty.

Our future research recommendations are that empirical tests of the research propositions could reveal further insights and relations and evaluate the conceptual model. Furthermore, the following research on entrepreneurship in poverty should consider the different dimensions of poverty and look at poverty as a general condition. Research on how to create a sustainable entrepreneurial ecosystem in regions containing resource constraints through bricolage and on necessity entrepreneurship combined with bricolage investigating the sustainability of the business models and imitators could be topics for further research.

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Refugee Entrepreneurship and Resilience

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Abstract

Resilience is essential for refugee entrepreneurs since it enables them to go through hardship, overcome obstacles, and build their entrepreneurial careers. Several research endeavors have shed light on refugees' entrepreneurial activities, but there are limited studies that address the resilience of refugee entrepreneurs. Therefore, this study will examine refugee entrepreneurship through resilience, using a theoretical construct developed by Ungar et al. (2008), referring to the seven resilience factors in the context of culture. The critical research question highlighted in this paper is: how do internal and external factors interact with refugees' entrepreneurial resilience? Based on the seven-tension model by Ungar et al. (2008), this paper develops a framework that presents the interaction of internal and external factors with refugees' entrepreneurial resilience. It also developed eight research propositions. Previous studies on resilience in refugee entrepreneurship primarily emphasize how resilience affects refugees' motivation to engage in entrepreneurship. However, this study extends the current literature by examining external and internal factors, which influence or are influenced by refugees' entrepreneurial resilience and, therefore, help refugee entrepreneurs overcome barriers and obstacles of entrepreneurship. Furthermore, the result shows the casualties of external and internal factors and refugee entrepreneurs' resilience.

Keywords: *Refugee entrepreneurship, Resilience, Refugee Entrepreneurial Resilience.*

1 Introduction

In recent years, the number of refugees around the world has increased enormously. A refugee is a displaced person whose movement was primarily driven by push factors such as war, persecution, and others (Desai, Naudé, & Stel, 2020). According to the United Nations High Commissioner for Refugees (UNHCR), 79.5 million men, women, and children were fleeing at the end of 2019 (UNHCR 2020). In comparison to the previous year, almost nine million more people were fleeing (UNHCR 2019). As a result, the number of people trying to flee has doubled since 2010 and has never been higher today. Moreover, the high unemployment rates among refugees are often the result of local economic conditions and access to the labor market (Sak et al., 2018). However, access to the labor market is the most politically charged and, therefore, most discussed area of socio-economic integration of the refugee population in the host countries (Sak et al., 2018). Entrepreneurship is seen as one of the opportunities for refugees who might have been denied access to the labor market (Feldman et al., 1991) due to language barriers, limited opportunities for advancement, low wages, and difficulties in obtaining a work permit (Light, 1979; De Freitas, 1991; Fairlie & Meyer, 1996; Kizil, 2016). In these cases, resilience is essential for refugee entrepreneurs since it enables them to go through hardship and overcome obstacles and build their own company (Bullough & Renko, 2013; Corner, Singh & Pavlovich, 2017; Korber & McNaughton, 2018).

Recently, there have been several research endeavours that shed light on the entrepreneurial activities of refugees (Sak et al., 2018; Alrawadieh, Karayilan & Cetin., 2019). However, refugee entrepreneurship is still a new and growing topic, and research is limited (Meister & Mauer, 2019). The amount of research on refugee entrepreneurship has increased since the refugee crisis (Desai et al., 2020). Thus, the importance of the topic is growing more than before. Furthermore, the research on the resilience of refugee entrepreneurs is still at an early stage. At present, refugee entrepreneurs' resilience is almost only examined in single case studies (Alkhaled, 2019). Only a few contributions deal with the factors that determine the resilience of refugee

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entrepreneurs. Moreover, previous studies on how resilience can help refugees in entrepreneurial activities are scarce. To fill this gap, the study examines refugee entrepreneurship through resilience, using a theoretical construct developed by Ungar et al. (2008), which refers to seven factors of resilience in the context of culture. Consequently, to expand the literature on refugee entrepreneurship and gain new insights into the phenomenon, the research will be guided by the research question: "How do internal and external factors interact with refugees' entrepreneurial resilience?"

To answer the research question, this study is structured as follows: Following the introduction, the paper deals with refugee entrepreneurship and presents the research object through different characteristics of refugee entrepreneurs, which have been examined and proven in past research. Accordingly, this study explains resilience concerning refugee entrepreneurship and highlights essential internal and external factors regarding resilience. We then present our conceptual model and related propositions regarding refugees' entrepreneurial resilience. We developed eight research propositions based on argumentation, which is supported by the literature. In the final part, the results and their implications are reflected in the conclusion.

2 Conceptual Backgrounds

2.1 Refugee Entrepreneurship

Some of the current literature has used the terms “migrant,” “refugee,” and “asylum seeker” synonymously or have presented refugees as a part of migrants (Wauters & Lambrecht, 2008; Bizri, 2017; Alrawadieh et al., 2019). However, each term and, therefore, each ethnic group has its definition and, further, its obstacles and consequences (Sarpong, 2019). Refugees are defined as people who have fled their homes for various reasons such as war, violence, conflict, or persecution and have crossed an international border to find safety in another country (UNHCR, 2020). On the other hand, migrants leave their home country for better economic conditions and humanitarian security (Bizri, 2017; Sarpong, 2019).

Several kinds of literature support the view that refugee entrepreneurship is refugees' entrepreneurial activity in their host-country (Wauters & Lambrecht, 2008; Shneikat & Alrawadieh, 2019). Furthermore, Meister & Mauer (2019) state that the creation of new ventures offers opportunities for the economic development of the host country in the context of refugee entrepreneurship. Refugee entrepreneurship has recently become significantly evident in several theoretical, empirical, and economic research endeavors. However, this topic is still limited (Wauters & Lambrecht, 2008; Alrawadieh et al., 2019). Past research is either limited to the studied refugee sample focusing on specific ethnic groups, e.g., Syrian refugees, or the research is limited to the country (e.g., Wauters & Lambrecht, 2008; Mawson & Kasem, 2018; Heilbrunn, 2019). Therefore, this study includes general characteristics of refugee entrepreneurs developed by past scholars, regardless of the origin and the host country. Further, we create and extend a broad understanding of refugee entrepreneurship.

Moreover, refugee entrepreneurship is often created as a solution to multiple barriers faced by refugees in the host country, e.g., access to the labor market (Sak et al., 2018; Heilbrunn, 2019). Several findings reveal that refugees´ motivation to new venture cover a wide range of push and pull factors, including the desire for independence or the limited availability of resources (Mawson and Kasem, 2018; Sak et al., 2018; Shneikat & Alrawadieh, 2019). Therefore, the limited access to different resources is one of the crucial obstacles and, at the same time, a characteristic of refugee entrepreneurs, which they have to overcome to create new ventures (Meister & Mauer, 2019). Limited access is further affected by the non-recognition of qualifications and home country-specific skills (Wauters & Lambrecht, 2008). The circumstances show that refugee entrepreneurs often have a weaker position in the labor market, and the last alternative is to become self-employed (Shneikat & Alrawadieh, 2019). In addition, limited local networks and a few socio-cultural barriers (Bizri, 2017; Alrawadieh et al., 2019) characterize refugee entrepreneurs. Further, refugee entrepreneurs’ social networks often contain strong social ties with their family, friends, customers, and suppliers, which is also highlighted in several studies (Meister & Mauer, 2019; Sheinkat & Alrawadieh, 2019). Moreover, refugees

are characterized by a limited legal status, which hindered interaction in a new socio-economic environment (Meister & Mauer, 2019). The limited rights limit their access to the labor market and their business development (Wauters & Lambrecht, 2008; Meister & Mauer, 2019; Alrawadieh et al., 2019). Finally, it is essential to mention that the strong determination and desire to integrate refugee entrepreneurs is a crucial characteristic (Birzi, 2017; Alrawadieh et al., 2019; Meister & Mauer, 2019).

2.2 Entrepreneurial Resilience

The theory of resilience has its origin in psychological research (Corner et al., 2017). In the 1970s, psychologists began to investigate the phenomenon of resilience, focusing especially on children. Further, the focus then was shifted towards adults and examined the resilience of those who had suffered a difficult or traumatic experience (Folke et al., 2010). In 2013, researchers began to examine resilience dimensions from health and psychology research in the context of entrepreneurial activities (Bullough & Renko, 2013; Manzano et al., 2013; Corner et al., 2017).

To better understand what motivates entrepreneurial activity, it is necessary to understand how individuals create personally perceived opportunities (Desai et al., 2020). Through everyday situations, individuals develop resilience-skills resulting from significant and unforeseen circumstances. For this paper, resilience is defined as the ability to adapt in the face of stress and adversity successfully and therefore as a dynamic process of adaptive overcoming stress while maintaining normal mental and physical characteristics (Bullough & Renko 2013; Eicher et al., 2015). In the context of resilience, adversity describes an unsuccessful occurrence, the nature or existence of severe and enduring difficulties (Tian & Fan, 2014). Thus, resilience is about the capacity to retain to learn, self-organize, and broaden in dynamic environments confronted with a real uncertainty and the unexpected (Folke et al., 2010). In this way, resilient communities or individuals can overcome shocks and start rebuilding more quickly (Shepherd, Saade & Wincent, 2019) and cope better with disruptions, which predicts business success (Ayala & Manzano, 2014). For instance, resilient individuals engage in activities specifically aimed at alleviating problems. In the face of adversity caused by war and terror, this may be the lack of useful employment, the incapacity to provide financial support for the family, and the need to have a regular daily schedule to deal with the chaos generated by war (Shepherd et al., 2019).

Furthermore, a study using mixed methods by Ungar et al. (2008) has shown that cultural and contextual factors significantly affect the factors

Factors	Tensions	Explanation
External	Access to material resources	Availability of financial educational medical and employment assistance and opportunities as well as access to food clothing and shelter.
	Supportive relationships	Relationships with significant others, peers and adults within ones family and community.
Internal	Desirable personal identity	Personal and collective sense of purpose, self-appraisal of strengths and values including spiritual and religious identification.
	Experience of power and control	Experiences of caring for one's self and others, the ability to affect change in one's social and physical environment in order to access health resources.
	Adherence of cultural tradition	Adherence to one's local and/or global cultural practices, values and beliefs.
	Experience of social justice	Experiences related to finding a meaningful role in one's community that brings with it acceptance and social equality relationships with significant others, peers and adults within ones family and community.
	Experience of sense of cohesion	Balancing one's personal interests with a sense of responsibility to the greater good; feeling a part of something larger than oneself, socially and spiritually.

Table 1: Internal and external factors of resilience
Source: Own visualization

that influence the resilience of a population of young people at risk (Table 1). Therefore, it has been demonstrated that resilience is more than just the individual's ability to cope with adversity.

The degree of resilience may depend not only on internal or personal characteristics but also on structural and external factors. Ungar et al. (2008) identified seven tensions of resilience across many different cultures (Table 1). Resolution of these tensions is foundational to experiences of resilience (Ungar et al., 2008). Moreover, internal as well as external factors, can contribute to the process of developing resilience. The internal aspects of resilience relate to internal adaptability, personality characteristics such as empowerment, self-control, cultural sensitivity, self-image and social sensitivity (Çam & Büyükbayram, 2018). External factors include external support such as family, peers, school, and community (Guo et al., 2017).

in entrepreneurship. Furthermore, without resilience, individuals would be less able to adopt the entrepreneurial behavior needed to start-up businesses or venture into new enterprises (Bullough & Renko, 2013). Therefore, resilience in the context of refugee entrepreneurship is about how refugee entrepreneurs deal with the limitations and constraints of their lives to obtain positive effects of resilience in a situation that may be categorized as a "helpless situation."

3 Development of Research Propositions

Based on the seven-tension model by Ungar et al. (2008), we developed a framework (Figure 1), which presents the interaction of internal and external factors with refugees' entrepreneurial resilience. Furthermore, for this research, we examined each factor's interaction with refugee entrepreneurs' resilience; however, Ungar et al.

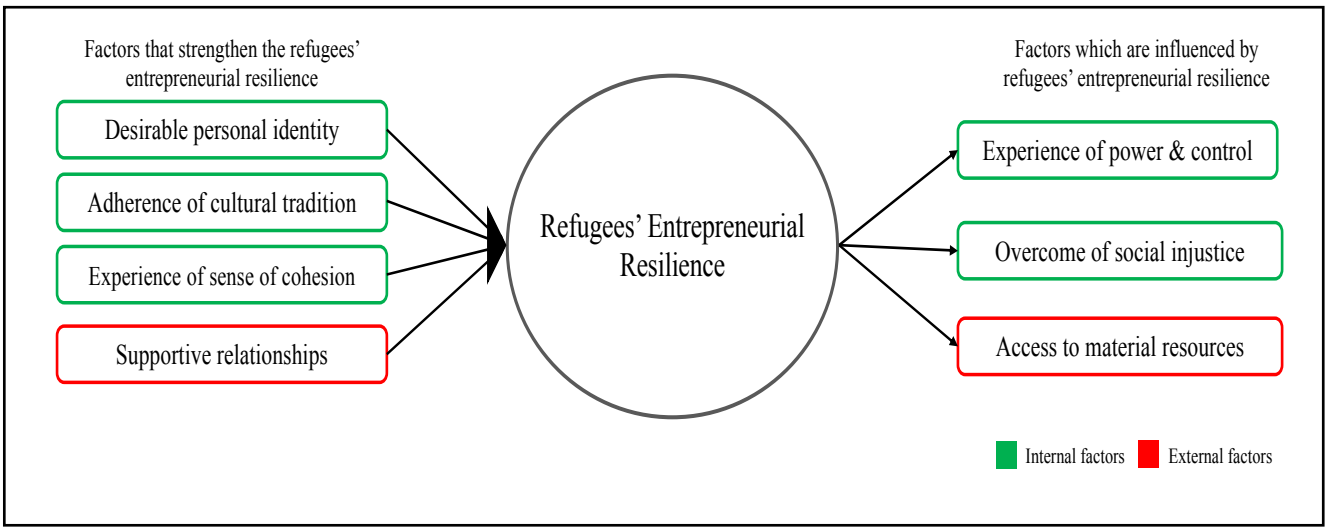

Figure 1: Interaction of internal and external factors with refugees' entrepreneurial resilience
Source: Own illustration

A crisis can have positive and negative impacts (Tedeschi et al., 2004). In particular, refugees are exposed to extreme adversity due to the disasters of war and the resulting deaths and violations. (Tay & Silove, 2017). As a result, they have to leave their home countries, which causes further damage and separates them from their families and friends (Betancourt et al., 2015). Adversity concerning refugees can lead to personal dysfunction such as depression and post-traumatic stress disorder. As mentioned above, resilience is about overcoming adversity while maintaining normal psychological and physical functions (Bullough & Renko, 2013; Eicher et al., 2015). Bullough and Renko (2013) have shown that resilience is an essential factor motivating people facing difficult times to engage

(2008) state that the elements interact with each other Based on the framework and the review of previous research in that field, we have developed eight research propositions in the following section.

3.1 Access to material resources

Access to material resources is defined by Ungar et al. (2008) "as the availability of structural provisions, including financial assistance and education, as well as basic instrumental needs such as food, shelter, and clothing, access to medical care and employment. "Furthermore, access to resources is needed by entrepreneurs to take advantage of perceived opportunities (Zimmer,

1986). However, previous scholars have also examined entrepreneurs who have engaged in entrepreneurial activities despite having institutional voids and limited resources and developed the so-called "bricolage entrepreneurship" concept (Baker, Miner & Eesley, 2003; Garud & Karnoe, 2003; Baker & Nelson, 2005). They looked at refugee entrepreneurs; the majority experienced such limited access to material resources (Wauters & Lambrecht, 2006; Bizri, 2017). The limitations are often due to discrimination, language barriers, limited access to labor markets and capital, complicated integration, and narrow social networks (Borjas & Bronars, 1989; Gold, 1992; Coate & Tennyson, 1992; McDougall et al., 1994; Wauters & Lambrecht, 2008; Bizri 2017). Having fled their home country, refugees often leave behind all their valuables and sometimes even their families (Wauters & Lambrecht, 2006).

Additionally, Bonnano et al. (2010) argue that "the loss of economic resources as a result of disaster poses what is arguably an even more imposing risk factor and that the psychological adjustment post adversity depends, even if not solely, on individual resources and losses. However, as mentioned earlier, on the one hand, refugees' access to material resources is limited, and on the other hand, they lose the majority of their resources fleeing their home, yet they manage to engage in entrepreneurship and successfully run their businesses (Wauters & Lambrecht, 2006; Bizri, 2017; Heilbrunn et al., 2019; Sandberg, Immonen & Kok, 2019; Shneikat & Alradawieh, 2019). Based on this argumentation, we suggest the following research proposition:

RP-1: The refugees' entrepreneurial resilience helps to overcome the limited access to material resources.

3.2 Supportive relationships

Numerous scholars have examined social networks in the context of entrepreneurship (Gold, 1992; Masurel et al., 2002; Anderies, Walker, & Kinzig., 2006; Wauters & Lambrecht, 2008; Docquier & Rapoport, 2012; Bizri, 2017; Heilbrunn et al., 2019; Shepherd et al., 2019). Wauters and Lambrecht (2008), for example, highlight the importance of social networks in the process of engaging in entrepreneurship since social networks can provide important information, attract customers and suppliers and give access to financial capital. For an entrepreneur, being embedded in a social network of strong and weak ties is necessary (Masurel et al., 2002), where for ethnic or refugee entrepreneurs the strong ties, in particular, play a crucial role since they start with fewer resources and limited access to capital (Wauters & Lambrecht, 2008). However, in the case of refugee entrepreneurs, either have fled their homes alone, leaving their families behind with hopes of bringing them to the host country at a later point (Gold, 1992), or they have managed to flee together. Still, either way, refugees' networks of strong ties are limited at the arrival. Before relocating, most refugees have a strong social support system consisting of immediate and extended family, friends, and neighbors like family (Bizri, 2017). Trying to rebuild such a social support system, refugees often form networks of people from the same country who share the same norms and standards (Adler & Kwon, 2002; Docquier & Rapoport, 2012). Ungar et al. (2008) use the term supportive relationships in their research on resilience when referring to "relationships with significant others, peers, and adults within one's family and community". Furthermore, Bonnano et al. (2010) state that individuals' social capital and networks are important for fostering resilience. Therefore, we formally propose:

RP-2: Having supportive relationships with family members and co-ethnic employees strengthens the refugees' entrepreneurial resilience.

3.3 Desirable personal identity

According to Ungar et al. (2008), the individual and a collective sense of purpose, self-appraisal of strengths and values, including spiritual and religious identification, promote and preserve a sense of individual identity. Additionally, in their study, Ungar et al. (2008) found out that respondents could navigate through challenges by firmly believing in themselves. Similar outcomes were found in a large number of studies on the research object of refugee entrepreneurship, e.g., in the Heilbrunn et al. (2019) study, where refugee entrepreneurs have shown faith in themselves as the responsibility to care for their family. Comparing the results, similar outcomes have been

recognized. Further, the literature on resilience states that the individual's faith in his or her own ability to deal with stressful situations and problems contributes to overcoming conflicts and promotes resilience (Bullough & Renko, 2013). In the entrepreneurial context, the belief in one's abilities allows individuals to take the necessary suitable measures for the business in challenging and difficult situations, which helps develop the ability to grow out of adversity rather than fear it. Thus, entrepreneurs who strongly believe in their capability to deal with stressful conditions and engage in entrepreneurial activities will build up their resilience and become more inclined to get out of trouble and become stronger.

RP-3: The strong belief of refugees in themselves and in their capacity strengthens the refugees' entrepreneurial resilience.

3.4 Experience of power and control

Unger et al. (2007) define the experience of power and control as the ability to cause changes in the social and physical environment and thus to care for oneself and others. Refugee entrepreneurs often experience a lack of help and use this experience as motivation to proactively care for themselves and other community members (Shepherd et al., 2019). Besides, refugees are often discriminated against as outsiders because they are considered uncompetitive due to a lack of language skills or unrecognized qualifications and a limited understanding of the local labor market (Schneikat & Alrawadieh, 2019; Heilbrunn et al., 2019). Because of these circumstances, refugees are forced to engage in entrepreneurial activities and support each other (Bizri, 2017; Shepherd et al., 2019). This happens because refugees believe that no one else will help them, and they show strong self-confidence in their actions (Bizri, 2017; Shepherd et al., 2019). The strong self-confidence of an entrepreneur helps to believe in their abilities and effectively manage challenges and stress factors (Bullough & Renko, 2013). Therefore, resilience is essential for the development of entrepreneurial aspirations. Thus, entrepreneurs who believe in their ability to cope with stressful environments and be entrepreneurial are more likely to help themselves and others out of adversity (Ungar et al., 2008; Bullough & Renko, 2013). Consequently, refugee entrepreneurs' resilience strengthens their ability to make changes in the environment and thus help others who have been in the same situation since they have experienced hardship and discrimination themselves (Shepherd et al., 2019). The belief and motivation to help others lead to the fact that particularly refugee entrepreneurs, with strong resilience, can help others and thereby themselves. Finally, this argumentation leads us to the following proposition:

RP-4: The entrepreneurial resilience of refugees strengthens their ability to make changes in their environment in order to care for their peers and themselves.

3.5 Adherence to cultural tradition

Cultural adherence to one´s global cultural tradition is defined by Ungar et al. (2008) as a barrier or a pathway to resilience depending on the link between this tension and others and was understood as comprising all aspects of ethnic family or community identification that were distinguished from aspects of global culture.

Entrepreneurial activities are more successful and are engaged in more often when the entrepreneur has a high social status, represented in a strong cultural bond with society (Thurik & Dejardin, 2011). In the context of entrepreneurship, on one hand, culture builds the opportunity to access entrepreneurship more successfully and simpler. However, on the other hand, culture may lead to additional barriers to entrepreneurship. Various scholars (Wauters & Lambrecht, 2008; Bizri, 2017; Mawson & Kasem, 2019; Alrawadieh et al., 2019) have showed both. Shneikat and Alrawadieh (2019) have indicated a familiarity of refugees towards co-ethnic groups, which allows for a wider comfort zone and a stronger business development for refugee entrepreneurs. Furthermore, through this way refugee entrepreneurs can rely on the support of their strong ties and are able to activate social capital, which helps them to reach their entrepreneurial goals (Birzi, 2017). On one side the cultural adherence towards the global culture of refugees and the associated support of co-ethnics, which helps them to overcome social barriers, represents a chance for refugee entrepreneurs (Meister & Mauer, 2019). However, on the other side, strong adherence to the global culture can lead to limited social and cultural capital within the host

country, which represents a further obstacle (Alrawadieh et al., 2019).
Cultural differences are a key obstacle for refugees and hinder refugees' or refugee entrepreneurs' integration into the host community (Lewis, 2010; Bizri, 2017). Korber and McNaughton (2017) have stated that the overcoming of cultural barriers influences entrepreneurial resilience. In the context of the definition by Ungar et al. (2008) and refugee entrepreneurship, two different consequences of culture adherence can be seen, and we therefore formally propose:

RP-5a: The adherence to the cultural traditions of refugee entrepreneurs strengthens the refugees' entrepreneurial resilience.

RP-5b: The adherence to the cultural traditions of refugee entrepreneurs hinders the development of refugees' entrepreneurial resilience.

3.6 Experience in social justice

The experiences of social justice or social injustices are the relations or missing relation to finding a meaningful role in the community and social equality (Ungar et al., 2008). Refugees very often face discrimination and injustice in host societies (Mawson & Kasem, 2018). Primarily due to language barriers, refugees are being classified as unable to compete (Levie, 2007). Furthermore, besides the language barriers, the not recognition of qualifications, e.g., degrees or work qualifications, have led to unequal social treatments (Shneikat & Alradawieh, 2019). Moreover, Alrawadieh et al. (2019) have highlighted that such unequal social treatments are visible within the consumer goods markets, capital markets, and labor markets. Due to the combination of barriers caused by the limited knowledge about the host culture and the business environment, refugees who engage in entrepreneurship are rather necessity-driven than opportunity-driven (Bizri, 2017; Mawson & Kasem, 2018). The experience with prejudices and dynamics of the socio-political context within the community and culture captures the encounter with social justice or injustice (Ungar et al., 2008).
Additionally, refugees who engage in entrepreneurial activities on account of push-factors are at the beginning of the business in weak positions on the labor market (Shneikat & Alrawadieh, 2019). The barriers mentioned above and obstacles repeatedly have to be overcome by refugee entrepreneurs. This process of continually overcoming those barriers helps refugee entrepreneurs grow their resilience compared to native entrepreneurs. Besides, it is essential to highlight the attribute of not giving up, which influences resilience. Therefore, our research proposition is as follows:

RP-6: The refugees' entrepreneurial resilience helps to overcome social injustice affecting entrepreneurial activities.

3.7 Experience of sense of cohesion

Prior to fleeing their home, many refugees grew up in cultural settings in which they have learned to take responsibility for themselves and their families from a young age (Ungar et al., 2008). Arriving in a new environment with a foreign community, many refugees tend to build networks with co-ethnics who share the same language, values, and norms (Allen, 2009). Applied to the context of refugees engaging in entrepreneurship, according to Shepherd et al. (2019), refugee entrepreneurs are driven by their experiences and their beliefs and feel part of a broader purpose than themselves. Additionally, Bizri (2017) highlights similar findings in her case study. A refugee restaurant owner felt obligated for his co-ethnic employees in the host country and was driven to do so by his moral commitment and national duty. Wilson and Portes (1980), who developed the theory of Enclave Economy, which suggests that immigrant employers hire co-ethnic employees based on the concepts of solidarity and obligation, also describe this phenomenon. Within such businesses of co-ethnics, a pseudo-family business perception is often developed, leading to the shared vision of the business as a lifeboat for the whole co-ethnic community (Bizri, 2017).

Through a strong sense of obligation and responsibility towards employees and family members, refugee entrepreneurs strengthen their resilience. Previous scholars on resilience confirm the significant positive correlation between resilience and cohesion (Vinson, 2004; Townshend et al., 2015). We, therefore, propose the following:

RP-7: The experience of a sense of cohesion strengthens the refugee's entrepreneurial resilience.

4 Conclusion

Research on refugee entrepreneurship has gained in importance over recent years. Various literature nowadays highlights that refugee entrepreneurship is beneficial for refugees regarding their integration into the host country and for the host country itself in terms of economic progress. However, unlike other entrepreneurs, e.g., native or migrant entrepreneurs, refugee entrepreneurs face a high level of adversity before and during their flight to another country. Yet, somehow, they manage to establish and run businesses in environments characterized by obstacles and barriers, mainly attributed to a high level of resilience.

This research aimed to highlight the interactions of factors and the resilience of refugee entrepreneurs, which we have done by applying a framework developed by Ungar et al. (2008) containing seven factors in the context of resilience to refugee entrepreneurs' general characteristics. The result is a framework that shows the casualties of external and internal factors and refugee entrepreneurs' resilience.

Past research on resilience in refugee entrepreneurship primarily emphasizes how resilience affects refugees' motivation to engage in entrepreneurship. However, we extended the current literature by examining external and internal factors, which influence or are influenced by refugees' entrepreneurial resilience and, therefore, help refugee entrepreneurs overcome barriers and obstacles of entrepreneurship. Refugees' entrepreneurial resilience helps overcome resources and the social injustice experienced in the host country. Moreover, refugees' entrepreneurial resilience strengthens their ability to care for themselves and others through entrepreneurial activities. Supportive relationships with family members and co-ethnics strengthen is a factor that boosts the resilience of refugee entrepreneurs and their developed personal identity and their sense of cohesion. However, firm adherence to the refugee's global culture can strengthen and hamper the development of resilience.

Furthermore, our model is regardless of origin and host country and allows more for a generalization. Therefore, future researchers can use our framework in different contexts since refugees have various sources and cultures and enter other host countries with different socio-political and socio-economical settings. Additionally, the framework can help researchers to extend their current results gained from research on resilience in the context of refugee entrepreneurship. However, it is important to mention that the framework needs further development, primarily since we examined each presented factor individually. Still, the matter of fact is that all of them interact with each other as well. Therefore, we suggest future research to tackle this and extend the framework.

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