Configurational Paths to Social Performance in SMEs: The Interplay of Innovation, Sustainability, Resources and Achievement Motivation

Sascha Kraus 1,*, Janina Burtscher 1, Thomas Niemand 2, Norat Roig-Tierno 3 and Pasi Syrjä 4

1 Institute for Entrepreneurship, University of Liechtenstein, Vaduz 9490, Liechtenstein; janina.burtscher@uni.li
2 Department of Management and Market Research, Clausthal University of Technology, Clausthal-Zellerfeld 38678, Germany; thomas.niemand@tu-clausthal.de
3 Department of Business Administration, ESIC Business & Marketing School, Valencia 46021, Spain; noratroig@gmail.com or norat.roig@esic.edu
4 School of Business and Management, Lappeenranta University of Technology, Lappeenranta 53851, Finland; pasi.syrja@lut.fi

* Correspondence: sascha.kraus@uni.li; Tel.: +423-265-1111

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Abstract: In today’s world of increasing ecological, social and economic issues, the question as to how businesses can become a vehicle towards more sustainable development has become more relevant than ever. Crucial to a more sustainable economy is the successful implementation of sustainable practices through entrepreneurial activities. Although there are attempts to describe how sustainable entrepreneurs differentiate themselves, the question of how some entrepreneurs manage to successfully create a sustainable enterprise, while others do not, remains unanswered. The aim of this research is to find causal patterns that explain the success of sustainable entrepreneurs, using their social performance as a measure. Using a configuration approach-based fuzzy set qualitative comparative analysis (fsQCA) of 598 Austrian small- and medium-sized enterprises (SMEs), we could identify four different combinations of the interconnected variables of innovation orientation, environmental sustainability, resource leveraging and achievement motivation, which all lead to social performance depending on the respective networking intensity of the firms. The only variable that is included in all combinations is environmental sustainability, thus indicating it may be either crucial to or a prerequisite for achieving social performance in SMEs.

Keywords: social performance; social entrepreneurship; configuration approach; networking; innovation; achievement motivation; resource leveraging; sustainability

1. Introduction

Whether or not humans are causing severe changes in the environment, such as climate change and the loss of biodiversity, is nowadays no longer a question [1]. The rising importance of humanity to act responsibly towards environmental, social and economic realms is an essential topic in politics as well as academia [2]. Due to this, sustainable entrepreneurship is increasingly geared towards the sustainable development of society, environment and economy [3]. To this end, it is critical to understand how entrepreneurs can succeed sustainably. Firms which seek to address social and environmental challenges by engaging in entrepreneurial practices are growing in numbers, while many existing companies are shifting their focus to include both monetary and social benefits [4].

This article aims to answer the question as to which configurations of various factors create the social performance of entrepreneurs. Thus, our research attempts to trace this by analyzing different
paths of interconnected variables that result in the social performance of small- and medium-sized enterprises (SMEs).

Unlike existing research, this paper not only introduces factors influencing the social performance of SMEs, but also attempts to find out how the interplay of these different variables forms a path to success. To date, there has been no extensive research showing, to what extent, different factors influence the social performance of an SME. Although there have been efforts to understand how companies successfully implement or base their organizations on sustainable practices, how some entrepreneurs manage to successfully create a sustainable enterprise, while others do not, remains unclear [1,2,5]. Hall et al. pose the question of how entrepreneurs can be expected to balance economics with the striving for social and environmental sustainability [6]. With the answer still unclear, this article attempts to discover different paths to achieving successful social performance in SMEs. The results show that there is, in fact, more than one way for SMEs to achieve social performance. We utilize fsQCA, a method that is rather new in management research [7,8], to investigate the different paths of success.

2. Theoretical Framework

This chapter provides a theoretical framework for better understanding the research and discussion. First, sustainable entrepreneurship, as our underlying term and concept, will be introduced. Second, current research in the sphere of sustainable development in companies will be analyzed and terms linked to it introduced. Third, the presentation of the theoretical background attempts to summarize the current literature on potential factors that can create a successful social performance for sustainable enterprises.

2.1. Sustainable Entrepreneurship

Although the relevance of green entrepreneurship has increased in academia as well as in global political discourse, Friedman points out that despite the first discussion of the UN having taken place more than thirty years ago, there remains a lack of visible action, irrespective of the increasing amount of pressing environmental issues. When discussing relevant literature, this remains a main issue of discussion [9].

In recent years, the scientific world has started addressing the question of how businesses can act more responsibly, namely how action in both start-ups and established firms can have a positive impact on these issues [10]. There are different categories of so-called “responsible entrepreneurial actions”. Important differentiations of these responsible entrepreneurial actions include the “green entrepreneur”, the “social entrepreneur”, and the “sustainable entrepreneur” [2]. While green entrepreneurship is most concerned with environmental challenges, social entrepreneurship has its focus on issues our society faces. The term green entrepreneurship was introduced by Berle in his book The Green Entrepreneur: Business Opportunities That Can Save the Earth and Make You Money [11]. As the title implies, green entrepreneurs build their businesses with environmental values as their foundation, but taking these values into account, they also seek competitive advantage [12]. These entrepreneurs thus differentiate themselves from the social entrepreneur who assigns his top priority to the creation of social value, with economic value creation only a necessary condition for financial viability [13,14]. Moreover, social enterprises are often described as hybrid organisations combining features from both the non-profit and for-profit sectors [15]. Their identity is thus formed from both social ambitions and utilitarian economic identity [16]. Nevertheless, in research circles, green entrepreneurship and social entrepreneurship are often linked to sustainable entrepreneurship, as all three categories share the common goal of positive environmental impact [17,18]. This paper is grounded in sustainable entrepreneurship, a field that is based on the belief that there needs to be improvement in the consumption of three types of non-substitutable capital: economic, social and environmental capital [3].
Due to the novelty of sustainable entrepreneurship as an academic concept, its definition is still developing [19]. The understanding of sustainable development, however, is more evolved. The UN World Commission on Environment and Development conference described sustainable development as “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs” [20]. In this article, acting sustainably is thus specified as being able to serve the needs of the current generation, without endangering the ability of the next to satisfy its own needs [20]. This paper’s understanding of entrepreneurship is constructed around the Schumpeterian concept of entrepreneurship as “an innovative process of creating market disequilibria” [1] (p. 166). Common entrepreneurship theories are based on the assumption that with a focus on market failures, entrepreneurs discover and exploit economic opportunities [21]; in the theory of sustainable entrepreneurship, this focus and exploitation is, despite the economic factors, a chance to initiate the transformation of a sector towards a more societally and environmentally sustainable state [22]. Therefore, a distinction must be made between the development of enterprises as such and the development of sustainable firms, with the latter pursuing a more “holistic, balanced and integrated perspective of development” [23] (p. VI). As such, sustainable firms necessarily demand the synthesis of the aforementioned economic, social and environmental pillars of sustainable development. Schaltegger and Wagner see the core of sustainable entrepreneurship in the attainment of sustainable innovation that meets the unsatisfied demands of stakeholders [17]. Stakeholders, who demand the environmental and social improvements, build the fundamental cause of opportunity for sustainable entrepreneurs, and therefore, sustainable innovations [24]. Hence, sustainable entrepreneurship, on the one hand, is linked to common concepts of entrepreneurship with a focus on the economic factor, but on the other hand also includes added social and environmental benefits [25]. The aim of the environmental pillar typically includes reducing the exploitation of invaluable resources and the environment, decreasing the creation and operation of harmful substances, and curbing environmental pollution and waste production [26–28]. Acting sustainably towards the social realm may involve promoting social integration through nurturing societies characterized by safety, stability and justice, promoting and protecting human rights, diversity, and equality, and securing livelihoods [23]. A definition that is therefore in accord with the balanced and more long-term view of sustainable development is named by Choi and Gray, who conceive of sustainable entrepreneurs as “individuals who are creating and building profitable companies that also pursue environmental or social causes” [29].

2.2. Connecting the Three Pillars

Since the 1970s and 1980s, researchers have been investigating questions concerning sustainable development. One of the main goals of researchers at that time was to find a correlation between human actions and changes in nature (growth of desert areas, climate change, etc.), due to the extensive research available at present, science no longer questions climate change or declining natural resources [2]. In fact, an important question today is how further deterioration of the human environment can be avoided with the increased demand of energy that comes from developing countries [9]. As identified in the last paragraph, sustainable entrepreneurship presents a unique combination by focusing on environmental, societal and economic issues. The Brundtland Report first introduced the three-pillar approach; Elkington named these three factors as crucial for corporate reporting standards thereby introducing the term “triple bottom line” [30]. While the triple bottom line is universally applied as a reporting standard, it has yet to achieve extended environmental awareness, since corporations continue to prefer reporting on corporate social responsibility (CSR) [5].

Subsequent to the Brundtland Report, sustainable development has been linked to the three pillars of sustainability: ecology, society and economy, with the goal to keep the three in balance. The “concentric circle” approach, however, puts these three pillars in a different relationship, with the environmental pillar forming the outer circle, the social pillar the middle, and the economic pillar the inner [31]. Lehtonen conceives of this approach as conveying that “economic activities should
be in the service of all human beings, while at the same time safeguarding the biophysical systems necessary for human existence” [32] (p. 201). While the three-pillar model of Brundtland is commonly used, another model that is gaining popularity is the one-pillar model, which prioritizes the ecological dimension. The focus of sustainability is shifting towards the ecological, since natural resources as well as ecosystems are limited and the economy is causing numerous environmental issues [26,33]. The aim of ecological sustainability is to find ways that enable a reduction of the exploitation of finite resources in order to ensure the ability of future generations to have access to those resources [27]. Furthermore, it is also driven towards a reduction of harmful substances, environmental pollution as well as waste [28]. Thus, although the main focus of ecological sustainability is the environment, it has direct positive effects on the economic as well as social pillar.

2.3. Factors for Social Performance

In this paragraph, potential factors that can create a successful social performance for sustainable enterprises are being presented. The factors have been derived from previous literature and will later be compared to the outcome of this research in the discussion part.

Sustainable entrepreneurs and the firms that they will found or are already leading are characterized by being on the frontier of their market. As such, they are the kind of entrepreneurs that are among the first to identify new, sustainable business opportunities which are most likely to lead to a reliable source of income and a potential of earning a higher profit than other firms [34]. This strategy of defining front-line opportunities and taking on those opportunities as a “first mover” in the general market economy is to be defined as “proactive”, as it involves a certain degree of risk, formed namely by the unexplored direction a firm is planning on exploring [34,35]. The potential to create profit for the enterprise and its stakeholders justifies the risk taken when trying to create societal value. This contribution to socio-economic development [36] is assumed to be enabled by a potential change in the environment- and sustainability-oriented mindset of sustainable firms [37–43]. Such firms are said to promote a greener future by acting as role models [29,36,44] or, as Tiley and Young describe them, as “wealth generators of the future” [45] (p. 79). The aspect of being a “role model” is reflected in the solution-providing orientation of these firms, as they deliver solutions to environmental problems and ecological degradation [46,47] through eco-innovations [19,48] and by doing so advocate a transition to more sustainable methods of production and consumption [49,50]. Furthermore, activating and mobilizing key actors within a community can dramatically contribute to a change in mindset of customers of enterprises as well as their surrounding environment [41]. An example to initiating such a change in mindset is organizing a special community event, which could e.g., be a waste recycling training, with the direct aim of creating and increasing awareness of particular habits as well as patterns of consumption, to develop an interest in local products, and to promote the use of sustainable design and consumption [40].

Firms that vary in age and size also differ in their resource combinations [51,52]. Katz and Gartner argue that in the initial phase of founding and growing a new enterprise, identifying and acquiring of resources is a crucial factor [53]. An additional potential competitive advantage of sustainable entrepreneurs is their observed increased level of persistence when compared to conventional entrepreneurs, enabling them to establish and maintain overview at all times, despite minor and major obstacles that they might have to face [54]. Additionally, the contingency characteristic of sustainable entrepreneurs enables these individuals to successfully adapt to changing parameters in their environment, adapting to new circumstances and exploiting new opportunities in the process [13]. Within the entrepreneurship literature, it is emphasized that liabilities of small and resource-constrained firms can be mitigated through social capital [55]. Social networks, especially, are important for the establishment of a point of access to a diverse set of resources that can be both tangible and intangible [56]. For sustainable entrepreneurs and the enterprises they are managing, access to such networks are especially crucial as such networks can take on several important functions, being, first of all, the connection of entrepreneurs to information services. A connection to these
services provides access to capital, low-cost support services, infrastructure that enables entrepreneurs to share ideas and resources among each other, as well as presenting an opportunity to strengthen local entrepreneurial culture [57].

The existing literature suggests that on the individual level of the single entrepreneur, sustainable entrepreneurs are value-driven, while enterprises are being established and run based on particular individual values which include, but are not limited to, sustainability [58]. Based on the formerly mentioned values, sustainable entrepreneurs engage themselves and their firms in order to put themselves into a unique, outstanding competitive position, as well as to reach a certain level of efficiency in the three areas of sustainability. The common characteristic that social and environmental entrepreneurs tend to possess can also be applied to sustainable entrepreneurs. These specific entrepreneurs can be described as a ‘change agent’, implying a certain disagreement with prevailing existing paradigms, as well as expressing a desire to implement a more long-term oriented focus, constraining themselves to do more with less inputs [13,59]. Additionally, personality characteristics contribute to the likeliness of being effective as a leader. In terms of these personality characteristics, it has been found that environmental leaders working for both non-profit and for-profit organizations achieve a more favourable score than their conventional counterparts at other organizations on the factors “need for achievement”, “need for affiliation”, “self-confidence”, as well as “emotional maturity” [58]. Furthermore, when narrowing down the differences between social and conventional entrepreneurs, social entrepreneurs are more likely to be described as charismatic, highly skilled, and showing a high degree of initiative, rather than the conventional entrepreneur who is described as “pragmatic”, “opportunistic”, and “imitating”. These differences exhibit potential competitive advantages of non-conventional entrepreneurs [54].

Current literature on ecological sustainable entrepreneurship stresses the importance of sustainable entrepreneurs to create and alter relationships with external stakeholders. Entrepreneurs, as previously, mentioned have to be able to influence opinion leaders and key actors in order to exploit their capability of establishing [60] and modifying powerful relationships among different actors [61]. This need reflects the critical nature of ecological sustainable entrepreneurs with the external environment [62–65], taking on no further distinction or separation between formal and informal institutions [66–68], or cooperation and support of each other in networks [69–71]. Research shows that by being more inclined to successfully network within and across industries, entrepreneurs leading sustainable enterprises maintain sustainable growth in pursuit of their long-term survival [59,72].

3. Method

3.1. The Configuration Approach

One of the main questions asked in modern entrepreneurship research is how one can identify factors that affect the success of small and young enterprises [73]. In an attempt to answer this question, multiple factors of success have been examined in the existing literature, with the aim of establishing models in order to explain performance in these firms [74]. The existing models differentiate themselves in the type of connections that are thought to be present between the factors of influence [75]. A rather novel method of analyzing these factors is the configuration approach. Based on the belief that companies consist of clusters of variables that must be investigated as a whole [76], the configuration approach consists of a bundle of (interrelated) variables [77]. The configuration approach is a method used in order to understand complicated and interdependent relationships between different variables.

Compared to traditional mono-causal approaches like the universal approach or the contingency approach, the configuration approach has multiple advantages and is a more advanced research tool [78]. First, the perspective of looking at the configuration domains as a whole shifts the attention to the interaction of the various possible factors of success, allowing a better adjusted development of a theory that explains and predicts the performance of enterprises [79]. Second, the substantial
extent of divergence in the population of small and young companies is clearly seen when applying the configuration approach. In other words, this approach allows for the differentiation between the factors of success from one type of enterprise to the other. Since the strengths of causal affiliations as well as the dependencies of variables are commonly analyzed with a reduced number of variables, mono-causal approaches categorically lead to fabricated oversimplification of the matter at hand [80]. The configuration approach, conversely, analyzes each crucial variable in connection to other variables, which may have an effect on or be effected by said variable. Thus, the configuration approach is more extensive than the mono-causal approach, since it does not only analyze dependencies, but also interdependencies [78].

Choosing the right number of domains for the configuration is a crucial factor, since when using this approach, the likelihood of incorporating all relevant domains is much higher compared to when mono-causal approaches are applied [80]. There are two different methods to identifying the ideal configuration that can explain the success of companies [77]. The first is to extract the configuration empirically by identifying the domains through quantitative and qualitative methods [81], for instance through clustering [82]. The second path is to extract the configuration through theoretical reasoning [83–85]. The original four domains of leadership, structure, strategy and environment applied to single out the optimal configurations in terms of strategy research [86], have been further discussed by Harms et al. [87], who proposed that the entrepreneur, who is the crucial force of a small or young enterprise, should represent the leadership domain. For this research, the approach of theoretical reasoning was implemented and applied to these four domains. Based on this, the following empirical constructs for each domain were derived; (1) innovation orientation (strategy); (2) achievement motivation (entrepreneur); (3) environmental sustainability (environment); and (4) resource leveraging (structure and resources).

3.2. Analysis Technique

The aim of this research is to find causal patterns that explain the social performance of entrepreneurs. Consequently, traditional quantitative approaches (e.g., linear regressions) are inappropriate, as these approaches investigate the principal influences of independent variables on at least one dependent variable, the so-called “net effects” [88]. Instead, qualitative comparative analyzes (QCA), i.e., a fuzzy-set QCA (fsQCA), which is able to find joint conditions that can explain a selected outcome [89], is used. More specifically, the method allows one to determine whether innovation orientation, achievement motivation, resource leveraging, and environmental sustainability are able to jointly or individually explain social performance for less networking (low network intensity) and highly networking (high network intensity) firms. QCA then yields solutions—that is, the total number of alternative paths that maximize performance. These paths consist of three different ways a variable can influence the outcome: (a) presence—being a crucial requirement; (b) absence, illustrating a deficient or lacking requirement; and (c) irrelevance, being a “do not care”, or dispensable variable for a desired outcome. Fuzzy sets allow our research to incorporate continuous rather than concrete variables, which are far more frequent in management research and less simplistic [88] in defining various levels of a membership (e.g., 0 for non-membership, 1 for membership, 0.5 for cross-over membership rather than a binary membership 0, 1). In this case, membership can be understood as the presence of a variable for a certain outcome, which is iterated over all possible combinations of variables and outcomes to obtain a truth table. The enhanced Quine–McCluskey algorithm [90] is then applied to reduce the truth table to a subset of outcome-altering (presence or absence) and irrelevant (”don’t care”) variables by Boolean minimization. After minimization was successful, each line of the reduced truth table consists of paths that can be interpreted causally; that is, each variable alters the outcome either positively (presence) or negatively (absence), or is irrelevant (don’t care). These paths form at least one solution.

Utilizing cutting-edge statistical analysis [91], we rely on three major criteria to assess the quality of our solutions and paths. First, consistency defines how often a certain solution (the collection of all
found paths) or path (the combination of variables) explains the predicted outcome compared to all found outcomes for that solution or path. Thus, consistency closely resembles the idea of a correlation. Second, coverage provides information about how much variance (deviation) in the outcome is explained by a solution or path. This resembles the explained variance (e.g., r-squared) in quantitative regression and variants thereof. Third, a unique coverage is provided for all paths illustrating a variance in the outcome that cannot be explained by other paths, resembling an incremental explained variance. We only assess solutions and paths that have a consistency of equal to or larger than 0.70, a considerable coverage of 0.1 and a unique coverage larger than 0.01 [3]. To model the fsQCA, the QCApro package in R is applied [90].

3.3. Dataset

In order to increase representativeness, a rather large dataset from 598 Austrian small- and medium-sized enterprises (SMEs; <250 employees) was used. Using the key respondent approach, CEOs, executives and managers with subordinates served as respondents for their firm. The sample was randomly drawn from the AURELIA database for Austrian firms. All respondents were invited to anonymously take part in an online survey. After confirming that the respondent is an appropriate representative of the firm and indicating firm-level variables (position, firm age, firm size, company background), the respondent answered items for the respective variables shown in random order. Finally, some personal information (gender, age, education of respondents) was inquired after ensuring the anonymity of the provided answers. A set of descriptive categories is provided in Table 1. A total of 598 out of 1006 respondents provided all required information for the QCA (59.4 percent response rate). Non-response bias [90] was assessed by comparing four equally large groups of early to late responding firm representatives via t-tests for all items of the QCA-relevant variables. Since no significant difference was found, it can be concluded that the response behavior is not biased.

<table>
<thead>
<tr>
<th>Variable and Category</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm level</td>
<td></td>
</tr>
<tr>
<td>Firm age</td>
<td>Mean: 42.3 years (SD = 47.3)</td>
</tr>
<tr>
<td>Firm size (employees)</td>
<td>• &lt;30: 412 (68.9%)</td>
</tr>
<tr>
<td></td>
<td>• 31–200: 97 (16.2%)</td>
</tr>
<tr>
<td></td>
<td>• 101–250: 89 (14.9%)</td>
</tr>
<tr>
<td>Firm background</td>
<td>• Commercial: 534 (89.3%)</td>
</tr>
<tr>
<td></td>
<td>• NGO: 18 (3.0%)</td>
</tr>
<tr>
<td></td>
<td>• Social (EU commission definition): 46 (7.7%)</td>
</tr>
<tr>
<td>Representative level</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>• Female: 135 (22.6%)</td>
</tr>
<tr>
<td></td>
<td>• Male: 463 (77.4%)</td>
</tr>
<tr>
<td>Age</td>
<td>Mean: 49.4 years (SD = 10.7)</td>
</tr>
<tr>
<td></td>
<td>• CEO: 495 (82.8%)</td>
</tr>
<tr>
<td></td>
<td>• Other Executive: 44 (7.4%)</td>
</tr>
<tr>
<td></td>
<td>• Employee with multiple subordinates: 13 (2.2%)</td>
</tr>
<tr>
<td></td>
<td>• Other: 46 (7.7%)</td>
</tr>
<tr>
<td>Education (decreasing by frequency)</td>
<td>• University degree: 198 (33.1%)</td>
</tr>
<tr>
<td></td>
<td>• School leaving examination: 135 (22.6%)</td>
</tr>
<tr>
<td></td>
<td>• Technical college: 59 (9.9%)</td>
</tr>
<tr>
<td></td>
<td>• Secondary school: 56 (9.4%)</td>
</tr>
<tr>
<td></td>
<td>• Teacher training: 52 (8.7%)</td>
</tr>
<tr>
<td></td>
<td>• Other: 50 (8.4%)</td>
</tr>
<tr>
<td></td>
<td>• Ph.D.: 48 (8.0%)</td>
</tr>
</tbody>
</table>
3.4. Variables and Measurement

Even though QCA does not rely on measures that require reliability and validity validation, fsQCA allows one to use those measures. Thus, multi-item scales were established, the reliability and validity assessed, and index scores used in the aim of obtaining variables for QCA. Those scores were then transformed to fuzzy sets via quantiles (0.05, 0.33, 0.50, 0.66, 0.95) to define memberships [92]. Innovation orientation is based on three items based on Duvanas et al. [93]. Achievement motivation is a Guttman-type scale of eight items as proposed by Lynn [94]. Resource leveraging consisted of two items from Morris et al. [95], while environmental sustainability is derived from the respective sub-scale from Kraus et al. [96]. Network intensity is based on three questions from Ostgaard and Birely [97]. Finally, social performance is measured by four items, as recently applied by Eggers et al. [98]. Table 2 provides all variables (measures) used for the QCA. Except for achievement motivation who used a binary yes/no response, all items are measured on a five-point Likert-type response format and all items were translated by the translation–backtranslation principle [99]. Reliability checks based on explorative factor analysis (principal component analysis) and Cronbach’s alpha indicate appropriate internal consistency, as all measures achieved uni-dimensionality with factor loadings > 0.4 and alpha > 0.7, except for social performance where item 1 indicated a low loading (0.25) and consequently an insufficient alpha (0.68). Thus, this item was removed and the scale reassessed, eventually confirming consistency (alpha = 0.80).

<table>
<thead>
<tr>
<th>Measure (Source)</th>
<th>Label</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation orientation (Duvnäs et al., 2012)</td>
<td>IO1</td>
<td>Our company has bound itself strongly to developing new things, to product development and to innovations.</td>
</tr>
<tr>
<td></td>
<td>IO2</td>
<td>Our company has introduced many new products or services on the market.</td>
</tr>
<tr>
<td></td>
<td>IO3</td>
<td>The changes in products or services we offer are typically significant.</td>
</tr>
<tr>
<td>Achievement motivation (Lynn 1969)</td>
<td>AM1</td>
<td>Do you find it easy to relax completely when you are on holiday?</td>
</tr>
<tr>
<td></td>
<td>AM2</td>
<td>Do you feel annoyed when people are not punctual for appointments</td>
</tr>
<tr>
<td></td>
<td>AM3</td>
<td>Do you dislike seeing things wasted?</td>
</tr>
<tr>
<td></td>
<td>AM4</td>
<td>Do you like getting drunk?</td>
</tr>
<tr>
<td></td>
<td>AM5</td>
<td>Do you find it easy to forget about your work outside normal working hours?</td>
</tr>
<tr>
<td></td>
<td>AM6</td>
<td>Would you prefer to work with a congenial but incompetent partner, rather than with a difficult but highly competent one?</td>
</tr>
<tr>
<td></td>
<td>AM7</td>
<td>Does inefficiency make you angry?</td>
</tr>
<tr>
<td></td>
<td>AM8</td>
<td>Have you always worked hard in order to be among the best in your own line?</td>
</tr>
<tr>
<td>Resource leveraging (Morris et al., 2002)</td>
<td>RL1</td>
<td>We arrange with other companies to refer each other in order to save marketing costs.</td>
</tr>
<tr>
<td></td>
<td>RL2</td>
<td>We use connections to other companies to increase our offerings in cost-efficient ways.</td>
</tr>
<tr>
<td>Environmental sustainability (Kraus et al., 2017)</td>
<td>ES1</td>
<td>We measure CO₂ emissions and/or our generated waste and actively try to reduce it.</td>
</tr>
<tr>
<td></td>
<td>ES2</td>
<td>We set ourselves ambitious goals in regard to sustainability and incorporate them in all strategic decisions.</td>
</tr>
<tr>
<td>Network intensity (Ostgaard &amp; Birley 1994)</td>
<td>NI1</td>
<td>I exchange regularly with my network partners.</td>
</tr>
<tr>
<td></td>
<td>NI2</td>
<td>I like to treat a close relationship with my network partners.</td>
</tr>
<tr>
<td></td>
<td>NI3</td>
<td>There is informal exchange between my network partners and me.</td>
</tr>
<tr>
<td>Social performance (Eggers et al., 2013)</td>
<td>SP1</td>
<td>Our beneficiaries are satisfied with our services.</td>
</tr>
<tr>
<td></td>
<td>SP2</td>
<td>We help mobilize interest for additional social welfare initiatives.</td>
</tr>
<tr>
<td></td>
<td>SP3</td>
<td>The output provided by our organization has a significant impact on general well-being.</td>
</tr>
<tr>
<td></td>
<td>SP4</td>
<td>Our organization is on a good path to accomplish its social mission.</td>
</tr>
</tbody>
</table>
Discriminant validity was checked through confirmatory factor analysis [100], and the newly proposed heterotrait-monotrait criterion [101]. All measures (with social performance in the revised version) exceeded an average variance explained (AVE) > 0.5, showing no squared correlation with another measure larger than AVE (largest correlation: 0.56 between environmental sustainability and social performance) and no heterotrait–monotrait ratio larger than 0.85 (largest: 0.59 between environmental sustainability and social performance again). Consequently, it can be assumed that all measures relate to distinct underlying constructs. Finally, in order to avoid a median split bias [102], the grouping variable of network intensity was split by using 0.25 and 0.75 quantiles (quantile split), resulting in 227 and 371 low and high networking firms.

4. Results

Based on the aforementioned variables, the QCA was run. Overall, for each group of low and high network intensity, one solution with two paths each was found that exceeds the minimum criteria (consistency > 0.7, coverage > 0.1, unique coverage > 0.01). For simplicity, these paths are termed L1 and L2 and H1 and H2, indicating their membership to the grouped variable. Table 3 depicts the relevant information. In both groups, paths show an adequate “three-out-of-four consistency”, but result in considerable determination for the outcome of social performance (minimum coverage: 0.29 for H1, maximum coverage: 0.43 for L1). Due to the considerably unique coverage of their respective paths, the solutions explain 45 and 40 percent of variation in social performance, respectively. It should be noted that due to the QCA principle, those paths do not capture some firms. Subsequently, these four paths will be explained in detail.

Path L1 illustrates that orientation towards innovation and environmental sustainability lead to social performance and thereby can overcome a lack of achievement motivation in low networking firms. Resource leveraging is irrelevant in this path (consistency = 0.76, coverage = 0.43, unique coverage = 0.14).

The lone alternative to L1 is path L2 indicating that achievement motivation loses its importance if resource leveraging is present, while innovation orientation and environmental sustainability remain crucial to social success in firms that network less intensively. Considering the drop in coverage compared to L1, path L2 seem to be less certain (consistency = 0.77, coverage = 0.31, unique coverage = 0.02). Turning to intensively networking firms, path H1 yields a configuration in which innovation orientation is not relevant to success if achievement motivation, resource leveraging, as well as environmental sustainability are pronounced (consistency = 0.76, coverage = 0.29, unique coverage = 0.07). Path H2 captures the only other combination for high social performance. Remarkably, this path is identical to L2; innovation orientation, resource leveraging and environmental sustainability are key success factors while achievement motivation remains irrelevant. Compared to its counterpart H1, H2 showed slightly better coverage, indicating that it is a less risky path for networking firms (consistency = 0.76, coverage = 0.34, unique coverage = 0.12).

Table 3. Overview over solutions and paths to social performance.

<table>
<thead>
<tr>
<th>Path</th>
<th>Low Network Intensity</th>
<th>High Network Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 187)</td>
<td>(n = 261)</td>
</tr>
<tr>
<td></td>
<td>L1</td>
<td>L2</td>
</tr>
<tr>
<td>Innovation</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>o</td>
<td>•</td>
</tr>
<tr>
<td>motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>leveraging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental sustainability</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.76</td>
<td>0.77</td>
</tr>
<tr>
<td>Coverage</td>
<td>0.43</td>
<td>0.31</td>
</tr>
<tr>
<td>Unique coverage</td>
<td>0.14</td>
<td>0.02</td>
</tr>
<tr>
<td>Solution consistency</td>
<td>0.76</td>
<td>0.74</td>
</tr>
<tr>
<td>Solution coverage</td>
<td>0.45</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Notes: • = presence, o = absence, blank = irrelevant (don’t care).
5. Discussion

5.1. Environmental Sustainability as the Foundation of Social Performance

The empirical results of this study show that all four paths include the environmental sustainability variable. Thus, the results suggest that a focus on environmental sustainability builds the foundation of successful social performance. This is in accordance with the one-pillar model, where the environmental sustainability builds the foundation, while the social pillar is influenced by environmental focus [19]. With the goal of solving issues facing the society and environment, sustainable entrepreneurs commonly rely on their activities as an entrepreneur [17]. Hence, their focus often is not limited to one of the three pillars, but directed at once towards environment, society and economy [103]. Often, given the limited supply of natural resources and ecosystems [33] as well as the abundance of environmental problems produced by commercial activities [26], the aim is to minimize adverse impact on the environment by actively engaging in sustainable initiatives. This active engagement then contributes to societal improvements in not only the society as a whole, but also on a very small, local scale, with the purposeful employment of members being an additional benefit [29]. This view underscores the findings of this research, where the focus on environmental sustainability formed the foundation for social performance in all four paths. It could also be argued that these findings support the idea that sustainable entrepreneurship should be following the one-pillar model, in this case focusing on environmental sustainability, which then will lead to achieving the goal of sustainable development in all three pillars [14]. Conversely, a different definition for sustainable entrepreneurship could be formed that instead does not aim for sustainable development in all three dimensions equally like; sustainable entrepreneurship could be defined as “the process of identifying, evaluating and seizing entrepreneurial opportunities that minimize an enterprise’s impact on the natural environment and therefore create benefits for society as a whole and for local communities” [19] (p. 46).

5.2. Eco-Innovations as a Vehicle for Social Performance

In three out of four paths analyzed in this research, environmental sustainability is accompanied by the variable innovation orientation. This supports the theses of existent literature [48,104] that a focus on environmental sustainability enables or is being enabled by eco-innovations. Research shows that strategies with a focus on environmental sustainability can lead to competitive advantage in terms of cost reduction, ecological efficiency as well as reputation [104]. These competitive advantages are created through eco-innovation, which are enabled by an environmental or sustainable focus [48]. This research also shows that in low network intense companies, environmental sustainability and innovation orientation alone can enable a path to success (L1). As presented in the theoretical part of this paper the existent literature suggests that by coming up with solutions for environmental issues through eco-innovations as well as advocating a change in production and consumption towards more sustainable methods [49,50] companies build a positive influence on the mindset of the communities by acting as “role-models” [29,36,44].

5.3. The Influence of Leveraging Resources

In two other paths, environmental sustainability and innovation orientation build a path to success in combination with the variable resource leveraging. These three variables build a path to social performance for high network intense companies (H2) as well as low networking companies (L2). The existent literature presented in the theoretical part of this paper is in accord with these findings, highlighting the importance of social networks for sustainable enterprises which facilitate the sharing of ideas and resources [57]. Resource leveraging was measured by how intensely companies communicate and work together with other companies in supporting industries or even the same industry. Thus, companies that aim their attention towards innovation, focus on environmental sustainability and leverage the resources available in terms of industry connections create a path for
social performance. These findings can be supported by the literature, as sustainable corporations are more likely to successfully network within and across industries, as well as maintain a sustainable growth to increase the probability of long-term survival [59,72].

5.4. Putting Achievement Motivation into Perspective

While the existent literature suggests that sustainable entrepreneurs often show more achievement motivation than general entrepreneurs [58], this study shows that in only one out of four paths it is part of the path to success, accompanied by environmental sustainability and resource leveraging in high network intense companies (H1). Worth to mention is that this is the only path that does not include innovation orientation. This suggests that companies with a focus towards environmental sustainability and an innovation orientation do not necessarily need achievement motivation in order to achieve social performance. With the absence of innovation orientation however, achievement motivation in combination with the leveraging of resources is needed to support the focus on environmental sustainability in order to succeed in a social performance.

Another point to be included is the question as to whether the achievement motivation that the literature suggests sustainable entrepreneurs have more of than ordinary entrepreneurs [58] is already included in other variables investigated in this study, or if it manifests itself in other variables not investigated. First, the question is towards what aim the achievement motivation is being set, more specifically what aim is to be achieved. Second, if the aim is to achieve a more sustainable development of social, environmental and economic factors, can the achievement motivation be measured separately or does achievement motivation always influence other variables? For instance, if the aim is to build a product more environmentally friendly than the previous product, do the activities of pursuing eco-innovations and increasing networking within the industry not also reflect the level of achievement motivation the entrepreneur possesses? This question would be an interesting topic for further research.

Nevertheless, this study shows that in reaching social performance, the achievement motivation of an entrepreneur investigated in this research only plays a role in one out of four paths. Still, it does not refute the findings of existing literature that sustainable entrepreneurs tend to have more achievement motivation [58]. Rather, it raises questions as to the importance of achievement motivation as well as whether achievement motivation can be measured as a separate variable, or in a way always influences actions taken towards the goal.

5.5. Different Paths to Social Performance for High and Low Networking Firms

While existing literature states that, in case of sustainable enterprises, companies that are more inclined to successfully network within and across industries, are also able to maintain a sustainable growth in quest of their long-term survival [59,72], this research found that for both low and high networking SMEs there are paths to a successful social performance.

In the case of low networking intense SMEs, innovation orientation and environmental sustainability are success factors for both paths investigated (L1, L2); in the first path the two variables build a path alone (L1), while in the second path they are accompanied by the success factor resource leveraging (L2). Thus, these findings suggest that companies that focus less on networking within and across industries tend to focus towards innovation. Nevertheless, the second path shows that while low network intense companies tend to achieve social performance by focusing on innovation and environmental sustainability, there are also companies that use the leveraging of resources as a vehicle towards social performance.

As for high networking intense SMEs, resource leveraging and environmental sustainability build the foundation in both paths (H1, H2), accompanied by the success factor achievement motivation in the first path (H1) and innovation orientation in the second (H2). This highlights the relative affiliation of networking and the variable resource leveraging investigated in this research, since the extent of resource leveraging was measured by how intensely communicate and work together with other
companies within their industry or supporting industries, and the network intensity was measured by investigating the extent of communication within and closeness of the enterprise’s network. Hence, companies fostering a network are also more likely to use the leveraging of resources as a vehicle to reach successful social performance.

5.6. Limitations, Further Research and Relevance for Practice

There are a number of evident limitations of this research. First, a successful sustainable performance can be influenced by far more factors than investigated here. The set of variables chosen for this research as well as their influence on the social performance attempt to demonstrate different paths to success for sustainable entrepreneurs, but in no way are extensive enough to cover all possible permutations. Thus, due to the constricted scope of factors investigated in this research, an incomplete picture of how companies can achieve sustainable social performance is being presented. Although fsQCA helps identify causal combinations leading to a specific outcome, it permits only one outcome variable in a single analysis [105]. Therefore, it is impossible to examine mediation models using fsQCA. Also noteworthy is the fact that all variables investigated are based on multiple self-reported items to account for their latent nature. This may lead to social desirability, self-esteem or self-representational biases in the responses of our firm executives, for example overstating their social performance. Since fsQCA is not designed to handle multiple outcomes and many variables, we call for further research that uses more objective measures like investments in social well-being projects.

Last, but not least, this paper has obviously utilized a classical perspective on entrepreneurship of a Schumpeterian type, which sees innovation as the major constituent. More recently developed is a wider perspective on the overall “entrepreneurship ecosystem” (EE), i.e., all individuals, organizations or institutions outside the individual entrepreneur, which leads to the creation of entrepreneurial firms [106–108]. Obviously, investigating all social and economic environment affecting the entrepreneurship of certain regions provides a more holistic view than classical Schumpeterian perspectives only. Considering the complexity of the models in relation to the question at hand here however, we think we have been able to provide first exploratory results on the complex interplay of at least four factors leading to the social performance of SMEs, where future EE research could base itself.

A potential topic for further research would be to investigate economic performance as a potential outcome. While environmental sustainability was one of the variables which in combination with others leads to a social performance, the inner circle of the “concentric circle approach”, or the economic pillar, does not form an explicit part of the study. However, this study built on the assumption that good social performance has a positive influence on the economic performance. Nevertheless, the influence of different factors such as social performance and environmental sustainability on the economic performance would be an interesting topic for further research. In that respect, future research on sustainable or social entrepreneurship could concentrate more on “entrepreneurial orientation” (EO), which describes the entrepreneurial focus of an enterprise [109,110]. Especially in a hybrid organization in which organizations seek to address a social or environmental purpose by engaging in entrepreneurial activities and generating a surplus [111], the fsQCA could be an interesting method to identify different interplays of EO’s three sub-dimensions proactivity, innovativeness and risk-taking towards both economic and social performance [96].

Although this—as every—research has its limitations, the relevance for practice is evident. By using the configuration approach, commonly used in management research and exploring the chosen variables through fsQCA, this research is the first to answer the question as to how sustainable entrepreneurs can achieve success in terms of social performance by using a larger-scale quantitative dataset. Furthermore, this research only shows one path to success, but investigates different combinations of variables that lead to success. Thus, it is relevant to practice since it gives insights on how to be successful while focusing on sustainable development.
6. Conclusions

The aim of this research was to answer the question as to which configurations of various factors create social performance of entrepreneurs. Thereby, it attempted to find out how the interplay of these different variables forms a path to a success. This research showed that a focus on environmental sustainability can indeed build the foundation for a path to social performance in SMEs. It thus follows that in pursuance of sustainable development, entrepreneurs can achieve positive influences on social performance by focusing on achieving environmental sustainability.

The findings show that an innovation orientation based on the foundation of environmental sustainability facilitates the social performance of an enterprise, especially in companies that have a low network intensity in which relying on innovation is a crucial part to achieving social performance. This study shows that networking and communicating with companies in similar or the same industries can be a crucial factor to success of a sustainable SME. While achievement motivation is thought to be a characteristic that most sustainable entrepreneurs possess to a larger extent than regular entrepreneurs [58], this research showed that only when the innovation orientation of an enterprise is irrelevant will achievement motivation be the sole success factor.

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