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# **The Role of Social Responsibility in Established and Emerging Companies**

## **DISSERTATION**

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## List of Abbreviations

ANOVA	Analysis of Variance
AVE	Average Variance Extracted
BImSCHG	Federal Act on Emissions Control (Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge)
CEO	Chief Executive Officer
CFA	Confirmatory Factor Analysis
CFI	Confirmatory Fit Index
CFP	Corporate Financial Performance
CI	Confidence Interval
CMB	Common Method Bias
CSR	Corporate Social Responsibility
EEG	Act on the Development of Renewable Energy (Erneuerbare-Energien-Gesetz)
HR	Human Resources
HRM	Human Resource Management
ICC	Intraclass Correlation Coefficients
M	Mean
PES	Proactive Environmental Strategy
RBV	Resource-Based View
RMSEA	Root Mean Square Error of Approximation
SD	Standard Deviation
SEM	Structural Equation Modeling

# **CHAPTER 1 | New Perspectives on the Role of Business in Society**

## 1.1 Four Challenges Concerning the Role of Social Responsibility

*“The idea of social responsibilities supposes that the corporation has not only economic and legal obligations, but also certain responsibilities to society which extend beyond the economic and legal responsibilities.”* (McGuire, 1963, p. 144)

The idea that companies bear a social responsibility to society and the natural environment has evolved tremendously. Since the 1960s academic research has discussed the role of businesses’ social responsibility in over 135.000 peer-reviewed articles across disciplines such as management, human resources, and entrepreneurship<sup>1</sup>. Among these, meta-analyses have shown that social performance is a valuable business practice as it is positively related to companies’ financial performance (Hou, Liu, Fan, & Wei, 2016; Margolis, Elfenbein, & Walsh, 2009; Orlitzky, Schmidt, & Rynes, 2003; Wang, Dou, & Jia, 2016). Thus, companies increasingly institutionalize their engagement for stakeholders such as employees, customers, suppliers, minorities and the natural environment in formal reports as well as formal organizational functions (Wang, Tong, Riki, & Gerard, 2016). By doing this, the portion of the world’s 250 largest companies that reports their social performance has grown from 35% in 1999 to 93% in 2017 (Blasco & King, 2017). Thus, scholars and practitioners have recognized that the engagement in corporate social responsibility (CSR) – that is “context-specific organizational actions and policies that take into account stakeholders’ expectations and the triple bottom line of economic, social, and environmental performance” (Aguinis, 2011, p. 855) – holds great value for business and society.

Nevertheless, important challenges concerning organizational performance and society’s well-being persist and even newly emerge because the competitive environment and expectancies by important stakeholders have evolved over the past decades (Wang, Tong, et

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<sup>1</sup> Search „social responsibility“ AND „business“ in EBSCOhost database, 11/13/18.

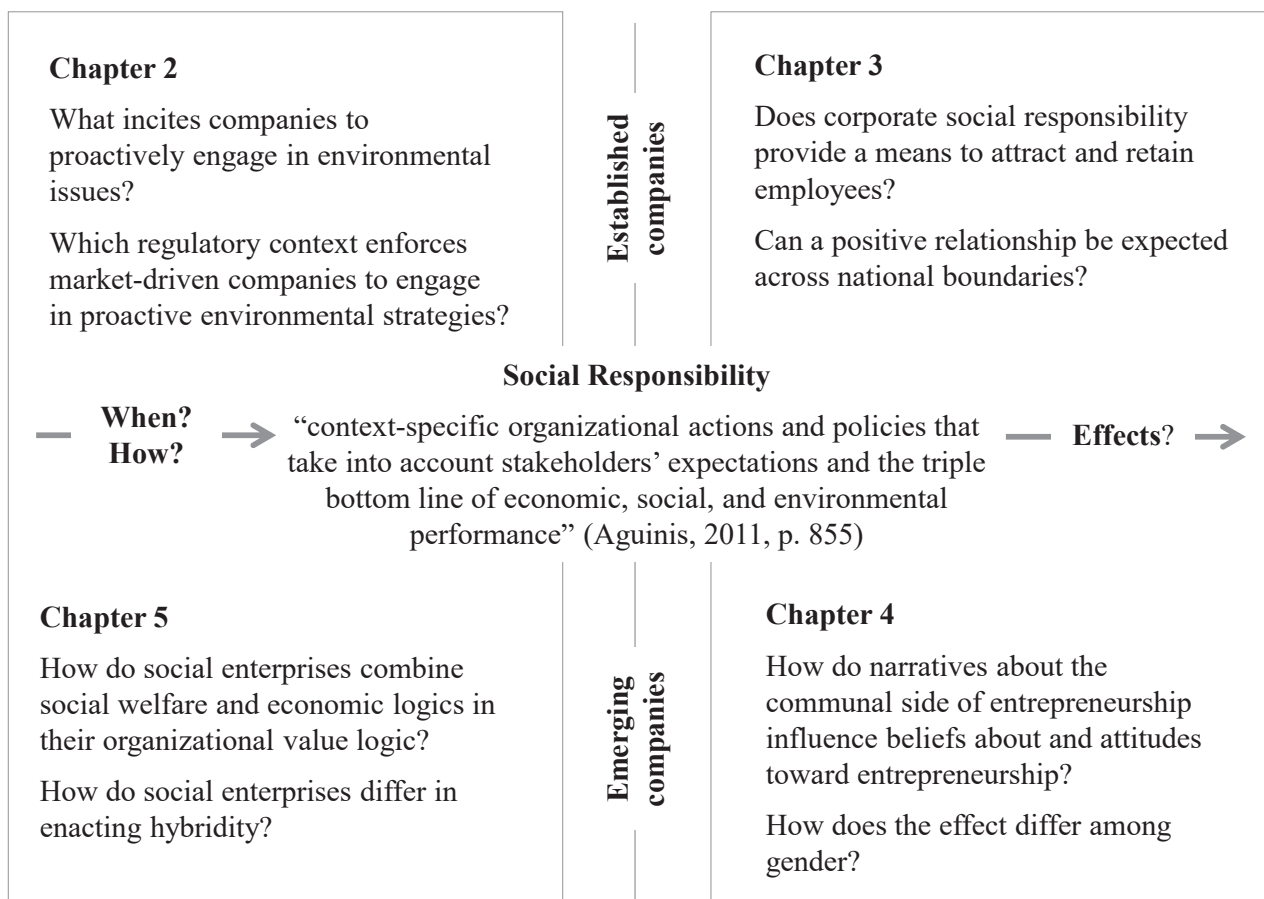
al., 2016; Zahra & Wright, 2016). This dissertation identifies four crucial research gaps in our understanding of the role of social responsibility, first, in established companies and, second, in the advent of newly emerging companies (**Figure 1**).

The first research gap arises from environmental disruptions that increasingly endanger our society's well-being and put pressure on economic systems (Whiteman & Yumashev, 2018). In 2018, the astronaut Alexander Gerst posted a memorable picture of the draught that caught Europe during the summer (Gerst, 2018). Later the same year, the World Meteorological Organization announced that the past four years were the warmest on record (World Meteorological Organization, 2018). On the one hand, companies are the reason for these pressing environmental issues, which resulted in an increase in environmental regulations (Hofmann, Theyel, & Wood, 2012). On the other hand, management research has recognized that companies are important players in mitigating environmental issues (Albertini, 2013). Some companies already pursue proactive environmental strategies (PES) by anticipating environmental requirements and by altering their company's operations to prevent negative environmental issues (Aragón-Correa & Sharma, 2003; Garcés-Ayerbe, Rivera-Torres, & Murillo-Luna, 2012). Thus, if proactive action by businesses is needed, what incites companies to act proactively? Which regulatory context enforces market-driven companies to proactively solve environmental issues?

The second research gap concerns the consequences of companies' engagement in CSR. Scholars and companies wonder if performing CSR activities is a means to vitalize a company's relationship with its salient stakeholders such as employees (Aguinis & Glavas, 2012). Since employees, in particular highly qualified employees, are considered as one of companies' most salient stakeholder groups, companies search for approaches to meet their employees' needs to increase their job engagement (Backhaus, Stone, & Heiner, 2002; Story, Castanheira, & Hartig, 2016; Voegtlin & Greenwood, 2016). In recent years, an increasing discourse on the

meaningfulness of work reflects a growing skepticism about the purpose of work and the value of companies (Bailey, Lips-Wiersma, et al., 2018; Bailey, Yeoman, Madden, Thompson, & Kerridge, 2018; Lysova, Allan, Dik, Duffy, & Steger, 2018). Meaningfulness is the most important driver of job engagement (May, Gilson, & Harter, 2004). Sources of meaningfulness are developing the self, unity with others, serving others, and expressing the self (Lips-Wiersma & Morris, 2009). Thus, does CSR provide a means to attract and retain employees? Can a positive relationship be expected across national boundaries?

**Figure 1.** Overview of research questions



A third important research gap regards the effects of social responsibility in the emergence of new companies. While research about the role of social responsibility in established companies has proliferated since the 1960s, entrepreneurship research only recently caught systematic interest in the role of social responsibility (Lundmark & Westelius, 2019; Zahra & Wright, 2016). In this way, it remains unclear which role social responsibility plays,

in terms of the engagement with and for others, during the early formation of businesses. Parallel to the arguments about the effects of CSR on potential employees (Aguinis & Glavas, 2017), the communal side of entrepreneurship, which implies social interaction and pro-social behavior, might provide an important but overlooked motivational factor for individuals to feel attracted to entrepreneurship. In view of the low rate of entrepreneurial activities in industrial nations such as Germany – particularly among women (Sternberg, Wallisch, Gorynia-Pfeffer, von Bloh, & Baharian, 2018), the answers to the following questions are valuable: How do narratives about the communal side of entrepreneurship influence beliefs about and attitudes toward entrepreneurship among the next generations' job entrants? How does the effect differ among gender?

The fourth research gap emerges from more recent criticism that CSR programs are often loosely connected to a company's core business activities (Porter & Kramer, 2011). One prominent example is the brewery Krombacher engaging in preserving the rainforest (Kremers, 2010). Although such activities may provide some value, they are unlikely to leverage on the company's capabilities which leads to the question whether established companies are the best to provide solutions to societal issues (Margolis & Walsh, 2003). A currently spotlighted phenomenon seems to offer a new angle on the role of business in society: Social enterprises have received surging attention because they solve pressing societal problems by engaging in commercial activities (Battilana, Sengul, Pache, & Model, 2015; Pache & Santos, 2013; Saebi, Foss, & Linder, 2018). The hybridity of social enterprises raises important questions about the role of social responsibility in relation to economic obligations. How do social enterprises combine social welfare and economic logics in their organizational value logic? How do social enterprises differ in enacting this hybridity?

## 1.2 Four Perspectives on the Role of Social Responsibility

As exemplified by the four challenges, constant changes in society and the natural environment require a continuous discourse. New perspectives on the transformative relationship between business and society are needed to advance our theoretical understanding and inform managerial practice. Therefore, this dissertation sets out to examine the role of social responsibility in established companies (*Chapter 2* and *3*) and newly emerging companies (*Chapter 4* and *5*) from four different perspectives drawing on four different methodological approaches (**Table 1**).

*Chapter 2* analyzes what incites companies to engage in social responsibility in terms of the pursuit of a PES. Guided by two competing theoretical perspectives, the chapter investigates the contextual role of perceived regulatory stakeholder pressure in the relationship between firms' strategic orientation and their pursuit of a PES. While the enhancing perspective suggests that perceived regulatory stakeholder pressure strengthens the association between strategic orientation and PES, the buffering perspective argues that greater regulatory stakeholder pressure mitigates this relationship. The existence of two theoretical perspectives might be due to the contrary nature of strategic orientation as self- or market-driven motivation toward solving environmental issues (Aragón-Correa, 1998; Delmas, Hoffmann, & Kuss, 2011) as opposed to regulatory stakeholder pressure which is of a coercive nature (Kassinis & Vafeas, 2006).

To test the competing perspectives, a survey is conducted on a sample of 349 German energy sector firms. The empirical findings of a moderated regression analysis go beyond the arguments made in the buffering perspective: high perceived regulatory stakeholder pressure not only weakens but also eradicates the relationship between strategic orientation and the pursuit of a PES. Thus, in case of high perceived regulatory stakeholder pressure, companies' strategic orientations do not relate to an increase in the pursuits of a PES.

The study contributes to the literature by disentangling formerly mingled theoretical arguments regarding the contingent role regulatory stakeholder pressure plays in following a PES. By analyzing regulatory stakeholder pressure and its interplay with firms' strategic orientation in the pursuit of a PES from a contingent resource-based perspective allows for a new lens in the understanding of the conditions that incite and prevent firms' engagement in environmental responsibility. Moreover, the study underlines the importance of managers' perception of the business environment in strategic decision-making. This adds to our understanding of why two separate firms with similar organizational characteristics might develop different environmental strategies.

*Chapter 3* analyzes which effects companies' engagement in social responsibility has on stakeholders, namely potential and current employees. Interest in the relationship between CSR and organizational attractiveness as well as employee attitudes and behavior has been increasing over the last three decades (Aguinis & Glavas, 2017; De Roeck & Maon, 2018); however, the literature remains fragmented. Furthermore, scholars call for more contextualization in CSR research by examining how the institutional context conditions the effect of CSR (Aguinis & Glavas, 2012).

Following signaling and social identity theory, the chapter reviews past research by conducting a meta-analysis which suggests that CSR is positively related to organizational attractiveness ( $\hat{r} = 0.36$ , 21 studies) as well as to employee attitudes and behavior ( $\hat{r} = 0.40$ , 50 studies). However, these effects are heterogeneous. Following arguments by the institutional theory, institutional level factors concerning the strength of the regulatory framework and governmental intervention particularly affect the ability of firms to attract potential employees through CSR. Moreover, the effect of CSR on employee attitudes and behavior is stronger for CSR practices than for CSR principles.



The chapter contributes to the field of CSR and human resource management (HRM) research by integrating two important streams which show great synergies into a meta-analytic review of the role of CSR in attracting and retaining employees. A structured perspective is useful, for instance, to a growing strand of research on the enabling role of HRM for CSR practices (De Stefano, Bagdadli, & Camuffo, 2018). In addition, integrating institutional level moderators in the analysis addresses the need for multi-level models of CSR (Aguinis & Glavas, 2012; Lindgreen & Swaen, 2010).

*Chapter 4* examines the role of social responsibility in the attractiveness of entrepreneurship. The chapter proposes that the communal side of entrepreneurship, which implies social interaction and pro-social behavior, is under-represented in narratives about entrepreneurship and therefore also in beliefs about entrepreneurship (i.e., expectancies about the role and activities of entrepreneurs). Following the information processing perspective, communicating communal aspects is likely to positively affect beliefs and attitudes because communal aspects are distinct to agentic beliefs (e.g., achievement, power), which dominate individuals' prevalent occupational portrayal and correspond to the basic need for belonging and meaningfulness (D'Netto & Ahmed, 2012; Mayseless & Keren, 2013).

A survey study ( $N = 129$ ) reveals that young adults tend to believe that entrepreneurship affords agentic aspects, but significantly less believe in communal aspects which are, however, equally integral to entrepreneurship. In a subsequent experimental vignette study ( $N = 389$ ), communicating the communal nature of entrepreneurship, specifically the pro-social aspects, improves both men's and women's attitudes toward entrepreneurship.

The chapter contributes to entrepreneurship and vocational research by integrating an information processing perspective into the investigation of the malleability of beliefs and attitudes toward entrepreneurship. Furthermore, the chapter proposes that both self- and other-orientation are important parts in the social construction of entrepreneurial identities. In

addition, the chapter extends perspectives in gender research as it shows that women's attitude toward entrepreneurship increase via pro-social beliefs about entrepreneurship.

*Chapter 5* follows the critique of Porter and Kramer (2011) that social responsibility might even have the potential to be the core competitive advantage of a business and not only an add-on to current business operations. Therefore, this chapter analyzes how social enterprises differ in enacting hybridity, i.e. combining multiple institutional logics within one organization. Social enterprises combine a social welfare logic focusing on solving the greatest societal issues with an economic logic demanding efficiency, revenue streams and business operations (Mair, Mayer, & Lutz, 2015; Pache & Santos, 2013).

This chapter develops a taxonomy of organizational value logics based on a sample of 127 social enterprises. An organizational value logic is a shared meaning system within an organization that implies for whom value is provided and what enables the organization to provide this value (Laasch, 2018a). Based on a cluster analysis, the sample shows that the hybrid nature of social enterprises becomes apparent in the configuration of three elements: the former institutional adherence of a social enterprise's stakeholders (social/commercial), the type of relationship to its stakeholders (uni-/bi-directional), and the number of distinct stakeholder groups with which it relates.

The chapter contributes to social entrepreneurship and hybrid organizing literature by integrating the concept of organization value logics as a lens that advances understanding about how social enterprises enact the social welfare and economic logics. Moreover, by providing a taxonomy of hybrid organizational value logics this chapter systematically enhances knowledge about the heterogeneity in the hybrid nature of social enterprises that enables a grounded exploration on why and when positive or negative implications arise from hybridity.

**Table 1.** Overview of the chapters

	<b>Research Objective</b>	<b>Contribution</b>	<b>Theoretical Perspective</b>	<b>Core Constructs</b>	<b>Method</b>	<b>Sample</b>
<i>Chapter 2: The Contextual Role of Regulatory Stakeholder Pressure in Proactive Environmental Strategies: An Empirical Test of Competing Theoretical Perspectives</i>	How does regulatory pressure stakeholder influence the relationship between of strategic orientation and proactive environmental strategies?	<ol style="list-style-type: none"> <li>1. disentangle mingled theoretical arguments regarding the contingent role of regulatory stakeholder pressure</li> <li>2. underline the importance of managerial cognition of the business environment in strategic decision-making</li> </ol>	Contingent resource-based view	<p>Dependent variable: proactive environmental strategies</p> <p>Independent variable: strategic orientation</p> <p>Moderator: perceived regulatory stakeholder pressure</p>	Regression analysis	349 German energy sector firms
<i>Chapter 3: Does Corporate Social Responsibility (always) help to Attract and Retain Employees – A Meta-Analysis</i>	Does corporate social responsibility affect potential and current employees? How does the regulatory and governmental institutional context condition these relationships?	<ol style="list-style-type: none"> <li>1. integrate two fields of research: corporate social responsibility research on organizational attractiveness and on employee attitudes and behavior</li> <li>2. introduce a multi-level perspective to understand how effects of corporate social responsibility are conditioned by the institutional environment</li> </ol>	Signaling theory, social identity theory, institutional theory	<p>Dependent variable: corporate social responsibility</p> <p>Independent variables: organizational attractiveness, employee attitudes and behavior</p> <p>Moderators: rule of law, governmental intervention</p>	Meta-analysis	71 studies on the effect of CSR on potential and current employees
<i>Chapter 4: The Other Side of the Same Coin – How Communal Beliefs about Entrepreneurship Influence Attitudes toward Entrepreneurship</i>	How do narratives about the communal side of entrepreneurship influence beliefs about and attitudes toward entrepreneurship? How does the effect differ according to gender?	<ol style="list-style-type: none"> <li>1. integrate the information processing perspective to understand malleability of beliefs and attitudes toward entrepreneurship</li> <li>2. provide new angle to the debate on the role self- or other-orientation in the social construction of entrepreneurial identities</li> <li>3. extend perspectives in gender entrepreneurship</li> </ol>	Information processing perspective	<p>Dependent variable: attitude toward entrepreneurship</p> <p>Mediating variable: communal beliefs</p> <p>Independent variable: treatment including communal narrative about entrepreneurship</p>	Experiment, structural equation modelling, instrumental variable approach	129 students (study 1) 389 students (study 2)
<i>Chapter 5: 50 Shades of Hybridity – A Taxonomy of Organizational Value Logics by Social Enterprises</i>	How do social enterprises differ in enacting hybridity?	<ol style="list-style-type: none"> <li>1. integrate organizational value logics as concept to understand how social enterprises enact multiple institutional logics</li> <li>2. develops theoretical grounds to examine why (not) tensions arise from hybridity</li> </ol>	Hybrid organizing	Organizational value logics (stakeholders, value proposition, value capture, value creation/delivery)	Taxonomy development	127 social enterprises

### 1.3 Additional Remarks

The four chapters that constitute the main body of this dissertation were developed in self-containing publication projects, which is why they are in different states of publication and include differing co-authors.

**Table 2.** State of publication and contributors to the chapters

	<b>Current State</b>	<b>Contributors</b>
<i>Chapter 2: The Contextual Role of Regulatory Stakeholder Pressure in Proactive Environmental Strategies: An Empirical Test of Competing Theoretical Perspectives</i>	Published in <i>Organization &amp; Environment</i>	Eva Alexandra Jakob Matthias Baum Pascal Hütt Rüdiger Kabst
<i>Chapter 3: Does Corporate Social Responsibility (always) help to Attract and Retain Employees – A Meta-Analysis</i>	Published in <i>Academy of Management Proceedings</i>	Eva Alexandra Jakob Matthias Baum Rodrigo Isidor Rüdiger Kabst
<i>Chapter 4: The Other Side of the Same Coin – How Communal Beliefs about Entrepreneurship Influence Attitudes toward Entrepreneurship</i>	Published in <i>Journal of Vocational Behavior</i>	Eva Alexandra Jakob Rodrigo Isidor Holger Steinmetz Marius Wehner Rüdiger Kabst
<i>Chapter 5: 50 Shades of Hybridity – A Taxonomy of Organizational Value Logics by Social Enterprises</i>	Accepted at <i>Babson College Entrepreneurship Research Conference 2019</i>	Eva Alexandra Jakob Janina Sundermeier

# CHAPTER 2 | The Contextual Role of Regulatory Stakeholder Pressure in Proactive Environmental Strategies: An Empirical Test of Competing Theoretical Perspectives<sup>2</sup>

## Abstract

Guided by two competing theoretical perspectives, we investigate the contextual role of perceived regulatory stakeholder pressure in the relationship between firms' strategic orientation and their pursuit of a proactive environmental strategy (PES). While the enhancing perspective suggests that perceived regulatory stakeholder pressure strengthens the association between strategic orientation and PES, the buffering perspective argues that greater regulatory stakeholder pressure mitigates this relationship. Our study looks at a sample of 349 German energy sector firms to identify which perspective holds greater explanatory power. Surprisingly, the empirical findings go beyond the arguments made in the buffering perspective: high perceived regulatory stakeholder pressure not only weakens but also eradicates the relationship between strategic orientation and the pursuit of a PES. Our results indicate that in the case of high perceived regulatory stakeholder pressure, market-oriented considerations are eclipsed by the need to gain legitimacy within the regulatory stakeholder context.

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<sup>2</sup> This chapter is published: Schmitz, E. A., Baum, M., Huett, P., & Kabst, R. (2017). The contextual role of regulatory stakeholder pressure in proactive environmental strategies: an empirical test of competing theoretical perspectives. *Organization & Environment*, <https://doi.org/10.1177/1086026617745992>.

## 2.1 Introduction

The crisis the world is currently facing regarding the natural environment presents a serious challenge. Research, politics, and the public all acknowledge that global environmental issues can only be solved if firms voluntarily and proactively engage in environmentally friendly behavior (Shrivastava, 1995). As such, proactive environmental strategies (PESs) have gained attention in the management literature as a means of reducing the adverse impact of firms on the environment (e.g., Aragón-Correa, Martín-Tapia, & Hurtado-Torres, 2013; Darnall, Henriques, & Sadorsky, 2010; Sharma & Vredenburg, 1998). We define a PES as a firm's environmental proactivity, which implies the anticipation of environmental requirements and trends, and the alteration of the firm's operations to prevent rather than to lighten negative environmental impact (Aragón-Correa & Sharma, 2003; Garcés-Ayerbe et al., 2012). A PES involves pollution prevention rather than end-of-pipe solutions (Hart, 1995; Russo & Fouts, 1997) and requires top management support to manage the interface between the firm and its natural environment (Berry & Rondinelli, 1998; Menguc, Auh, & Ozanne, 2010).

Although notable progress has been made in the understanding of organizational characteristics that favor firms' pursuit of a PES (e.g., Aragón-Correa, 1998; Christmann, 2000; Delmas et al., 2011), little is known about the dependency of these processes on firms' external business environment (Aragón-Correa & Sharma, 2003). Research on contingencies is crucial in the field of environmental management, as we need to learn whether the identified precursors of PES remain effective under varying conditions within the external business environment.

In choosing an environmental strategy, the regulatory context of the firm is of particular importance, as it frames managerial discretion in environmental decision making (Banerjee, 2001; Henriques & Sadorsky, 1996, 1999). Managers act as curial interpreter of the organizational context (Darnall et al., 2010). Thus, managerial perception of regulatory

stakeholder pressure, which represents an integral part of firms' organizational context, determines the managers' view of potential competitive gains from using organizational resources in the pursuit of a PES (Aragón-Correa & Sharma, 2003; Dess & Beard, 1984).

While organizational characteristics such as strategic orientation underline a mainly self- or market-driven motivation toward solving environmental issues for the purpose of achieving competitive advantage (Aragón-Correa, 1998; Delmas et al., 2011), regulatory pressures are of a coercive nature, pushing firms toward the implementation of an environmental strategy (Kassinis & Vafeas, 2006). Thus, the question becomes how managers deal with these potentially conflicting factors in their pursuit of a PES.

To explain the contingent role of regulatory stakeholders in firms' pursuit of a PES, two conflicting theoretical views can be found within the environmental management literature. The enhancing perspective infers that a business environment with high regulatory stakeholder pressure amplifies the positive link between strategic orientation and the pursuit of a PES because strategically oriented firms will anticipate future developments and therefore will be prepared to cope with a dynamic external environment (Aragón-Correa & Sharma, 2003; Hoffmann, Trautmann, & Hamprecht, 2009). In contrast, the buffering perspective argues that if managers feel confronted by strong regulatory stakeholder pressure, their discretion to act freely is restricted and the consequences of their decisions are diffuse (Aragón-Correa & Sharma, 2003; Sharma, 2000). Therefore, the association between strategic orientation and the pursuit of a PES might weaken if managers perceive high regulatory stakeholder pressure.

Despite the presence of these conflicting theoretical views regarding the contingent role of regulatory stakeholder pressure, environmental research has neither clearly distinguished between the theoretical arguments nor empirically tested their explanatory power. In this article, we develop and test competing hypotheses to determine the extent to which regulatory stakeholder pressure strengthens or weakens the role of strategic orientation toward customers,

competitors, and technology in pursuing a PES. We thereby offer two major contributions to the environmental management and regulatory literature.

First, our study clarifies the views of two theoretical perspectives on the contingent role of regulatory stakeholder pressure: regulatory stakeholder pressure either enhances or buffers the association between firms' strategic orientation and the pursuit of a PES. Accordingly, following the contingent resource-based view (RBV), our study advances the field's understanding of the role of regulation by disentangling previously mingled theoretical arguments regarding its boundary influence. Modeling regulatory stakeholder pressure as a moderator thus extends the previous research on the influence of regulation on organizational outcomes such as innovation and environmental management (e.g., Jaffe & Palmer, 1997; Rugman & Verbeke, 1998; Triebswetter & Hitchens, 2005) by providing insights into its boundary influence on the organizational processes that lead to the pursuit of a PES. Thereby, we enable future research to address the contextual effects of environmental policies on strengthened theoretical grounds and under a new lens—the contingent RBV—which has so far not found much applicability in the regulatory research domain.

Second, our study underlines the importance of managerial cognition of the business environment for organizational behavior. We find that how managers perceive their firm's business environment is likely to be key to the link between a firm's strategic orientation and the extent to which it pursues a PES. Thus, our article advances the understanding of organizational behavior by highlighting the idea that attention to the constituents of the general business environment is relevant to firms' environmental strategy. Whether a firm's attention to strategic market constituents facilitates the pursuit of a PES depends on its managers' perception of the pressure being applied by nonmarket constituents. Hence, our study substantiates the discussion regarding the importance of the managerial interpretation of PES as a threat or opportunity (e.g., López-Gamero, Molina-Azorín, & Claver-Cortés, 2010;



Sharma, 2000). In looking at this issue, we learn not only how managers interpret their environment but also how their perceptions influence strategic decision making concerning firms' resource utilization with regards to environmental issues.

## **2.2 Theoretical Framework and Hypotheses**

### **2.2.1 Strategic Orientation and Proactive Environmental Strategies**

Firms differ in the way they manage the interface between their business and the natural environment. Their approach toward environmental issues can be described along a continuum, from reactive to proactive (Aragón-Correa, 1998; Sharma, 2000). Thus, firms choose their environmental strategy by relying on ad hoc end-of-pipe solutions on the one extreme, to reflecting on and planning a pattern of sound practices secured by top management support on the other end (Aragón-Correa & Sharma, 2003; Berry & Rondinelli, 1998).

The degree of environmental proactivity in the form of a PES is closely related to firms' over-all strategic posture (Aragón-Correa, 1998; González-Benito & González-Benito, 2006) anchored in a firms' strategic orientation. A strategic orientation is a behavioral culture (Dobni & Luffman, 2003) that describes a firm's degree of attention to market constituents and reflects the extent to which a firm sustains processes to collect and integrate market intelligence for continuous superior performance (Gatignon & Xuereb, 1997; Hult & Ketchen, 2001; Narver & Slater, 1990; Slater, Olson, & Hult, 2006). A strategic orientation is composed of a firm's orientation toward customers, competitors, and technology (Gatignon & Xuereb, 1997; Zhou & Li, 2010).

Following the RBV, firms' strategic orientation is likely to be crucial to their selection of an environmental strategy. A pronounced strategic orientation reflects the attitude and behavior of a prospector (Miles & Snow, 1978) who recognizes, analyzes, and adequately responds to external requirements, including customer demands, competitor activities, and

technological advancements (Gatignon & Xuereb, 1997; Zhou & Li, 2010). A strong strategic orientation favors the development of processes and routines (Theodosiou, Kehagias, & Katsikea, 2012; Zhou & Li, 2010), which equip firms to pursue a PES. Such strategic organizational processes and routines are likely to be unique to the firm and might therefore be difficult to imitate, be nonsubstitutable, and, thus, be rare and valuable so that they provide for a competitive advantage (Barney, 1991; Hart, 1995). Accordingly, the degree of firms' orientation toward customers, competitors, and technology is likely to be associated with the pursuit of a PES for several reasons.

First, a strong customer orientation is proposed to favor the pursuit of a PES because customer-oriented firms focus on creating superior value to the firm's target group (Hult & Ketchen, 2001; Narver & Slater, 1990). A customer-orientated firm continuously generates information about its customers by monitoring and assessing their needs (Kohli & Jaworski, 1990; Narver & Slater, 1990). The adequate understanding of its target group is to serve the firm in the development of paramount solutions for its customers (Hult & Ketchen, 2001; Narver & Slater, 1990).

Since the 1980s, the influence of business on the natural environment is of increasing concern for a wide span of stakeholders, including customers (Gadenne, Kennedy, & McKeiver, 2009; Petts, 1998). A study surveying German citizens' environmental awareness shows that 71% of the respondents strongly agree that everyone should assume responsibility for the next generation in his or her scope of action (Federal Ministry for the Environment, 2017). Indeed, customers grant greater satisfaction when firms assume responsibility which eventually lifts firms' market value (Luo & Bhattacharya, 2006). Similarly, customers in the business-to-business context value suppliers' engagement in corporate social responsibility with greater customer loyalty (Homburg, Stierl, & Bornemann, 2013).

Customer-oriented firms build out processes and routines to integrate not only general but also environmental customer demands (Hofmann et al., 2012; Tatoglu, Bayraktar, Sahadev, Demirbag, & Glaister, 2014), which facilitate innovation (González-Benito & González-Benito, 2006) and generate new suitable offerings for customers (Chen, Chen, & Zhou, 2014). Thus, firms with a strong customer orientation might tend to view a PES as an opportunity to either reduce the risk of consumer criticism concerning their environmental practices (Delmas & Toffel, 2008) or provide superior customer value to achieve a competitive advantage (Darnall, 2006; Luo & Bhattacharya, 2006).

Second, a strong competitor orientation should help firms pursue a PES. Firms with a strong competitor orientation identify, analyze, and respond to competitor action which enables them to determine their strengths and weaknesses compared to industry rivals (Gatignon & Xuereb, 1997; Zhou & Li, 2010). Profound understanding of competitor activities prepares firms to develop appropriate processes to stay ahead of competitors and thereby realize competitive advantage (Zhou & Li, 2010).

In this pursuit of competitive advantage, competitor-oriented firms try to find new ways of differentiating themselves from their industry peers in order to enhance competitiveness (Gatignon & Xuereb, 1997; Zhou & Li, 2010). A PES can be a vehicle of differentiation (Orsato, 2006; Sharma & Vredenburg, 1998) and thus particularly competitor-oriented firms should see value in pursuing such a proactive strategy. By actively collecting competitor-related information and monitoring rival behavior, competitor-oriented firms recognize changes in their business environment earlier (Zhou & Li, 2010) allowing competitor-oriented firms to work at the innovation frontier, also regarding environmental trends. Accordingly, insights from competitor behavior help firms differentiate themselves via ahead-of-market environmental practices in form of a PES.

Third, a technology orientation is likely to relate to the pursuit of a PES because process technologies have been recognized as core building block of PESs, with the potential to create competitive advantage (Christmann, 2000; Klassen & Whybark, 1999). The related literature shows that PESs are connected with the use and development of environmental technologies in terms of cost reduction and quality improvements (Banerjee, 2001; Chan, 2005; Hofmann et al., 2012). In the current environmental climate, firms are being forced to continuously identify, develop, and implement advanced environmental technologies and to redesign their processes to be less environmentally harmful (Hart & Dowell, 2011; Shrivastava, 1995).

Technology-orientated firms identify, analyze, and react to technological changes in the business environment (Gatignon & Xuereb, 1997; Zhou & Li, 2010). A technology orientation enables a firm to recognize emerging or potential technological trends and to reconfigure resources to capitalize on opportunities (Aragón-Correa, 1998; Zhou, Yim, & Tse, 2005). Moreover, technology-orientated firms use their own knowledge to develop new technical solutions (Gatignon & Xuereb, 1997; Voss & Voss, 2000). Since developing new and innovative environmental technologies can provide firms with significant efficiency improvements (Christmann, 2000), technology-orientated firms may gain a competitive advantage from their ability to identify and develop new environmental solutions.

Thus, we argue that a strong strategic orientation can help generate possible solutions to manage the complex interface between firms and the natural environment. Strategically oriented firms are likely to view the pursuit of a PES as an opportunity to realize competitive advantage by providing superior value, outperforming competitors, and effectuating efficiency improvements. In this way, strategically orientated firms achieve alignment between their strategy and the market environment by following a PES. The above considerations lead to the following set of baseline hypotheses:

**Hypothesis 1a:** A firm's customer orientation is positively related to the pursuit of a proactive environmental strategy.

**Hypothesis 1b:** A firm's competitive orientation is positively related to the pursuit of a proactive environmental strategy.

**Hypothesis 1c:** A firm's technology orientation is positively related to the pursuit of a proactive environmental strategy.

### 2.2.2 The Contingent Role of Regulatory Stakeholder Pressure

According to the contingent RBV, the relationship between organizational characteristics and the pursuit of a PES is moderated by managers' perception of the general business environment (Aragón-Correa & Sharma, 2003). Managers can perceive the business environment as either facilitating or restricting the firm's internal processes associated with environmental solutions in pollution prevention (Hoffman, 2001). Thus, whether managers perceive the firm's business environment as supporting or preempting opportunities to realize competitive advantage strongly influences environmental decision making (Aragón-Correa & Sharma, 2003).

With regard to environmental strategies, managerial perception of pressure exerted by external stakeholders has gained much attention in research on firms' proactivity (e.g., Darnall et al., 2010; Murillo-Luna, Garcés-Ayerbe, & Rivera-Torres, 2008; Sharma & Henriques, 2005). Stakeholders refer to "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p. 46). In particular, external stakeholder groups have the power to withhold resources or influence their usage (Frooman, 1999; Sharma & Henriques, 2005), and can thereby directly affect firms' strategy (Donaldson & Preston, 1995; Fineman & Clarke, 1996; Henriques & Sadorsky, 1999).

Regulatory stakeholders play a unique role with regard to environmental strategies (Davidson & Worrell, 2001; Henriques & Sadosky, 1999). Regulatory stakeholders hold a stake in or represent public policy (Baron, 1995; Kassinis & Vafeas, 2006). Participants in the regulatory context fight an “institutional war” (Hoffman, 1999, p. 367) that leads to the emergence of predominant guidelines to direct firms’ behavior within an organizational field. Increasingly stringent national and international laws and regulations regarding environmental protection (Hofmann et al., 2012) emphasize the relevance of regulatory stakeholders.

According to the contingent RBV, the positive link between a firm’s strategic orientation and the pursuit of a PES should be bound to how much pressure managers perceive from the regulatory context. In this way, the firm’s business environment shapes managers’ perception of the chances of achieving a competitive advantage when using organizational resources in the pursuit of a PES (Aragón-Correa & Sharma, 2003; Garcés-Ayerbe et al., 2012).

Although scholars have recognized the importance of regulatory stakeholders (Henriques & Sadosky, 1996) and the interdependence between the firm’s internal factors and external factors in the general business environment (Aragón-Correa & Sharma, 2003; Martinez-del-Rio, Antolin-Lopez, & Cespedes-Lorente, 2015; Rueda-Manzanares, Aragón-Correa, & Sharma, 2008), the contingent role of regulatory stakeholders has not yet gained much attention in the PES research. Among the few empirical works, Menguc et al. (2010) argue that regulatory stakeholders’ power to withhold important resources, along with firms’ need to maintain legitimacy, will drive entrepreneurial-orientated firms to adopt a PES. In investigating direct regulatory effects, Darnall (2006) and Delmas and Toffel (2008) argue similarly, adding that firms might aim to establish a close relationship with regulators in order to influence future policy.

Those arguments, however, reveal two problems in the field of PES research. First, the theoretical explanations of the direct effect and contingent role of regulatory stakeholder

pressure overlap and are therefore diffuse. Second, existing empirical research on regulatory stakeholder pressure mainly reflects an enhancing perspective of regulatory stakeholders, although theoretical works, in particular those following the contingent RBV, propose arguments supporting a buffering perspective (Aragón-Correa & Sharma, 2003). This discrepancy might be due to the ambiguous interplay between a coercive regulatory context and firms' pursuit of a PES, which, in contrast, has a market-driven and self-initiated nature (Sharma & Vredenburg, 1998). Thus, in the following, we distinguish between the theoretical viewpoints and develop competing hypotheses—based on the enhancing versus buffering perspectives—to explain how regulatory stakeholder pressure alters the mechanisms that connect a firm's strategic orientation with the pursuit of a PES. To this end, in each paragraph we describe what the perception of high regulatory stakeholder pressure means to the firm and its business environment and why this condition changes the link between strategic orientation and PES.

### 2.2.3 The Enhancing Perspective

Following the enhancing perspective, managers' perception of high regulatory stakeholder pressure strengthens the link between firms' strategic orientation and their pursuit of a PES for at least three reasons.

First, in situations marked by high regulatory stakeholder pressure, regulatory stakeholders have a greater ability to induce changes in the form of, for instance, taxes affecting product demand, thereby influencing the size and structure of the market (Kassinis & Vafeas, 2006). Thus, if managers perceive the existence of high regulatory stakeholder pressure, they might feel confronted by dynamism and regulatory uncertainty, especially concerning health, safety, and environmental issues (McCaffrey, 1982). Strategically oriented firms are prepared to excel in such a dynamic environment (Zhou & Li, 2010) and are likely to view rising state uncertainty as an opportunity to generate competitive advantage (Aragón-Correa & Sharma,

2003; Sharma, Aragón-Correa, & Rueda-Manzanares, 2007). Since strategically oriented firms are highly alert to customer needs, competitor behavior, and technological advancements, they will have established a repertoire of practices that match the characteristics of their business environment (Gatignon & Xuereb, 1997; Zhou & Li, 2010). Hence, technology-oriented firms are likely to possess flexible technologies and be aware of alternatives. In an environment of high regulatory stakeholder pressure, technology-oriented firms are able to integrate the alternatives demanded by stakeholders more easily than firms with a weaker technological orientation (Aragón-Correa, 1998). Moreover, customer- and competitor-oriented firms might expect uncertainties in the external business environment to pose difficulties for less strategically oriented competitors. Thus, if managers perceive high regulatory stakeholder pressure, a strategically oriented firm might interpret the pursuit of a PES as an even greater opportunity to achieve competitive advantage. Managers of strategically oriented firms know that their firms possess the necessary processes and routines to sustain advanced environmental practices in an uncertain environment.

Second, managers who perceive high regulatory stakeholder pressure are likely to expect the enactment of stricter rules and environmental standards (Davidson & Worrell, 2001). High regulatory stakeholder pressure might thus reinforce the association between firms' strategic orientation toward market constituents and the pursuit of a PES, as strategically oriented firms might want to influence future regulatory developments in order to align their own business strategy with customers' needs and potential technologies. In this regard, strategically oriented firms might aim to deter more rigorous legislation concerning environmental issues (Decker, 2005; Delmas & Toffel, 2008; Maxwell & Decker, 2006). Thus, to maintain their competitive advantage via a PES, or to prevent repeated and costly adaptations to their production processes (Bansal & Roth, 2000), strategic orientation could be associated



even more strongly with the pursuit of a PES in the case of high perceived regulatory stakeholder pressure.

Third, if managers perceive high regulatory stakeholder pressure, they can expect this pressure to also affect their industry peers. Hence, a higher overall standard of environmental management practices will apply to all actors within the industry (DiMaggio & Powell, 1983; Jennings & Zandbergen, 1995). To consistently offer customer value that is above the industry average, strategically oriented firms are likely to see an increased necessity of pursuing a PES if they perceive high regulatory pressure. Customer- and competitor-oriented firms draw much of their competitive advantage from a unique selling proposition that distinguishes them from competitors and offers superior values to customers; they risk losing this advantage if they do not exceed the standards of their competitive environment. Technology-oriented firms also invest highly in continuously monitoring and adopting technological advances (Aragón-Correa, 1998). Because of this, they might aim to exhibit high environmental engagement in pursuing a PES, for risk of sunk costs, which are lost if the firms do not secure their competitive advantage.

Hence, an enhancing perspective supposes the following set of hypotheses:

**Hypothesis 2a:** Perceived regulatory stakeholder pressure moderates the relationship between customer orientation and proactive environmental strategy such that the relationship becomes stronger under greater perceived regulatory stakeholder pressure.

**Hypothesis 2b:** Perceived regulatory stakeholder pressure moderates the relationship between competitor orientation and proactive environmental strategy such that the relationship becomes stronger under greater perceived regulatory stakeholder pressure.

**Hypothesis 2c:** Perceived regulatory stakeholder pressure moderates the relationship between technology orientation and proactive environmental strategy such that the relationship becomes stronger under greater perceived regulatory stakeholder pressure.

#### 2.2.4 The Buffering Perspective

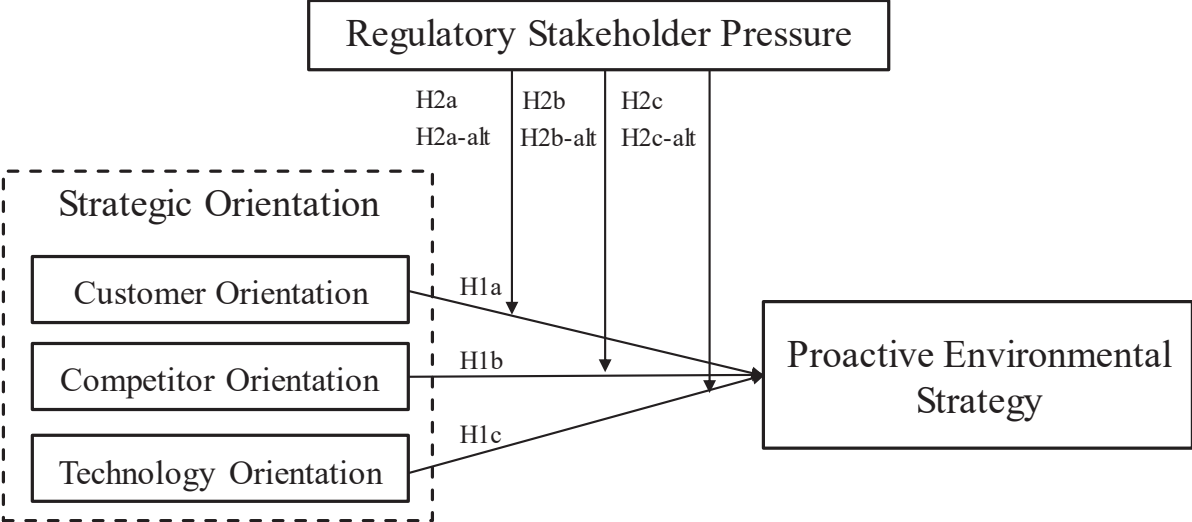
In contrast to the enhancing perspective, the buffering perspective gives rise to the assumption that greater regulatory stakeholder pressure bounds the mechanisms that positively link a firm's strategic orientation with the pursuit of a PES. This logic grounds on three reasons.

First, perceived regulatory stakeholder pressure is likely to reflect strong environmental regulation (Henriques & Sadosky, 1999). In such a case, advanced environmental practices provide no differentiation from competitors, but rather become the norm in the firm's business environment (Christmann, 2004; Sharma et al., 2007). Hence, in a situation where managers perceive high regulatory stakeholder pressure strategically orientated firms might anticipate diminishing marginal returns in the pursuit of a PES because of those firms' pronounced market intelligence. Thus, high regulatory pressure could render a customer, competitor, or technology orientation less associated with the pursuit of a PES.

Second, dynamism and regulatory uncertainty accompanying high regulatory stakeholder pressure imply aggravated predictability of the prospective legislative framework (Birnbaum, 1984). Thus, in the case of high regulatory stakeholder pressure, it might be difficult for strategically oriented firms to know whether pursuing a PES will generate the expected competitive advantage (Aragón-Correa & Sharma, 2003). In this sense, customer- and competitor-oriented firms neither have an advantage nor feel motivated to follow a PES if customer demands and competitor behavior could misguide strategic decision making concerning environmental issues. Similarly, advanced technological know-how acquired via a technology orientation might not prevent a firm from needing to invest in refitting costs if future

regulations require following a different path than was chosen in the pursuit of a PES. This should reduce the positive relationship between strategic orientation and PES if strong regulatory stakeholder pressure is perceived.

**Figure 2.** Regulatory stakeholder pressure, strategic orientation, proactive environmental strategy



Third, if managers perceive high regulatory stakeholder pressure, they might feel forced to deal with a high number of relevant parties. Strategically oriented firms already observing and responding to customers’ and competitors’ demands will be faced with a greater number of demands if regulatory stakeholders are perceived to play an additional role. A business environment with great regulatory stakeholder pressure demands managers to process additional information (Tung, 1979) and compensate for information asymmetries (e.g., via maintaining close bonds with regulators). Although strategically oriented firms might show a greater ability to recognize and convert information concerning customers, competitors, or technology, different information processing capabilities are needed with regard to the legislative process. Because strategically oriented firms are confronted with additional resources that require strong relationships with policy makers in case of high regulatory pressure (Hillman & Hitt, 1999), these firms have less slack available to maintain a PES. Therefore, under high regulatory stakeholder pressure, strategically oriented firms would be of

no advantage in following a PES because their established processes concentrate on market (customers, competitors, technology) and not non-market constituents (regulatory stakeholders) (Figure 2).

Hence, a buffering perspective supposes the following set of hypotheses:

**Hypothesis 2a-alt:** Perceived regulatory stakeholder pressure moderates the relationship between customer orientation and a proactive environmental strategy such that the relationship becomes weaker under greater perceived regulatory stakeholder pressure.

**Hypothesis 2b-alt:** Perceived regulatory stakeholder pressure moderates the relationship between competitor orientation and proactive environmental strategy such that the relationship becomes weaker under greater perceived regulatory stakeholder pressure.

**Hypothesis 2c-alt:** Perceived regulatory stakeholder pressure moderates the relationship between technology orientation and proactive environmental strategy such that the relationship becomes weaker under greater perceived regulatory stakeholder pressure.

## 2.3 Methods

### 2.3.1 Data

The present study uses survey data from 349 firms operating in the German energy sector. As we aimed to investigate the conditions under which firms with similar organizational characteristics might show diverging degrees of proactivity toward environmental management, we selected a single industry context. The analysis of firms within the same organizational field reinforces comparability within the sample. Thereby, we investigate

differences in perception that might be attributable to varying interpretations of the environment, minimizing de facto differences in regulatory pressure (Sharma, 2000).

We drew on the energy sector because it is a dynamic industry in which all actors are profoundly affected by regulation, political demands, and lobbying. In recent years, the German energy sector has faced major changes with regard to market structure and regulation. Under the European legislative framework of directives regarding environmental issues such as renewable energy sources (directive 2009/28/EC) or eco-design (directive 2009/125/EC), the German government has established a wide set of acts and ordinances concerning environmental protection (Federal Ministry for Economic Affairs and Energy, 2014). Germany's national strategy, called "Energy Concept," was passed in 2010 and maps the country's "transition into the age of renewables" (Federal Ministry for Economic Affairs and Energy, 2014), implying wide and system-changing consequences. The phase-out of nuclear energy leading up to 2022 and the increase in the share of renewables used in power generation to up to 80% by 2050 (Federal Ministry of Economics and Technology, 2012) are major goals anchored in the Energy Concept, and they affect all participants in the energy sector. Central instruments used to regulate market actors and incite them to contribute to the stated objectives make up the Act on the Development of Renewable Energy (EEG) (Federal Ministry for Economic Affairs and Energy, 2014) and the Federal Act on Emissions Control (BImSCHG) (Federal Ministry for the Environment, 2009). The EEG subsidizes renewable electricity production via guaranteed fixed prices and priority feed-in of renewable energy to the grid (Rueb, Heinemann, Ulbricht, & Zohlhoefer, 2015). The BImSCHG involves mandatory licensing for the construction, operation, marketing, and importation of installations (e.g., production facilities), with the aim of preventing emissions to air, water, and soil (Federal Ministry for the Environment, 2009). While such acts might increase the demand for certain

energy-generating products and related services, firms will bear additional costs due to increased energy prices and stricter standards concerning production facility emissions.

Our sample industry is particularly suited to the research context for two reasons. First, in dynamic environments such as the energy sector, firms' strategic choices are highly related to organizational survival. Satisfying customer needs and preferences, adequately reacting to competitor activity, and using up-to-date technology determine firms' success (Rauch, Wiklund, Lumpkin, & Frese, 2009). Second, the outlined legislative context emphasizes how firms operating in the energy sector are vulnerable to regulatory stakeholder pressure. Accordingly, we believe that the study's sample is suitable for testing our proposed research model, and we expect that the relationship between customer, competitor, and technology orientation and regulatory stakeholder pressure on PES will be relevant and observable.

To identify relevant firms for the sample, we drew on the membership data of the German Association of Energy and Water Industries and related official energy sector subassociations and state-owned firm indexes. We identified a sample of 2,581 firms within the data of the associations. Data collection was conducted via a standardized web survey on an established online survey platform. The questionnaire was sent to the firms' chief executive officers (CEOs), as we assumed that the CEOs would have the best knowledge concerning their firm's environmental strategy, strategic orientation and perceived regulatory stakeholder pressure. If, however, the CEO did not feel that he or she was the right contact person, the questionnaire was sent to the person who could most appropriately answer questions related to the firm's environmental strategy. The same or a similar process has been applied multiple times in previous studies (e.g., Aragón-Correa, 1998; Delmas et al., 2011; Rueda-Manzanares et al., 2008). Because the core of our article was to investigate managers' perception of the general business environment, we followed other studies by using top managers as our main information source (e.g., Daft, Sormunen, & Parks, 1988; Martin-Tapia, Aragon-Correa, &

Senise-Barrio, 2008; Tatoglu et al., 2014). Additionally, our study predominantly looked at small- and medium-sized companies, in which CEOs are the best point of intersection regarding the information of interest (Delmas et al., 2011; Ling, Simsek, Lubatkin, & Veiga, 2008; Zapkau, Schwens, & Kabst, 2014).

After following up with the 2,581 sample firms, we received 487 responses. According to Klassen and Jacobs (2001) analysis of web, electronic, and mail survey technologies, our response rate of 19% was within an expected and acceptable range. After the exclusion of firms with missing data, our final data set included 349 firms.

Our sample firms were operating along the energy value chain, from the manufacturer of technology-intensive products (46%), the supply of products to the energy sector (37%), the planning of energy facilities (64%), and the operation and maintenance of energy facilities (42%) to consultation regarding energy utilization (45%). About 10% of the sample firms were energy-producing private investor companies (mostly solar park operators), while 6% were public utilities, wholly or partially owned by the state or communities. Of the sample firms, 56% were engaged in photovoltaics, 35% in biomass, 34% in solar energy, and 31% in wind energy. Thus, many firms held a diversified portfolio of business activities spanning different stages of the value chain. Equally, the customer base of our sample firms shows some diversity: 12.3% business-to-consumer (e.g., photovoltaics installation), 39.8% business-to-business (e.g., manufacturer of products for energy production), and 47.9% both (e.g., supply of electricity). The average firm size was 676 employees, with a right-skewed distribution representative of the industry (Federal Statistical Office, 2015). The average firm age was 19 years. Hence, the sample reflects the general industry dynamics, including the strong growth in the number of actors since the decentralization of the German energy sector began in the 1990s (Strunz, 2014).

### 2.3.2 Measurements

We collected data for the dependent, independent, and moderator variables using 5-point Likert-type scale instruments (1 = “do not agree at all” to 5 = “strongly agree”). The scales were adapted from previously tested multi-item measures to enhance the reliability and validity of our measurement instruments (see the **Appendix 1**).

**Proactive Environmental Strategy.** As stated earlier, a PES involves pollution prevention rather than end-of-pipe solutions (Hart, 1995; Russo & Fouts, 1997) and requires top management support in managing the interface between a firm and the natural environment (Berry & Rondinelli, 1998; Menguc et al., 2010). For this, we applied a six-item measurement to assess firms’ pollution prevention practices and top management support based on the extant literature.

Pollution prevention was assessed by three items (Cronbach’s  $\alpha = .67$ ) derived from Bansal (2005), Chan (2005) and Sharma and Vredenburg (1998): whether the firm applies the pollution prevention practices of environmental process optimization, waste disposal systems, and resource recycling to decrease the impact of the firm’s processes on the natural environment. As PES implies organizational commitment (Aragón-Correa & Sharma, 2003; Chan, 2005; Darnall et al., 2010; Menguc et al., 2010), we included a set of three items measuring top management support (Cronbach’s  $\alpha = .74$ ). Based on the items developed by Wagner and Schaltegger (2004), we asked each CEO whether his or her respective firm’s top management was convinced that environmental management is positively related to resource utilization, cost efficiency, and market competitiveness.

To account for the multifaceted construct of a PES, we followed previous studies (compare Anton, Deltas, & Khanna, 2004; Darnall et al., 2010) and averaged all six items into one aggregate item that reflected pollution prevention and top management support in a single



PES index score. A high score was indicative of a high degree of proactivity in a firm's environmental strategy.

Consistent with Gatignon and Xuereb (1997) and Zhou and Li (2010), we measured three distinct subconstructs of a firm's strategic orientation: customer, competitor, and technology orientation. We drew our measures of customer and competitor orientation from Narver and Slater (1990), while our items for technology orientation were based on Gatignon and Xuereb (1997).

Customer orientation was measured using three items (Cronbach's  $\alpha = .74$ ). We asked each CEO whether his or her respective firm was proactive in collecting information on customer needs, whether the firm possessed the capacity to analyze this information, and whether the firm had the will to meet the needs of customers (Gatignon & Xuereb, 1997; Zhou & Li, 2010). We measured competitor orientation using another three items (Cronbach's  $\alpha = .79$ ). Each CEO was asked whether his or her respective firm was proactive in identifying competitor activity, whether the firm possessed the capacity to react to competitor activity, and whether the firm had the will to respond to competitor activity (Gatignon & Xuereb, 1997; Zhou & Li, 2010). Technology orientation was measured using four items (Cronbach's  $\alpha = .85$ ). We asked each CEO whether his or her respective firm used sophisticated technologies in new product development, whether the firm rapidly integrated new technologies into products and processes, and whether the firm was proactive in developing new technologies and product ideas (Gatignon & Xuereb, 1997; Zhou & Li, 2010).

Regulatory Stakeholder Pressure. The regulatory stakeholder pressure perceived by firm management was derived from the stakeholder pressure scale developed by Henriques and Sadorsky (1996). This approach is similar to other studies investigating the effect of stakeholder pressure on environmental management strategies (e.g., Buysse & Verbeke, 2003; Delmas & Toffel, 2008; Murillo-Luna et al., 2008). Each CEO was asked to rate his or her perception of

the intensity of different sources of stakeholder pressure on the firm's operational field within the renewable energy sector (1 = "not at all intensive" to 5 = "very intensive"). We performed an exploratory factor analysis using principal component analysis with varimax rotation. The results revealed that the three items of regulations (0.766), politics (0.831), and lobby groups (0.687) all load onto one factor (eigenvalue: 2.717). Cronbach's alpha (.724) also suggested an adequate level of reliability of the scale. We thus calculated regulatory stakeholder pressure by composing the mean score of the three indicators. This follows other studies that have interpreted the current regulatory framework and parties participating in the legislative process (e.g., political and trade associations) as one factor (e.g., Buysse & Verbeke, 2003; Henriques & Sadorsky, 1999).

**Control Variables.** We included multiple control variables in this study. First, we added firm age, measured by subtracting the year the company was founded from the year the data were collected. Second, we controlled for firm size by assessing the natural logarithm of the number of employees in each company. Third, we included firms' governmental relationships by asking the respondents whether the firms possessed established relationships with legal authorities, government departments, and ministries. Fourth, we controlled for the business segment by creating a dummy variable that took the value of "1" when firms were active in producing products for the construction of facilities and "0" otherwise. Fifth, we added a variable called "public utility," which controlled for whether entities that produce, transmit, or distribute energy and are (partially) owned by the state or communities are subject to different effects (Russo, 1992). Sixth, we added the control variable of innovation by asking each CEO whether changes in his or her respective firm's production had been mostly minor in nature during the past 3 years (reversed, Hofmann et al., 2012).

### 2.3.3 Assessing Reliability and Validity

Before testing the hypotheses, additional checks on the quality of the data were performed. The Cronbach's alphas for all scales showed acceptable values, indicating good internal consistency and consequently, good reliability of all constructs. We computed the variance inflation factor values to eliminate the risk of multicollinearity. The values did not exceed the maximum of 2.5, as recommended by Allison (1999). Thus, there was no serious risk of multicollinearity between the independent, moderator, and control variables. **Table 3** provides the means, standard deviations, and correlations of all variables in the model.

To ensure validity, we adapted our measurements from established scales and tested our measurement model by means of confirmatory factor analysis (CFA). The CFA showed that a 5-factor model has an acceptable fit ( $\chi^2/df = 1.593$ ;  $p < .01$ ; root mean square error of approximation [RMSEA] = 0.03; confirmatory fit index [CFI] = 0.96), supporting the validity of our measurement model. Additionally, we calculated the average variance extracted (AVE) for each applicable construct. Since all AVE scores were above the cutoff value, convergent validity is supported (**Table 3**). To assess discriminant validity, we compared the square root of each AVE with the bivariate correlations. The square root of each AVE exceeded the value of the bivariate correlation between the respective variable and all covariates, supporting the discriminant validity of our constructs (Chin, 1998). To further test discriminant validity, we conducted several chi-square difference tests. We compared the chi-square values and the degrees of freedom between the one- and two-factor models, which we computed for each pair of variables (Anderson & Gerbing, 1988; Baum, Schäfer, & Kabst, 2016). The results of these tests also supported discriminant validity, as the chi-square values of the one-factor models were all significantly higher than those of the two-factor models in every comparison (O'Leary-Kelly & J. Vokurka, 1998). The lowest chi-square difference was found for the two-factor model of competitor and technology orientation,  $\Delta\chi^2(df) = 103.27 (1)$ .

Because this study relies on self-reported data collected from one person per firm, we checked for possible difficulties stemming from common method bias (CMB). We applied multiple strategies to assess the existence of CMB, as recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). One of the most prominent sources of CMB is measurement of both the predictor and the criterion variables by the same respondent (Podsakoff, MacKenzie, Lee, et al., 2003). Therefore, we sent a second, similar questionnaire to another member of management at the participating firms. We received 44 second responses that could be matched to the first round of questionnaires. In controlling for CMB, we assessed the interrater reliability between the two respondents from each of the 44 firms by means of intraclass correlation coefficients (ICCs). The ICCs for our scales exhibited high interrater reliability (Shrout & Fleiss, 1979) all were at the 0.001 level (proactive environmental strategy: 0.78, customer orientation: 0.78, competitor orientation: 0.80, technology orientation: 0.86, regulatory stakeholder pressure: 0.84).

To further protect against CMB, we applied additional measures. The questionnaire was conceptualized with additional questions placed in between those measuring the independent and dependent variables to avoid respondents making connections between variables. Additionally, Harman's one-factor test (Podsakoff & Organ, 1986) was used as an ex post test to evaluate the magnitude of CMB. The analysis revealed four factors with eigenvalues greater than 1 that together accounted for 54.3% of the total variance. No single factor accounted for the majority of the variance. These results indicate that the data were not affected by CMB. Finally, we included interactions in our analyses that might reduce the potential threat of CMB, consistent with Chang, Van Witteloostuijn, and Eden (2010). In summary, all tests for CMB indicated that CMB was not a serious threat to the validity of our analyses.

**Table 3.** Pearson correlation coefficients

	M	SD	AVE	Proactive Environmental Strategy	Customer Orientation	Competitor Orientation	Technology Orientation	Regulatory Pressure	Governmental Relations	Firm Age	Firm Size <sup>a</sup>	Business Segment	Public Utility
Proactive Environmental Strategy	3.69	0.54											
Customer Orientation	4.19	0.66	0.66	0.211***									
Competitor Orientation	3.63	0.78	0.60	0.174**	0.426***								
Technology Orientation	3.45	0.97	0.67	0.177***	0.357***	0.275***							
Regulatory Pressure	3.42	0.99		0.053	0.035	0.085	-0.094						
Firm Age	19.00	25.37		-0.071	-0.079	0.030	-0.006	-0.128*					
Firm Size <sup>a</sup>	2.92	1.99		-0.085	-0.064	0.074	0.124*	-0.064	0.549***				
Governmental Relations	2.74	1.18		0.072	0.090†	0.112*	0.105†	0.048	0.127*	0.284***			
Business Segment	0.78	0.41		0.045	0.011	-0.065	0.158**	0.227***	-0.078	-0.037	-0.026		
Public Utility	0.06	0.24		-0.110*	-0.186***	0.033	-0.223	0.124*	0.343***	0.292***	0.116*	-0.158*	
Innovation	3.93	1.13		0.057	0.263***	0.191***	0.414***	-0.078	0.002	0.072	0.007	0.161*	-0.068

Note: † Significant at 10%. \* Significant at 5%. \*\* Significant at 1%. \*\*\* Significant at 0.1%. (n=349)

<sup>a</sup> natural logarithm of number of employees

To assess nonresponse bias, we followed Armstrong and Overton (1977) and controlled for differences between early and late respondents under the assumption that late respondents are more similar to nonrespondents than early respondents are. We conducted t tests for the variables of interest (e.g., customer orientation); these tests yielded nonsignificant results across early and late respondents ( $p > .1$ ). Additionally, we compared our sample's characteristics with general statistics from the German energy sector (Federal Statistical Office, 2015). This comparison revealed a very similar distribution in our sample to the overall population of firms in the sector. Thus, we had reasonable indication that our sample was representative of the population.

We performed robustness tests. First, we repeated our regression analysis without public utilities (partially) owned by the state or communities as these firms might be exposed to specific type of regulation (e.g., of their profits) that might affect our investigated relationships. When excluding public utilities, the results of our hypothesized results remain stable: The interaction effect of perceived regulatory stakeholder pressure with customer and competitor orientation are significant ( $\beta = -0.120, p = .029$ ;  $\beta = -0.121, p = .029$ ), while the one with technology remains insignificant (compare results of main analysis in Table 3).

Second, to approach the question if it is regulatory stakeholder pressure moderating strategic orientations or the other way around, we followed the suggestion of one of the reviewers and conducted split sample analyses. In that regard, we split our sample in a first analysis along the median of regulatory stakeholder pressure and in a second analysis along the median of strategic orientation and then compare the resulting models with each other (Iacobucci, Posavac, Kardes, Schneider, & Popovich, 2015). We observe that the models provide a slightly better fit for a split along regulatory stakeholder pressure. Splitting the sample along strategic orientation does not yield a sufficient goodness of fit under high strategic orientation. Thus, the split sample analysis seems to suggest regulatory stakeholder pressure as

the moderator and strategic orientation as the independent variable. We have to note that this analysis can only provide us with a rather vague tendency on the direction of moderation and thus should only be seen as a supplement to our theoretical reasoning (Aguinis, Gottfredson, & Wright, 2011; Aiken & West, 1991).

## 2.4. Results

We used a multivariate regression model to analyze multiple moderation effects with one dependent variable. Regression modeling is an adequate and widely used method for analyzing interaction effects (e.g., Anderson & Bateman, 2000; Darnall et al., 2010; Russo & Fouts, 1997), which are the focus of the current investigation. To avoid multicollinearity and for easy interpretation of interactions, we standardized all variables before creating interaction terms, as suggested by Aiken and West (1991). To sharpen our understanding of the moderating effect of regulatory stakeholder pressure on the relationship between strategic orientation and the pursuit of a PES, we plotted the significant interaction effects (**Figure 3**, **Figure 4**).

A stepwise approach was used to assess the model-fit change of each model. The stepwise procedure resulted in six models for the analysis, including customer, competitor, and technology orientation (**Table 4**). Model 1 includes the control variables and explains only a marginal amount of variance. Adding the strategic orientation variables (Model 2) provides a significant increase in the variance explained ( $\Delta$  adjusted  $R^2 = .044$ ,  $p = .000$ ). The results show that customer, competitor, and technology orientation all have a positive and significant association with the pursuit of a PES, thereby supporting our baseline hypotheses ( $\beta = 0.116$ ,  $p = .062$ ;  $\beta = 0.104$ ,  $p = .080$ ; and  $\beta = 0.115$ ,  $p = .068$  for H1a to H1c, respectively). Model 3 includes the moderator variable of regulatory stakeholder pressure; this does not significantly increase the variance explained. Regulatory stakeholder pressure has no significant first-order effect on the pursuit of a PES.

**Table 4.** Regression analysis

<b>Dependent Variable: Proactive Environmental Strategy</b>						
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
<b>Step 1: Control variables</b>						
Firm age	-0.003	0.000	0.007	0.016	0.004	0.008
Firm size <sup>a</sup>	-0.091	-0.103	-0.103	-0.113†	-0.107	-0.104
Governmental relations	0.108†	0.073	0.071	0.079	0.082	0.078
Business segment	0.021	0.030	0.018	0.021	0.019	0.015
Public utility	-0.088	-0.043	-0.051	-0.061	-0.055	-0.056
Innovation	0.054	-0.041	-0.037	-0.037	-0.033	-0.035
<b>Step 2: Independent variables</b>						
Customer orientation		0.116†	0.113†	0.108†	0.102	0.109†
Competitor orientation		0.104†	0.099†	0.089	0.102*	0.091
Technology orientation		0.115†	0.120†	0.117†	0.105*	0.126*
<b>Step 3: Moderator variable</b>						
Regulatory stakeholder pressure			0.043	0.044	0.022	0.044
<b>Step 4: Interaction variables</b>						
Customer orientation × regulatory stakeholder pressure				-0.113*		
Competitor orientation × regulatory stakeholder pressure					-0.117*	
Technology orientation × regulatory stakeholder pressure						-0.053
<i>F</i>	1.720	3.290***	3.020**	3.190***	3.220***	2.830**
Adjusted <i>R</i> <sup>2</sup>	0.012	0.056	0.055	0.065	0.065	0.055
Change in adjusted <i>R</i> <sup>2</sup>		0.044***	-0.001	0.010*	0.011*	0.000

Note. Standardized variables for interaction terms. Beta coefficients of the linear regression analysis are reported. <sup>a</sup>Natural logarithm of number of employees. †Significant at 10%; \*Significant at 5%; \*\*Significant at 1%; \*\*\*Significant at 0.1% (*n* = 349).

To test our moderation hypotheses and avoid multicollinearity between the product terms, we included the interaction terms consecutively in Models 4 to 6 (similar to, e.g., Aragón-Correa et al., 2013; Maekelburger, Schwens, & Kabst, 2012). Models 4 and 5 show a significant increase in the variance explained compared to Model 3 ( $\Delta$  adjusted *R*<sup>2</sup> = .010, *p* = .032;  $\Delta$  adjusted *R*<sup>2</sup> = .011, *p* = .028). We found that regulatory stakeholder pressure



significantly diminishes the relationship between strategic orientation and the pursuit of a PES. Thus, H2a-alt and H2b-alt, which assume that customer orientation and competitor orientation have a weaker association with PES when regulatory stakeholder pressure is high, are supported ( $\beta = -0.113, p = .032$ ;  $\beta = -0.117, p = .028$ ).

**Table 5.** Regression analysis with an aggregate measure of strategic orientation

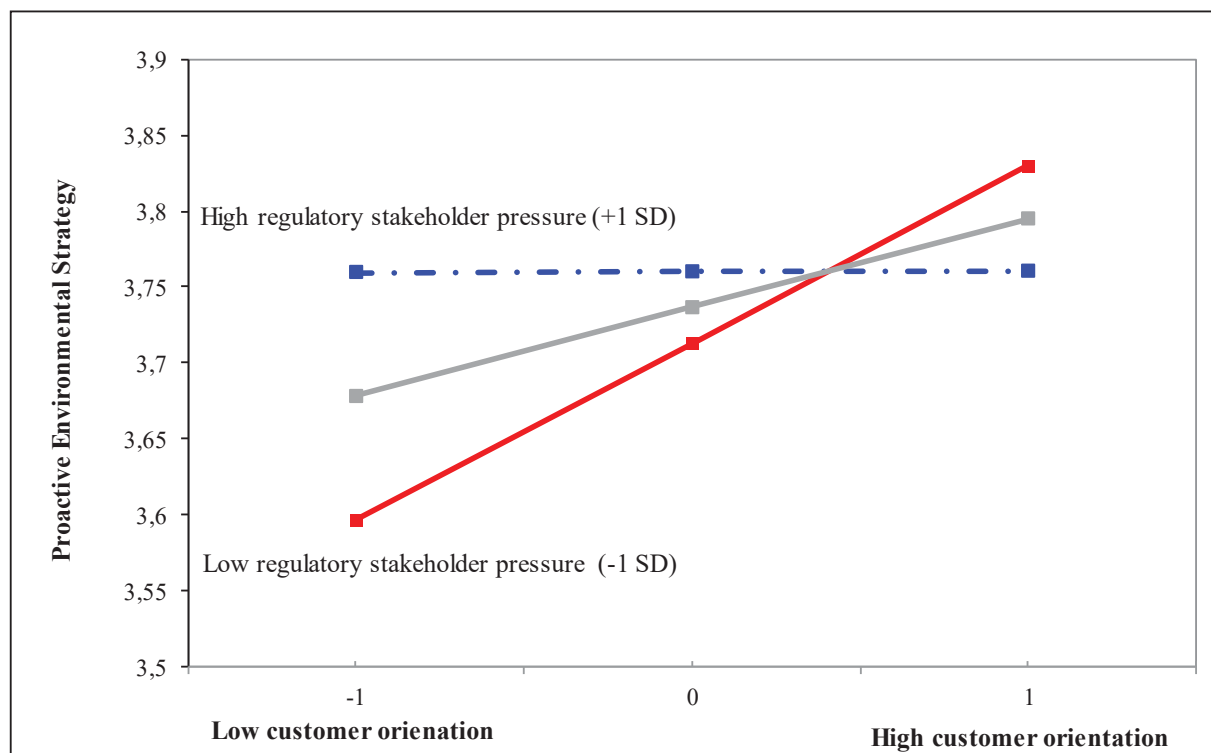
<b>Dependent Variable: Proactive Environmental Strategy</b>				
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
<b>Step 1: Control variables</b>				
Firm age	-0.003	0.000	0.008	0.010
Firm size <sup>a</sup>	-0.091	-0.108†	-0.106	-0.112†
Governmental relations	0.108†	0.073	0.071	0.086
Business segment	0.021	0.028	0.016	0.017
Public utility	-0.088	-0.042	-0.052	-0.063
Innovation	0.054	-0.044	-0.038	-0.033
<b>Step 2: Independent variables</b>				
Strategic orientation		0.253***	0.250***	0.233***
<b>Step 3: Moderator variable</b>				
Regulatory stakeholder pressure			0.044	0.036
<b>Step 4: Interaction variables</b>				
Strategic orientation × regulatory stakeholder pressure				-0.115*
<i>F</i>	1.720	4.230***	3.770***	3.920***
Adjusted <i>R</i> <sup>2</sup>	0.012	0.061	0.060	0.094
Change in adjusted <i>R</i> <sup>2</sup>		0.049***	-0.001	0.034*

*Note.* Standardized variables for interaction terms. Beta coefficients of the linear regression analysis are reported. <sup>a</sup>Natural logarithm of number of employees. †Significant at 10%. \*Significant at 5%. \*\*Significant at 1%. \*\*\*Significant at 0.1% ( $n = 349$ ).

In the case of H2c/H2c-alt, which assume that regulatory stakeholder pressure enhances/diminishes the relationship between technology orientation and the pursuit of a PES, no significant result was found. Thus, H2a to H2c and H2c-alt are not supported. Repeating the hierarchical regression analysis with a strategic orientation composite of customer, competitor, and technology orientation yielded similar results (Table 5). In Model 3, strategic orientation is

significantly associated with the pursuit of a PES ( $\beta = 0.250$ ;  $p = .000$ ). The interaction between strategic orientation and regulatory stakeholder pressure is also significantly connected with the pursuit of a PES, as shown in Model 4 ( $\beta = -0.115$ ;  $p = .030$ ).

**Figure 3.** Interaction effect between customer orientation and regulatory stakeholder pressure (H2a/H2a-alt)<sup>3</sup>



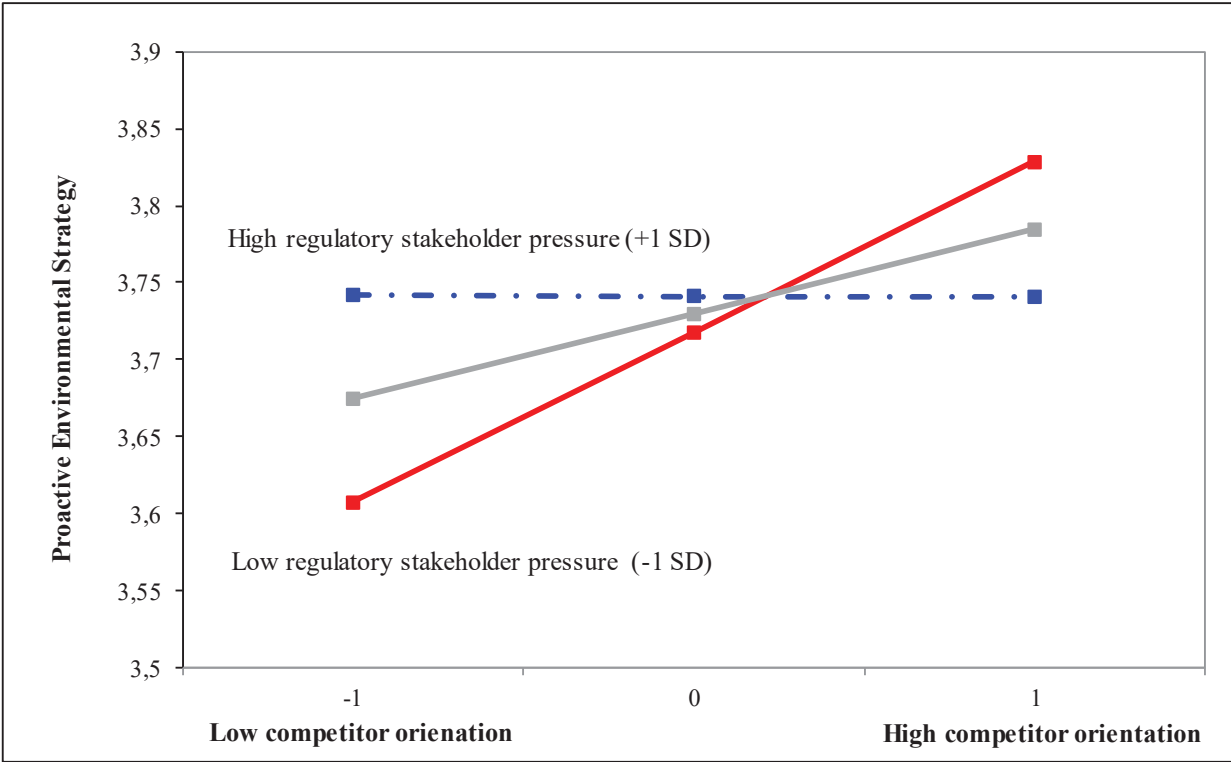
The plots of the interaction terms of customer and competitor orientation with regulatory stakeholder pressure support our findings and illustrate the nature of the moderation (**Figure 3**, **Figure 4**). **Figure 3** and **Figure 4** show that the relationships of customer and competitor orientation with the pursuit of a PES differ significantly according to the perceived level of pressure exerted by stakeholders within the regulatory context. Following Cohen, West, and Aiken (2003), we conducted simple slope analyses to test for the significance of the relationship between strategic orientation and PES at different levels of regulatory stakeholder pressure. We

<sup>3</sup> The results of the simple slope analyses show that the relationship between customer orientation and PES is significantly positive in situation of average ( $b = 0.06$ ,  $p = 0.079$ ) and low perceived regulatory stakeholder pressure ( $b = 0.12$ ,  $p = 0.006$ ), while the effect disappears for high perceived regulatory stakeholder pressure ( $b = 0.00$ ,  $p = 0.992$ ).

used one standard deviation (1 SD) above and below the moderator to visualize the interaction effect (Cohen et al., 2003).

The results for the customer and competitor orientations reveal that both orientations are only associated with the pursuit of a PES when perceived regulatory stakeholder pressure is low ( $b = 0.12, p = .006$ ;  $b = 0.11, p = .008$ ). Under high levels of perceived regulatory stakeholder pressure, customer and competitor orientation are not significantly related to the pursuit of a PES ( $b = 0.000, p = .992$ ;  $b = 0.00, p = .992$ ). Thus, the relationships of these strategic orientation are not only lowered but become nonsignificant if a firm’s management perceives high regulatory stakeholder pressure.

**Figure 4.** Interaction effect between competitor orientation and regulatory atakeholder pressure (H2b/H2b-alt)<sup>4</sup>



<sup>4</sup> The results of the simple slope analyses show that the relationship between customer orientation and PES is significantly positive in situation of average ( $b = 0.06, p = 0.086$ ) and low perceived regulatory stakeholder pressure ( $b = 0.11, p = 0.008$ ), while the effect disappears for high perceived regulatory stakeholder pressure ( $b = 0.00, p = 0.992$ ).

## 2.5 Discussion

In view of the importance of the regulatory context in firms' environmental management, we take the contingent RBV (Aragón-Correa & Sharma, 2003) to examine two competing theoretical perspectives of the contextual role of regulatory stakeholder pressure. The enhancing and buffering perspectives provide opposing explanations for how regulatory stakeholder pressure moderates the relationship between strategic orientation and the pursuit of a PES. Our empirical analysis shows that strong perceived regulatory stakeholder pressure weakens the relationship between strategic orientation and the pursuit of a PES. Thus, our results provide some guidance for future research in pointing to a flipside of regulatory stakeholder pressure – namely, the buffering perspective.

Taking a closer look at the detected interaction effects, simple slope analyses and interaction plots reveal that if perceived regulatory stakeholder pressure is high, the relationships between customer/competitor orientation and the pursuit of a PES disappear. Thus, our moderator analysis indicates that pressure exerted by the regulatory context not only weakens but also eliminates the relationship of customer and competitor orientation to the pursuit of a PES. Within a context in which regulatory stakeholder pressure is perceived as high, limited decision autonomy, lack of clarity regarding decisions' consequences, and a high number of diverging stakeholder demands create an unfavorable environment for strategically oriented firms to make use of their resources in the pursuit of a PES. These arguments and empirical results mirror the findings of Martínez-del-Río et al. (2015), who show that the relationship between organizational characteristics and the pursuit of a PES is strengthened when managers perceive the firm to be operating in a munificent business environment that allows for discretion.

By analyzing the moderating role of perceived regulatory stakeholder pressure on the internal organizational processes supporting firms in following a PES, our study contributes to the environmental management and regulatory literature in several ways. First, analyzing regulatory stakeholder pressure and its interplay with firms' strategic orientation in the pursuit of a PES from a contingent RBV perspective allows for a new and more distinctive integrative lens. We add to the previous environmental management research on the role of regulatory stakeholder pressure (e.g., Darnall, 2006; Delmas & Toffel, 2008; Menguc et al., 2010) by theoretically examining the influence of opposing – that is, enhancing and buffering – conditions of the external business environment on the relationship between organizational characteristics and PES. In lending support to the buffering perspective, our empirical results hint at a previously unobserved flipside of regulatory stakeholder pressure.

Thereby, we also extend the field of regulatory research, which has addressed the question of how regulatory legislation relates to organizational outcomes. Jaffe and Palmer (1997), for instance, found little empirical evidence for Porter (1991) hypothesis that stringency of environmental regulation triggers innovation. A framework proposed by Rugman and Verbeke (1998) conceptualized the relationship between different types of environmental regulations and firms' choice of environmental strategy. Triebswetter and Hitchens (2005) failed to uncover an impact of the stringency of environmental regulations on firms' competitiveness in Germany. Our findings may point to an opportunity to take a different angle, namely a contingent perspective that proposes a moderating role of the regulatory context.

Through our study, we demonstrate that the contingent RBV framework proposed by Aragón-Correa and Sharma (2003) offers a systematic understanding of boundary effects. Thus, the contingent RBV could be valuable for future research on the moderating role of (perceived) legislative context in organizational processes. Additionally, we show that the contingent RBV might not only explain the contingent role of general business environment characteristics (e.g.,

Martinez-del-Rio et al., 2015; Sharma et al., 2007) but could also apply to specific stakeholder influences or other institutional pressures. Hence, our research extends the literature on the organization-environment interface and supplements recent efforts to provide empirical evidence for the theoretical contingent RBV framework developed by Aragón-Correa and Sharma (2003) (e.g., Martinez-del-Rio et al., 2015; Sharma et al., 2007).

Second, our findings underline the importance of managers' perception of pressure stemming from the general business environment, adding to other studies that emphasize the role of managers' receptivity to stakeholder pressure (e.g., Delmas & Toffel, 2004; Sharma & Henriques, 2005). This corroborates the contingent RBV of the firm and adds to our understanding of why two separate firms with similar organizational characteristics might develop different environmental strategies.

In case of highly perceived regulatory stakeholder pressure, managers of strategically oriented firms might expect turning the pursuit of a PES into a competitive advantage to be difficult. Instead, they may attribute more importance to sustaining their legitimacy with regulatory stakeholders, since exhibiting nonconformity can seriously endanger viability (DiMaggio & Powell, 1983; Kassinis & Vafeas, 2006). The conditional effect of the business environment indicates that, in the case of high regulatory stakeholder pressure, firms' self-driven motivation to achieve a competitive advantage is crowded out by an external intervention, similar to the effects predicted by motivational crowding theory (Frey & Oberholzer-Gee, 1997). Hence, the intrinsic motivation of a strategically oriented firm's management to follow a PES to gain a competitive advantage is, to a certain extent, weakened by the firm's extrinsic need to align with its regulatory context to gain legitimacy. Thus, our results might point to an opportunity for the regulatory literature to more closely consider subjective or perceived regulatory pressure in addition to the objective strength or type of regulation. The work of López-Gamero et al. (2010) supports our findings by providing the first

evidence of how the dual consideration of subjective and objective measures adds to our knowledge on the impact of environmental policies.

Our results have several implications for future research on PESs. First, this study illustrates the complexity of regulatory frameworks. While regulatory stakeholder pressure might push some firms toward the adoption of an environmental strategy (Darnall, 2006; Sharma et al., 2007), it might undermine prospector firms' use of their resources, processes, and routines to take a proactive approach toward environmental issues. Although we observed a buffering moderating effect of perceived regulatory stakeholder pressure, we acknowledge that regulatory forces cannot be assumed to have a negative effect on firms' environmental management per se. Pressure from the regulatory context might still cause reactive or defensive firms to undertake environmental management, as shown by Murillo-Luna et al. (2008). Nevertheless, we suggest that future research should take a more nuanced view of the regulatory–environmental management debate.

The past literature has mostly been focused on how to induce or pressure firms to adopt appropriate environmental practices (e.g., Darnall et al., 2010; Davidson & Worrell, 2001; Kassinis & Vafeas, 2006). Future efforts should include the question of what happens to those firms that choose to behave in an environmentally friendly manner even in the absence of regulation. We encourage future environmental management research to take a closer look at the double-edged sword of the regulatory context.

Second, while we found broad empirical support for theoretical assumptions concerning the buffering perspective, the contextual role of regulatory stakeholder pressure cannot be confirmed in terms of the relationship between technology orientation and the pursuit of a PES. Although the enhancing and buffering perspectives predict mutually exclusive organizational behavior, in the case of technology-oriented firms, some submechanisms might overlap and potentially neutralize one another. This may be particularly true for a high technology

orientation, which implies a substantial investment in maintaining the ability to acquire technological know-how and in advancing technological products and processes (Aragón-Correa, 1998). From the enhancing perspective, more stringent governmental regulations might induce firms to continue pursuing a PES in a bid to reduce the risk of unforeseen refitting costs (Bansal & Roth, 2000), and such firms may even seek to prevent stricter environmental legislation (Decker, 2005; Delmas & Toffel, 2008; Maxwell & Decker, 2006). From the buffering perspective, realizing a continuous competitive advantage from technological know-how is difficult in the presence of high environmental standards. Thus, whether managers' perception of regulatory stakeholder pressure influences the association between firms' technology orientation and the pursuit of a PES might depend on the firms' financial slack and decreasing marginal returns. To a certain extent, firms might aim to deter rigorous legislation when they perceive regulatory stakeholder pressure to be high. However, when financial slack is limited and regulatory stakeholder pressure produces high standards with regards to environmental practices in the industry, technology-oriented firms might not view pursuing a PES as a promising way to differentiate from competitors. Some technology-oriented firms might expect that decreasing marginal returns would obscure the possibility of realizing a competitive advantage through the pursuit of a PES. These reverse considerations could explain why we did not empirically detect a moderating effect of perceived regulatory pressure on the link between technology orientation and the pursuit of a PES. Thus, it might be worthwhile to expand research on the reciprocal relationships between business and the regulatory context (e.g., Baysinger, 1984; Bonardi & Keim, 2005) in the environmental management literature.

Third, in contrast to previous research (e.g., Darnall et al., 2010; Delmas & Toffel, 2008), our findings do not show a significant direct relationship between regulatory stakeholder pressure and the pursuit of a PES. This divergence in results might reflect a change in environmental attitudes. Environmental issues have gained prominence as investors and



customers are increasingly rewarding firms for responsible behavior regarding the environment (Flammer, 2013). Hence, our results might indicate that it is not the external pressure, but rather the strategic value, that leads managers to engage in a PES (see positive coefficient of strategic orientation, *Table 5*). Although the managers in our sample do perceive external pressure from regulatory stakeholders (mean score of 3.42, *Table 3*), this did not seem to evoke proactive attitudes and behaviors.

Additionally, previous research findings show that the influence of the regulatory set-up depends on the type of regulation in place. Voluntary norms rather than command-and-control regulatory systems were found to be positively related with the pursuit of a PES (López-Gamero et al., 2010). As the German environmental regulatory framework is dominated by technology-requiring regulations and standards (Organization for Economic Co-operation and Development, 2012), managers' perception of regulatory stakeholder pressure might not lead to the pursuit of a PES in our sample. We have to note that the above interpretations of a nonsignificant effect must be treated with great caution, as a nonsignificant effect does not prove that the effect does not exist (Cashen & Geiger, 2004). Countervailing mechanisms might have caused our finding.

Nevertheless, our results prompt future research in the environmental management field to disentangle the objective effects of regulations from the subjective perception of them. Such research could reveal how managerial perception mediates the effect of regulation on the environmental decision-making process. Additionally, the flipside of regulatory stakeholder pressure as a buffering condition, might at first glance be viewed as very specific to the German context. The potential boundary role of the regulatory framework is, however, valuable for future research, as it reveals potential unwanted side-effects of policy making. Thus, future research on this issue would generate knowledge about how environmental policies could be shaped more effectively to increase firms' engagement in proactive environmental behavior.

## 2.6 Limitations and Practical Implications

As with all studies, there are limitations to our approach that must be addressed and provide grounds for future research. First, the cross-sectional design of the study requires a cautious interpretation of the results, as it is not possible to discern causality among our hypothesized relationships. While we believe that our survey study significantly improves the understanding of the contingencies regarding the link between strategic orientation and the pursuit of a PES, additional longitudinal studies would be useful. By looking at longitudinal data, future studies could investigate how changes in the regulatory context affect the role of a firm's strategic orientation in managerial decision making concerning environmental issues. Thereby, the environmental management field could gain insight into how managers adapt their environmental strategy to the dynamics of the general business environment, which is key to the contingent RBV.

Second, our study has investigated contextual influences via a moderated multiple regression. Although this is an appropriate and accepted method for analyzing contingencies (e.g., Darnall et al., 2010; Rueda-Manzanares et al., 2008), the use of an experimental research design in future research would enhance our causal understanding of how managerial decision making concerning PES relates to managers' perception of the general business environment. Following the contingent RBV, different experimental conditions could be used to address the characteristics of a business environment: uncertainty, complexity, and munificence (Aragón-Correa & Sharma, 2003; Dess & Beard, 1984).

Third, following Slater et al. (2006), we could interpret a firm's strategic orientation to be a moderator. Hence, the association between regulatory stakeholder pressure and the pursuit of PES would depend on a firm's strategic orientation. More precisely, when a firm is highly strategically oriented, regulatory stakeholder pressure would not be related to the pursuit of a

PES.<sup>5</sup> However, for firms whose strategic orientation is low, regulatory stakeholder pressure would indeed be associated with the pursuit of a PES.<sup>6</sup> We acknowledge that this alternative interpretation of the interaction between strategic orientation and regulatory stakeholder is possible. Since there is no definite empirical solution to what moderates what, we find a more solid theoretical reasoning in Aragón-Correa and Sharma (2003) contingent RBV for our choice of model. Moreover, we see much value in placing the role of regulatory stakeholder pressure at the fore, as the regulatory framework and how it is perceived play a very crucial role in environmental management (Banerjee, 2001; Henriques & Sadosky, 1996, 1999). We believe that the regulatory context has been underrepresented in contextualizing firms' internal drivers of PES.

Fourth, we focused our analysis on stakeholder pressures in the regulatory context because this stakeholder group is highly crucial to environmental management (Banerjee, 2001; Henriques & Sadosky, 1999). It would be worthwhile to expand the analysis to pressures arising from other market and nonmarket constituents, such as the media, industry, or trade associations (Buysse & Verbeke, 2003; Doh & Guay, 2006).

Fifth, our sample might be particular in two respects: Sampled firms operate in the energy sector and the majority is engaged in renewable energies. Thus, the sampled firms act in a more highly regulated business environment and firms might show a greater attention to natural environment than firms in other sectors (see method section). Both aspects could influence the generalizability of our results. To receive a tentative idea if this is an issue to our

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<sup>5</sup> Simple slope analyses show that regulatory stakeholder pressure is not significantly associated with the pursuit of a PES if customer orientation is high (+1 *SD*;  $b = -0.03$ ,  $p = .396$ ), nor if competitor orientation is high (+1 *SD*;  $b = -0.04$ ;  $p = .308$ ).

<sup>6</sup> Simple slope analyses show that regulatory stakeholder pressure is positively linked to the pursuit of a PES if customer orientation is low (-1 *SD*;  $b = 0.08$ ,  $p = .046$ ) or if competitor orientation is low (-1 *SD*;  $b = 0.07$ ;  $p = .065$ ).

analyses, we repeated our analysis without the most regulated firms, namely public utilities. Results on the crowding-out effect remain consistent, backing up our findings.

Since renewable energy firms tend to be younger, we included a control variable for age which has a nonsignificant effect. Following these tests, the sample seems to allow for a cautious interpretation of our results. However, issues of generalizability remain and future studies should include other, less regulated industries to add to our understanding. Sixth, our study relies on self-reported data from one person per firm. To account for this issue, we distributed a second questionnaire to some of the responding firms. The high consistency values between the first and second respondents lend support to the validity and reliability of our findings and reduce the risk of single-respondent bias. Nevertheless, we see theoretical value in including multiple perspectives in the analysis of a PES.

With regard to practical implications, the contributions of our study are twofold. First, if managers' perceptions of the influence of stakeholders in the regulatory context play such an important role in firms' stance on environmental issues, policy makers may be advised to improve transparency in the legislative process and the resulting regulations. Flexibility and clarity might help policy makers increase efficiency in enacting policy, as well as the effectiveness of regulations for promoting the use of advanced environmental management practices in firms (Engau & Hoffmann, 2009). In light of Germany's ambitious climate targets, improved incentivization of economic participants is one of the cornerstones of the energy transition. In sum, the continuously tightening regulatory framework seen worldwide with regard to environmental issues underlines the need for researchers, managers and policy makers to improve their understanding of how external constraints affect the internal processes that induce organizations to pursue a PES.

Second, a clear understanding of the factors that influence managerial decision making in strategically oriented firms is crucial for policy makers, as those firms might serve as

benchmarks for other market players (Narver & Slater, 1990). Knowing that flagship organizations might lose their self-driven approach to environmental issues due to perceived pressure might cause policy makers rethink policy design. Policies that emphasize moving toward the desired behavior rather than command-and-control approaches could provide more flexibility and thereby increase managerial discretion in strategic decision making. This could be beneficial for both business and legislative performance contributing to the solution of global environmental issues

# CHAPTER 3 | Does Corporate Social Responsibility (always) Help to Attract and Retain Employees? A Meta-Analysis<sup>7</sup>

## Abstract

Interest in the effect of corporate social responsibility (CSR) on stakeholders, particularly on potential and current employees, has been increasing over the last three decades; however, the literature remains fragmented. This paper structures the field of CSR-Human Resource Management (HRM) research by integrating two important streams into a meta-analytic review of the role of CSR in attracting and retaining employees. This adds to the CSR-HRM literature by joining research on two crucial and related stakeholder groups, current and potential employees. Moreover, the paper answers calls for more contextualization in CSR research by examining how the institutional context conditions the effect of CSR on attracting and retaining employees. The results of the meta-analysis suggest that CSR is positively related to organizational attractiveness ( $\hat{r} = 0.36$ , 21 studies) as well as to employee attitudes and behavior ( $\hat{r} = 0.40$ , 50 studies). However, these effects are heterogeneous. Institutional level factors concerning the strength of the regulatory framework and governmental intervention particularly affect the ability of firms to attract potential employees through CSR. Moreover, the effect of CSR on employee attitudes and behavior is stronger for CSR practices than for CSR principles.

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<sup>7</sup> This chapter is co-authored by Matthias Baum, Rodrigo Isidor, Rüdiger Kabst and was accepted at the Academy of Management Annual Meeting 2017 and is published in the proceedings of the same conference in an earlier version.

### 3.1 Introduction

Corporate social responsibility (CSR) is defined as “context-specific organizational actions and policies that take into account stakeholders’ expectations and the triple bottom line of economic, social, and environmental performance” (Aguinis, 2011, p. 855) and has intrigued scholars for decades (Aguinis & Glavas, 2012). Discussions on the concept and operationalization of CSR characterize early works in the field of CSR research (Wood, 2010). Later, extensive research was conducted on the relationship between CSR and corporate financial performance (CFP) (Pelozo, 2009). In the past decade, scholars have increasingly recognized the importance of CSR for human resource management (HRM) (De Roeck & Maon, 2018; Hofman & Newman, 2014; Rupp, Shao, Thornton, & Skarlicki, 2013).

Analyzing how CSR affects potential and current employees is a worthwhile endeavor, since these two stakeholder groups of HRM are crucial to a company’s success (Wood & Jones, 1995). First, employees’ knowledge, skills, and abilities are important resources that enhance competitive advantage and long-term firm success (Jiang, Lepak, Hu, & Baer, 2012; Wright, Ferris, Hiller, & Kroll, 1995). Second, in the context of socio-demographic changes, finding the most capable employees and attracting them to staying employed for the company for a long-term challenges companies more than ever (Ng & Burke, 2005).

While research on the effects of CSR on potential and current employees has proliferated (Aguinis & Glavas, 2017; De Roeck & Maon, 2018), examinations of the two groups of stakeholders have remained rather separate. Moreover, despite enhanced understanding of the role of CSR in employer branding and as a motivational factor (e.g., Dögl & Holtbrügge, 2014; Du, Bhattacharya, & Sen, 2015; Hofman & Newman, 2014), limited knowledge about the boundary conditions persists. Multi-level and contextual perspectives are particularly scarce in analyzes of the effects of CSR on stakeholders (Aguinis & Glavas, 2012;

Wang, Tong, et al., 2016). How do relationships between CSR and potential as well as current employees compare? How do these relationships differ depending on the institutional settings in which organizations and stakeholders act?

To answer these questions, the current study first synthesizes the literature on the effect of CSR on potential and current employees. Second, we meta-analyze how CSR influences the evaluation of organizational attractiveness by potential employees as well as the attitudes and behavior of current employees (e.g., commitment, job satisfaction, reduced turnover intention). Third, we analyze whether the relationships between CSR and organizational attractiveness as well as CSR and employee outcomes are contingent upon institutional level moderators related to formal institutions (e.g., rule of law, governmental intervention). As a social phenomenon, CSR does not exist in a vacuum but depends on the company's institutional environment, particularly the regulatory and governmental setting (Brammer, Jackson, & Matten, 2012; Matten & Moon, 2008). Accordingly, the institutional context is a crucial contingency in observing the impact of CSR (Wang, Tong, et al., 2016).

This study contributes to the CSR literature in two important ways. First, meta-analytically determining the effect sizes of CSR on organizational attractiveness and employees' attitudes and behavior integrates two streams of research that join to create an HRM perspective on CSR. This achieves a more complete perspective on the role of CSR for HRM providing a structured starting point for an otherwise fragmented field of research (De Roeck & Maon, 2018). A structured perspective can be useful, for instance, to a currently growing strand of research on the role of HRM for CSR (De Stefano et al., 2018). Second, integrating institutional level moderators in the analysis addresses the need for multi-level models of CSR (Aguilera, Rupp, Williams, & Ganapathi, 2007; Aguinis & Glavas, 2012; Lindgreen & Swaen, 2010) and dismantles a micro-macro divide in CSR research (Aguinis, Boyd, Pierce, & Short,



2011). Finally, the findings from the meta-analysis reveal gaps in the literature and flesh out future research avenues.

## **3.2 The Relationship between CSR and HRM Stakeholders**

Today, research on the role of CSR for HRM is vast and draws on multiple theoretical perspectives (De Roeck & Maon, 2018; Voegtlin & Greenwood, 2016). Interest in the relationship between CSR and HRM stakeholders (potential and current employees) emerged from a broadened understanding of relevant outcomes of CSR. At the end of the 1990s, the guiding question of CSR research evolved from whether companies should engage in CSR (e.g., Cochran & Wood, 1984; McGuire, Sundgren, & Schneeweis, 1988) to how engaging in CSR influences a company's relationship with important stakeholders (e.g., Maignan, Ferrell, & Hult, 1999; Waddock & Graves, 1997).

Employees are part of the group of primary stakeholders with well-established claims on organizational resources (Jones, 1999). In this vein, researchers wondered if CSR could be a means of achieving competitive advantage in attracting (e.g., Albinger & Freeman, 2000; Turban & Greening, 1997) and retaining employees (e.g., Brammer, Millington, & Rayton, 2007; Koh & Boo, 2001). While recent reviews have structured perspectives on the effects of CSR to align with current employees' attitudes and behaviors (e.g., Aguinis & Glavas, 2017; De Roeck & Maon, 2018), research on both potential and current employees remains disintegrated. However, similarities and differences in mechanisms that explain the connection between CSR and the two HRM stakeholder groups might provide valuable insights for both.

### **3.2.1 CSR and Organizational Attractiveness**

Most prominently drawing on signaling theory, CSR research suggests that a company's devotion to CSR positively influences potential employees' evaluation of a company as an attractive employer (e.g., Albinger & Freeman, 2000; Backhaus et al., 2002; Greening &

Turban, 2000; Turban & Greening, 1997). Signaling theory (Rynes, 1991; Spence, 1978) informed an understanding of the relationship between employer and potential employees, in terms of information asymmetries (Highhouse, Thornbury, & Little, 2007). Potential employees have incomplete information about a potential employer (Celani & Singh, 2011). Thus, an applicant will use all available information concerning the potential employer as a signal of expected working conditions (Breugh, 1992; Rynes, 1991).

CSR might serve as an important carrier of information for potential employees to assess the employer with respect to attributes of their future work environment (Backhaus et al., 2002). CSR carries informational cues about organizational values, beliefs, and practices (Greening & Turban, 2000; Jones & Murrell, 2001), insofar as it implies how a company relates to employees, customers, the community, the natural environment, and competitors (Carroll, 1999). Thus, CSR might convey potential benefits of employment by the company, suggesting that CSR increases organizational attractiveness due to the expected positive treatment of employees at the company (Jones, Willness, & Madey, 2014; Lis, 2012). Moreover, CSR might signal fair treatment within the organization and thus affect potential employees' evaluation of the company through perceived overall justice (Joo, Moon, & Choi, 2016). Regarding CSR values and activities related to other stakeholders than employees, job applicants may favor an employer if they anticipate pride in the organization's care for stakeholders such as the community and the environment (Jones et al., 2014).

In addition to signaling theory, studies of the effect of CSR on organizational attractiveness use arguments drawn from social identity theory (e.g., Backhaus et al., 2002; Greening & Turban, 2000), which assert that people tend to classify themselves and others in different categories (Ashforth & Mael, 1989). For example, employment by a company having certain ethical convictions becomes a meaningful category (Tajfel & Turner, 1986). The perceived identity of a group influences the self-concept of its members (Ashforth & Mael,

1989). By identifying with successful groups and comparing them with inferior groups, individuals feel a validation of their self-concept (Smith, Wokutch, Harrington, & Dennis, 2001).

Thus, following the arguments of social identity theory, CSR has a positive influence on organizational attractiveness, as potential applicants hope for an enhanced self-concept through employment in a socially committed and highly reputable company (Turban & Greening, 1997). Furthermore, in view of raising awareness about social and environmental issues, some scholars propose that CSR allows an opportunity for a perceived fit in values between potential employees and the employer (Aiman-Smith, Bauer, & Cable, 2001; Albinger & Freeman, 2000; Zhang & Gowan, 2012). Thus, derivative arguments from signaling and social identity theory represent previous research suggesting that CSR and organizational attractiveness are positively related.

**Hypothesis 1:** Companies engagement in CSR is positively related to organizational attractiveness.

### 3.2.2 CSR and Employee Attitudes and Behavior

Similar to some viewpoints on the relationship between CSR and organizational attractiveness, research about the role of CSR in employee attitudes and behavior commonly draws on a social identity perspective (e.g., Brammer et al., 2007; Turker, 2008; Vlachos, Panagopoulos, Theotokis, Singh, & Singh, 2014). Because the dominant theory in the research on the CSR-employee relationship overlaps with arguments concerning the relationship between CSR and potential employees, main mechanisms reappear to argue for a positive relationship between CSR and current employees.

Scholars argue that employee-centered CSR in particular creates job satisfaction and reduced turnover intention because CSR practices can imply positive working conditions

(Brammer et al., 2007; Turker, 2009; Vlachos et al., 2014). CSR practices integrated into HRM, such as fair wages, a clean and safe work environment, training opportunities for employees, provision of child care, flexible working hours, and job sharing, lead to stronger perception of overall justice in employment, higher levels of organizational commitment, and, as a result, to increased employee productivity (Branco & Rodrigues, 2006; De Roeck & Maon, 2018). Additionally, engagement in CSR reflects a company's care for a broader range of stakeholders and thereby proposes a long-term orientation toward not only the well-being of the organization, but also of society (Turker, 2008). As employees perceive, experience, or even become involved in the company's concern for fair treatment of stakeholders such as suppliers, they are likely to develop an identification with and pride in the organization (Brammer et al., 2007; Newman, Nielsen, & Miao, 2015). More recently, researchers argue that CSR provides meaningfulness at work and thereby fulfills developmental and ideological needs of employees (Aguinis & Glavas, 2017; Du et al., 2015). Accordingly, signaling theory and further arguments from previous research suggest that CSR and current employee attitude and behavior are positively related.

**Hypothesis 2:** Companies engagement in CSR is positively related to current employee attitudes and behavior.

### 3.2.3 Moderating Effects: Rule of Law and Governmental Intervention

From an institutional perspective, the present study proposes that the institutional environment provides important contextual factors for the relationship between CSR and organizational attractiveness, as well as the relationship between CSR and employee attitudes and behavior. Firms do not operate in a vacuum, but are embedded in an institutional environment that influences organizational practices (DiMaggio & Powell, 1983; Zucker, 1987). An organization's survival depends on the extent to which organizational behavior mirrors formal rules and the system of norms, values, and beliefs prevalent in its institutional

field (Meyer & Rowan, 1977b). Past research has highlighted that companies within a common institutional field establish a similar understanding and CSR practices (e.g., Campbell, 2007; Matten & Moon, 2008; Nikolaeva & Bicho, 2011). In particular, regulations and governmental intervention shape the meaning and understanding of CSR (Arya & Zhang, 2009; Campbell, 2007; Young & Marais, 2012). Thus, past research has contributed to our knowledge about the influence of regulatory and governmental institutions on organizational practices of CSR.

However, others argue that regulatory and governmental institutions also play a role in the interpretation of CSR by a company's stakeholders. For instance, regulatory and governmental interventions influence investor assessment of a company's CSR by a strongly regulatory institutional environment that provides general guidance for them when it is difficult to estimate companies' "true" engagement in CSR (Doh, Howton, Howton, & Siegel, 2009). Similarly, the present study proposes that the institutional context, i.e. the extent of rule of law and governmental intervention, also influences the interpretation of CSR by potential and current employees, thus moderating the effect of CSR on organizational attractiveness, as well as on employee attitude and behaviors. More precisely, rule of law and governmental intervention might strengthen the effect of CSR on HR stakeholders.

Rule of law is a norm of governance and encompasses the societal respect for laws and legal protection of property rights (Licht, Goldschmidt, & Schwartz, 2007). In a context of weak rule of law, property rights are not secured and corruption defines exchanges with authorities (Miller & Kim, 2016). If formal institutions such as rule of law are weak, exchange partners in an institutional field need to rely on trust (Yu, Beugelsdijk, & de Haan, 2015). Findings from marketing research, show that the effect of CSR on consumer evaluations of a company is mediated by trust in the company's activities and the belief in its "true" engagement in CSR (Kim, Hur, & Yeo, 2015; Park, Lee, & Kim, 2014). Thus, while the effect of CSR on stakeholders depends on the credibility of the sending company, rule of law in an institutional

field could outweigh the need for trust as it increases the general reliance on regulated exchange and value in transparency (Licht et al., 2007).

A parallel rationale should apply to the relationship between CSR and HR stakeholders. In a less protected and more corrupt institutional environment, potential as well as current employees might trust less the presence and effectiveness of CSR. In such an environment, politicians and officials are more likely to “take their stake” from investments into CSR. In a contextual environment marked by weaker rule of law, both, expectations and possibilities for unfolding CSR will decrease and, thus, the effect of CSR on organizational attractiveness and employee attitude and behavior should be lower. In an institutional environment marked by strong rule of law, companies’ CSR signaling gains in strength and therefore increases its effect on potential and current employees, because current and potential employees expect companies to stick to their promises, and corruption itself does not characterize economic exchanges. Although current employees might be insiders of the organization, their ability to observe a company’s compliance with communicated CSR activities might still be limited. For instance, the fair treatment of suppliers or reductions in environmental emissions are difficult to assess if the employees are not directly working in the department involved. Thus, in their identity building current employees might equally rely on trust in the company’s signal and a strongly regulated environment could strengthen their trust in a company’s CSR. Taking these arguments together, leads to the following hypotheses:

**Hypothesis 3a:** Rule of law positively moderates the relationship between CSR and organizational attractiveness.

**Hypothesis 3b:** Rule of law positively moderates the relationship between CSR and employee attitudes and behavior.

Further, this study proposes that governmental intervention has a strengthening effect on the relationship between CSR and organizational attractiveness, as well as on the relationship between CSR and employee attitude and behavior. In an institutional field where tax burden and governmental expenditures are high, the state is likely to include a stronger welfare system covering many social and environmental issues (Aguilera et al., 2007). Thus, greater governmental intervention might imply that the government are the main actor in societal welfare, while private actors such as companies are not expected to take as strong a role in CSR (Matten & Moon, 2008). For instance, the institutional field in the United States, framed by discretionary agency, has led to a form of explicit CSR that is strongly communicated and focuses much on employee benefits not covered by the state (Brammer et al., 2012). In contrast, the institutional field in Europe tends to be marked by instituting obligations and obligatory agency, and a form of implicit CSR not as expressively communicated (Matten & Moon, 2008).

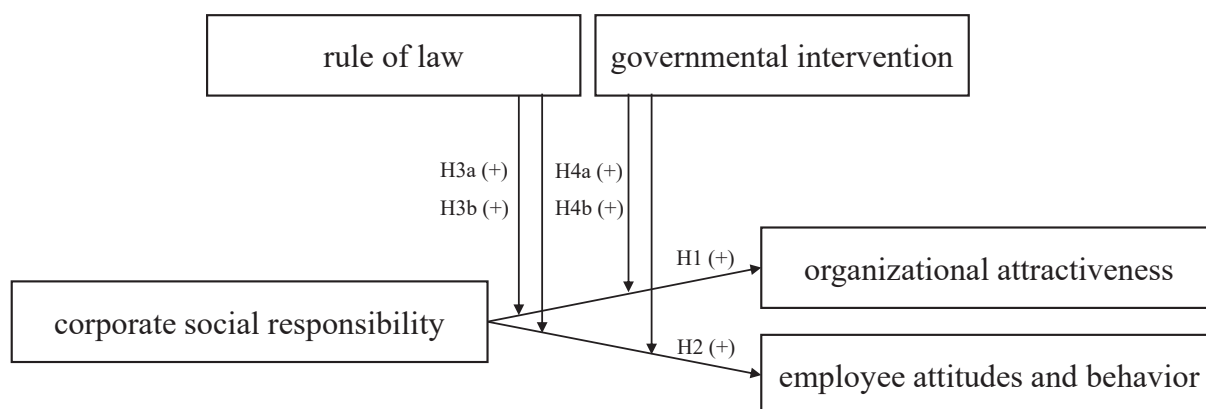
Whereas explicit CSR might produce clearer signals to stakeholders, the signals might not as effectively provide a competitive advantage in a context where explicit CSR is the norm. Instead, companies in an institutional field where high governmental intervention and implicit CSR are more common show and communicate a great level of CSR that potential and current employees might more likely perceive. Potential and current employees might value companies' CSR activities because they do not expect companies to take a voluntary role in care for stakeholders. If the government provides for a baseline of societal well-being, CSR will have to exceed basic benefits to offer potential and current employees substantial value. In this way, CSR in an institutional environment marked by high governmental intervention might be more visible to potential and future employees, so that CSR is a stronger signal to them. Moreover, in countries with greater governmental intervention, CSR might fit the solidarity principle that promotes interest in the collective good the government supports (Matten & Moon, 2008). Therefore, CSR in an environment of high governmental intervention might more

easily contribute to building a social identity for current employees as they perceive a fit with the values of a welfare society. Following these arguments, this study proposes:

**Hypothesis 4a:** Governmental intervention positively moderates the relationship between CSR and organizational attractiveness.

**Hypothesis 4b:** Governmental intervention positively moderates the relationship between CSR and employee attitudes and behavior.

*Figure 5.* Conceptual model with hypotheses



### 3.3 Methods

#### 3.3.1 Sample

The meta-analysis includes empirical studies that were either scenario-based or field studies in the management literature and included variables that fit definitions of CSR and organizational attractiveness (Highhouse, Lievens, & Sinar, 2003) or employee attitude and behavior (e.g., Mael & Ashforth, 1992; Meyer & Allen, 1991; Mowday, Steers, & Porter, 1979), respectively.

Searches for articles within titles, abstracts and keywords on an electronic database from 1945 to 2016 (EBSCO; ScienceDirect and Web of Science) identified studies by using all combinations of keywords that described the independent variable CSR (i.e.: *corporate social performance, corporate social responsibility, corporate environmental responsibility,*



*corporate environmental performance*) with terms for one of the two dependent variables, organizational attractiveness (i.e.: *organizational attractiveness, organisational attractiveness, intention to apply*) or employee attitude and behavior (i.e.: *organizational commitment, organisational commitment, employee commitment, job pursuit, job satisfaction, intention to leave, turnover*). Second was a check for reference lists from previous qualitative and meta-analytical reviews (e.g., Aguinis & Glavas, 2012; Margolis, Elfenbein, & Walsh, 2007; Orlitzky et al., 2003; Wood, 2010).

Studies included in the meta-analysis had to comply with the following inclusion criteria: a) the relationship between at least one aspect of CSR and at least one of the dependent variables, b) sample sizes and outcome statistics (e.g.,  $r$ , univariate  $F$  or  $t$  statistics) that allowed the computation of a weighted average correlation coefficient (Peterson & Brown, 2005; Rosenthal & DiMatteo, 2001) and c) studies had to be in English. Based on these criteria, the sample for examining the relationship between CSR and organizational attractiveness included 21 independent studies from 17 articles with 74 effect sizes (**Appendix 2**). The sample for examining the relationship between CSR and employee attitude and behavior encompassed 50 independent studies from 45 articles with 174 effect sizes (**Appendix 3**). To account for dependencies among effect sizes across and within studies, we did not include equivalent datasets across studies. That is, we included only studies that had used independent samples. In addition, because many studies used several measures of the same construct, a three-level meta-analysis was applied, explained in more detail in the meta-analytic procedure section (Cheung, 2014; Konstantopoulos, 2011).

### 3.3.2 Variables

For each study in the sample, the researchers coded the correlation coefficient estimate of the CSR-organizational attractiveness relationship or CSR-employee attitude and behavior relationship and the respective sample size. If sample sizes corresponding to each correlation

coefficient within a study differed, the minimum of the multiple sample sizes was coded. To improve coding accuracy, the first author established a coding scheme which was successively improved in an iterative manner through discussions within the team of authors. The **Appendix 1** lists all studies and the respective coding according to the constructs included in the research model.

### **Independent variable**

*Corporate Social Responsibility.* To identify appropriate correlations for the meta-analyses, variables in the sampled studies had to fit into the definition of CSR: “context-specific organizational actions and policies that take into account stakeholders’ expectations and the triple bottom line of economic, social, and environmental performance” (Aguinis, 2011, p. 855). Variables did not have to measure all facets at once (e.g., economic, social and environmental performance). Differences between these facets of CSR were checked in the moderator analyses.

### **Dependent variables**

*Organizational attractiveness.* Organizational attractiveness was specified by summarizing three categories in accordance with prior meta-analysis of the antecedents of applicant attraction (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). The first category encompassed job-pursuit intentions and attractiveness perceptions, reflecting all variables that measure the wish of an applicant to apply to an organization. An example of such an item is "I would make RLA, Inc. one of my first choices as an employer" (Behrend, Baker, & Thompson, 2009, p. 345). The second category included variables that measured the probability of an applicant engaging in a job interview. This probability is generally assessed by determining the number of applicants that complete this portion of the application process (Gatewood, Gowan, & Lautenschlager, 1993; Turban & Cable, 2003). The third category encompassed variables

that assessed the choice to be employed by the company measured by the final acceptance or refusal of a job offer by an applicant at the end of the interviewing process (Bourhis & Mekkaoui, 2010).

***Employee attitude and behavior.*** Our employee attitude and behavior were operationalized by including variables such as organizational commitment, job satisfaction, positive behavior in the job and reduced turnover intentions (reversely coded for the meta-analysis). Although all these variables reflect distinct constructs, previous meta-analyses show that they are all highly intercorrelated and display various facets of employee attitudes or behaviors (Fassina, Jones, & Uggerslev, 2007; LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff, Whiting, Podsakoff, & Blume, 2009) allowing an integration of these constructs.

### **Moderators**

To account for institutional level moderators, the studies in the sample were matched with secondary data obtained from the Heritage Foundation, which regularly measures the economic freedom in national economies worldwide (Miller & Kim, 2016). For each study, the year the study was conducted and the country in which the study was conducted were identified. If the year of the study was not mentioned, the publication date of the study from which two years were subtracted was used to identify an approximated year when the data was collected. The value for the indexes provided by the Heritage Foundation for the year and country of the studies was matched with the correlations collected from the studies.

***Rule of law.*** Rule of law is measured by the index, which consists of a measure of property rights (measured by the ability of individuals to accumulate private property) and a measure of freedom from corruption (measured by the Transparency International's Corruption Perceptions Index) (Miller & Kim, 2016). Rule of law ranges from 0 (private property is

outlawed, very high corruption) to 100 (private property is guaranteed, very little corruption) (Miller & Kim, 2016).

***Governmental intervention.*** The extent of governmental intervention is measured by the index “government size” and consists of fiscal freedom (tax burden imposed by government) and government spending as a percentage of gross domestic product (Miller & Kim, 2016). We reversed the scale of government size introduced by the Heritage Foundation for ease of interpretation to now range from 0 (low government expenditure, low tax burden) to 100 (high government expenditures, high tax burden).

The present study proposes that contextualizing relationships between CSR and HR stakeholders can help identify reasons for heterogeneity and can inform future theory building in CSR research. Therefore, we additionally considered the moderating influence of the following conceptual and study-specific moderators. With no a priori reason to believe that specific study characteristics would lead to stronger or weaker relationships, no directional hypotheses for these moderators are offered. This procedure is consistent with previous meta-analyses such as Geyskens, Steenkamp, and Kumar (2006).

***CSR type and CSR facets.*** As conceptualizations of CSR differ considerable, we conduct two sub-group analyses. We followed a differentiation of CSR by Wood (1991), to differentiate the *CSR type* measured as *principles* (e.g., stakeholder values of a firm), *practices* (e.g., minimized use of toxic chemicals), or *outcomes* (e.g., CSR reputation). Further, we differentiated between *socially-oriented CSR* (e.g., help improving the quality of life in the communities where firms operate), *environmentally-oriented CSR* (e.g., voluntarily exceeding government environmental regulations), *economically-focused CSR* (e.g., treating all customers fairly and respectfully) and *mixed* indicators (Aguinis, 2011; Carroll, 1999).

**Publication year.** As several studies have argued that the CSR concept and awareness for CSR have changed over time, the publication year for each study was collected to analyze if the CSR-HR relationships depend on evolution over time. Aguinis and Glavas (2012) show in their review article that almost half of the articles on CSR have been published since 2005. The augmented research interest in CSR reflects and spurs corporate interest and activities regarding CSR. The increased emphasis on CSR over time may diminish the effect of CSR, as differentiation possibilities due to CSR become weaker. However, it is possible that the increased communication of CSR as well as the increased media and research interest in this topic cause not only differentiation problems, but also have an “agenda-setting” effect (Berger, Cunningham, & Drumwright, 2007). Due to the omnipresence of CSR, job seekers are increasingly confronted with this topic, making them more prone to consider CSR (Backhaus et al., 2002). Thus, time might be a moderator of the CSR-HR relationships.

**Study type.** Individual-based studies can be separated into two broad categories: scenario-based studies and field experiments. Scenario-based studies comprise labor-experiments or quasi-experimental settings, that have the advantage of better control for biasing effects, thus increasing internal validity. On the other hand, field experiments in which actual conditions are observed are meant to have greater external validity (Allen, Mahto, & Otondo, 2007). Accordingly, the results gathered in different study settings could vary.

### 3.3.3 Meta-analytic Procedure

This study used three-level meta-analytical approach proposed by Cheung (2014) and Konstantopoulos (2011). Dependent effect sizes occurred because primary studies often used more than one measure for the variables, so aggregated effect sizes across different variables are used here to estimate an overall effect size. Neglecting dependence among effect sizes can lead to a bias in the average effect size when some studies report many effect sizes (Cheung, 2014; Konstantopoulos, 2011) and an underestimation of the sampling variance, which

consequently decreases standard errors and confidence intervals (Steinmetz, Knappstein, Ajzen, Schmidt, & Kabst, 2016).

To counter these potential problems, the three-level approach considers that effect sizes are nested within studies (Cheung, 2014; Konstantopoulos, 2011). The three-level approach decomposes the overall observed variance in sampling error, true heterogeneity between studies, and true heterogeneity within studies (Cheung, 2014; Konstantopoulos, 2011). The first level is the within-effect-size model. This level concerns specific effect sizes and decomposes the observed effect sizes in the true effect size and sampling error. The second level is the within-study-across-effect-size model, which deals with different effect sizes within one study. Accordingly, this model refers to the study's mean effect size and its variance within the study. The third level depicts the between-studies level which accounts for the variance due to different designs or domains of studies. Conducting a three-level meta-analysis allows estimating an overall effect size and decomposing the amount of systematic variance (i.e., the "true heterogeneity") in a component that is due to differences within studies ( $T^2_w$ ) and differences between studies ( $T^2_B$ ). In this way, how much of the observed variance is due to sampling error, heterogeneity within studies, or heterogeneity across studies can be estimated (Steinmetz et al., 2016).

Calculating the three-level meta-analysis, we employed random-effects models. In contrast to fixed-effects models, random-effects models do not expect the observed variance to be caused solely by sampling error while assuming an overall fixed parameter in the population (Steinmetz et al., 2016). Instead, true effect sizes are assumed to follow a distribution that stems from a myriad of unsystematic differences across studies (Hedges & Olkin, 1985). While estimating an average population effect size, study effect sizes were weighted by the inverse variance of the effect size that consists of an estimate of the sampling variance and systematic variance (Borenstein, Cooper, Hedges, & Valentine, 2009).

We calculated 95% confidence intervals around the weighted correlation as measures of accuracy of the effect sizes (Whitener, 1990). The  $Q$ -statistic to test for homogeneity of effect sizes was also calculated (Hedges & Olkin, 1985). The  $Q$ -statistic determines whether the effect sizes from a series of studies exhibit any variability beyond the variability that is expected to result from sampling error. Thus, a significant  $Q$  indicates the likelihood of moderators explaining variability in correlations over studies (Lipsey & Wilson, 2001).

When  $Q$  was significant, moderator analyses were conducted to determine whether contextual variables could explain the heterogeneity of effect sizes (Hedges & Olkin, 1985; Lipsey & Wilson, 2001). For continuous moderators (i.e., firm size, economic growth, journal ranking, time), we used the meta-regression techniques outlined in Lipsey and Wilson (2001) avoiding the artificial categorization of continuous moderating variables. The regression coefficient obtained from a meta-regression analysis indicates how the study's effect size changes with a one-unit increase in the moderator.  $Q_M$  is the homogeneity test for the regression model and, if significant, indicates that the moderator significantly explains variability in correlations over studies.

The categorical moderators (CSR measurement, type of study) with subset analyses were tested, given that the number of effect sizes per subgroup is not smaller than three (Geyskens, Krishnan, Steenkamp, & Cunha, 2008; Lipsey & Wilson, 2001). The logic of the categorical model moderator test is analogous to an analysis of variance (ANOVA). The resulting  $Q_B$  is analogous to a main effect in an ANOVA. A significant  $Q_B$  indicates that the categorical moderator explains the heterogeneity of correlations (Aguinis, Pierce, Bosco, Dalton, & Dalton, 2011).

## 3.4 Results

### 3.4.1 Main Effects

Using the meta-analytic techniques described above, we first calculated the main effects between CSR and organizational attractiveness and between CSR and employee attitudes and behavior (**Table 6**). CSR was significantly positively related to organizational attractiveness ( $\hat{r} = 0.36, p < .001$ ) as well as employee attitudes and behavior ( $\hat{r} = 0.40, p < .001$ ). Hence, the results support hypotheses H1 and H2. However, the significant  $Q$ ,  $T^2$ , and  $I^2$  statistics suggested that these relationships are highly heterogeneous and thus influenced by moderators.

### 3.4.2 Moderator Analyses

**Table 7** shows the results of the continuous moderator analyses. The relationship between CSR and organizational attractiveness was significantly moderated by rule of law ( $Q_M = 6.93, p < .05$ ) and by limited governmental size ( $Q_M = 5.50, p < .05$ ) lending support to H3a and H4a. The relationship between CSR and employee attitude and behavior did not show any significance for a moderating effect of rule of law ( $Q_M = 0.34$ ) or governmental intervention ( $Q_M = 0.00$ ), so that we could not find support for H3b. The methodological moderator year of publication did not moderate any of the relationships. The categorical moderator analyses, illustrated in **Table 8**, show that the relationship for CSR practices ( $\hat{r} = 0.47$ ) is significantly stronger than for CSR principles ( $\hat{r} = 0.11$ ) with employee attitudes and behavior. Moreover, mixed CSR associated more strongly with employee attitudes and behavior ( $\hat{r} = 0.45$ ) than economic CSR ( $\hat{r} = 0.33$ ). The type of study did not play a significant role for any relationship.



**Table 6.** Direct effects of CSR

Dependent Variable	<i>k</i> (ES)	<i>N</i>	<i>f</i>	<i>SE</i>	95% CI	<i>Q</i> ( <i>df</i> )	<i>T</i> <sup>2</sup> <sub><i>w</i></sub>	<i>I</i> <sup>2</sup> <sub><i>w</i></sub>	<i>T</i> <sup>2</sup> <sub><i>B</i></sub>	<i>I</i> <sup>2</sup> <sub><i>B</i></sub>			
H1 Organizational Attractiveness	21 (74)	3.838	0.362	**	0.03	0.30	0.43	639.535 (73)	**	0.00	0.11	0.02	0.74
H2 Employee Attitudes and Behavior	50 (174)	114.289	0.402	**	0.02	0.36	0.45	12575.176 (174)	**	0.01	0.39	0.02	0.59

Notes. *k* = number of studies; *ES* = number of effect sizes; *N* = sample size; *f* = weighted average effect size; *SE* = standard error; 95% CI = confidence interval; *Q*(*df*) = *Q* test for heterogeneity and degrees of freedom; *T*<sup>2</sup><sub>*w*</sub> = estimated systematic variance within studies; *T*<sup>2</sup><sub>*B*</sub> = percentage of true variance within studies of the overall observed variance; *T*<sup>2</sup><sub>*B*</sub> = estimated systematic variance across studies; *I*<sup>2</sup><sub>*B*</sub> = percentage of true variance across studies of the overall variance. \*\**p* < .01; \**p* < .05.

**Table 7.** Continuous moderator analyses

Variable	Moderator	<i>k</i> (ES)	<i>f</i>	<i>SE</i>	95% CI	<i>Q</i> <sub><i>M</i></sub>		
<b>Organizational Attractiveness</b>								
H3a	rule of law	19 (68)	0.01	**	0.00	0.01	6.93	**
H4a	governmental intervention	19 (68)	0.01	*	0.00	0.00	5.50	*
H5a	year	21 (74)	0.00		0.01	0.01	0.23	
<b>Employee Attitudes and Behavior</b>								
H3b	rule of law	43 (140)	0.00		0.00	0.00	0.34	
H4b	governmental intervention	43 (140)	0.00		0.00	0.00	0.00	
H5b	year	47 (149)	0.00		0.00	-0.01	0.35	

Notes. *k* = number of studies; *ES* = number of effect sizes; *f* = weighted average effect size; *SE* = standard error; 95% CI = confidence interval; *Q*<sub>*M*</sub> = homogeneity test for the regression model. \*\**p* < .01; \**p* < .05.

**Table 8.** Categorical moderator analysis

Variable	Moderator	Categories	<i>k</i>	<i>f̂</i>	<i>SE</i>	95% <i>CI</i>	<i>Q<sub>B</sub></i>		
Organizational Attractiveness	CSR type	CSR principles	-	-	-	-	-		
		CSR practices	18	0.39 **	0.03	0.33	0.46	116.48 **	
		CSR outcomes	15	0.34 **	0.05	0.24	0.44	165.99 **	
	CSR facets	social	19	0.29 **	0.03	0.23	0.35	81.04 **	
		environmental	14	0.25 **	0.03	0.19	0.31	38.66 **	
		economic	20	0.27 **	0.02	0.23	0.32	33.52 *	
		mixed	4	0.31 **	0.04	0.23	0.40	5.25 *	
	study type	scenario	40	0.33 **	0.02	0.29	0.37	267.35 **	
		field study	34	0.31 **	0.03	0.25	0.36	370.59 **	
	Employee Attitudes and Behavior	CSR type	CSR principles	30	0.11 **	0.02	0.08	0.14	97.35 **
			CSR practices	48	0.47 **	0.02	0.43	0.51	1679.13 **
			CSR outcomes	4	0.59 **	0.06	0.48	0.71	21.89 **
		CSR facets	social	22	0.30 **	0.05	0.20	0.40	2008.94 **
environmental			21	0.35 **	0.06	0.23	0.46	770.83 **	
economic			52	0.33 **	0.03	0.28	0.38	1032.28 **	
mixed			52	0.45 **	0.03	0.40	0.50	5972.94 **	
study type		scenario	4	0.45 **	0.05	0.34	0.55	2.25	
		field study	170	0.36 **	0.02	0.33	0.39	12572.24 **	

Notes. *k* = number of studies; *f̂* = weighted average effect size; *SE* = standard error; 95% *CI* = confidence interval; *Q<sub>B</sub>* = value for the heterogeneity between groups; - not enough effect sizes. \*\**p* < .01; \**p* < .05.

### 3.5 Discussion

Despite the increasing number of corporations that have implemented CSR into their corporate strategies and the advances in the CSR literature, to date, no meta-analyses have explored the specific quantitative influence of CSR on important HRM stakeholders, potential and current employees. This meta-analysis contributes to CSR and HRM research by joining two important fields of research in terms of CSR effects on potential and current employees, that have been fragmented and but are now shown to have great synergies. Moreover, this study frames the relationships between CSR and HR stakeholders' reactions by taking an institutional contingency perspective to explore boundary effects concerning rule of law and governmental intervention, thereby answering the call for more multi-level and contextual perspectives in CSR research (Aguinis & Glavas, 2012; Wang, Tong, et al., 2016).

#### 3.5.1 Theoretical Implications

First, the results of the present meta-analysis show a positive connection between CSR and organizational attractiveness, which supports previous arguments drawn from signaling and social identity theory. Companies that engage in CSR are producing a more attractive perception as future employer among applicants, whereas companies lacking a strong engagement with and or reputation for CSR appear to be less interesting to potential employees. This implies that companies that consciously emphasize CSR can generate considerable competitive advantage in the context of HRM. These advantages derive from the attraction of a qualified workforce and the resulting release of new resources and skills, with respect to knowledge base and innovation (Branco & Rodrigues, 2006).

Second, a higher scale of CSR positively influences the level of employee attitudes and behavior. This shows that CSR has important implications for individual perceptions and behavior of current employees. Increased satisfaction and reduced turnover intentions secure

the important intangible resource of a qualified and dedicated workforce. Accordingly, CSR helps to increase an important basis for sustained competitive advantage, positive attitudes and behaviors of the firm's employees. Comparing arguments from the perspectives of both organizational attractiveness and the employee attitudes and behaviors literature, the underlying reasoning for the positive effects of CSR on the two stakeholder groups is similar. The results of the meta-analyses underline that the comparability of the relationship between CSR and the two HR stakeholder groups. To use synergies and find support for similar mechanisms, future research could join the theoretical perspectives and explicitly compare mechanisms that connect each of the two stakeholder groups with CSR.

Third, the empirical findings indicate that institutions matter for the influence of CSR on potential employees. CSR is more strongly related to organizational attractiveness in institutional environments characterized by strong rule of law and high governmental intervention. This adds to the field of CSR-HRM research by showing that the institutional context may affect the perception of CSR. Although past research on CSR has already emphasized the importance of institutions (e.g., Brammer et al., 2012; Campbell, 2007), their boundary role in the effects of CSR has gained less attention. The present findings encourage future research to include a contingency perspective in the analysis of the effects of CSR, to answer the question of which conditions strengthen or weaken identified relationships. In view of a need for a qualified workforce as well as internationalized operations, differences in applicants and employee the perceptions are crucial for research, to better understand HRM effectiveness in an international context.

Although there is support for the contextual role of the institutions for the association between CSR and organizational attractiveness, the relationship between CSR and employee attitudes and behavior remained unchanged by rule of law and governmental intervention. The reason why a moderating role of institutions for organizational attractiveness is found, but not

for employee attitudes and behavior, could be the greater extent of information asymmetry that potential employees confront than current employees do. Potential employees must rely on the signals of the firm. Current employees have greater access to internal information on the firm's CSR. As weak rule of law in a country signifies high levels of corruption and low levels of property rights enforcement, potential employees might have less trust in a firm's CSR signals. Current employees can off-set the general non-transparency and uncertainty with their internal knowledge, so that rule of law might not seem to be an issue with regard to the effect of CSR on their commitment, job satisfaction and turnover intention.

In view of these differences between potential and current employees, future research could conduct a comparative analysis of differences in sense-making of CSR and differing effects of the CSR signal between potential and current employees. It could be worthwhile to learn which type of sender and signaling channel increases trust in the CSR signal and if there are differences between potential and current employees. However, caution should be used in assuming no influence of the institutional environment as we tested a selection of institutions. Avenues for future research may lie in the systematic inclusion of other institutional factors such as culture, which was not possible with the limited number of countries included in this meta-analytical review.

Fourth, the results of the moderated meta-analyses indicate that differences in the conceptualization of CSR also accounted for some variance in the results. CSR type and facets (principles versus practices; economic versus mixed) moderate the relationship between CSR and employee attitudes and behavior. These results point to the importance of clarity in the concept of CSR. Although some consistency in the use of CSR measurements might develop (recently increasing use of Turker, 2009), high heterogeneity in measuring CSR still divides the field. We suggest future research to draw more strongly on established concepts that would render results more comparable. Moreover, it is worth recognizing that the conceptualization

of CSR had an effect on the attitudes and behavior of current employees but not on potential employees. While reactions to CSR and mechanisms of the effects of CSR on current and potential employees might be similar, these moderator results indicate that current employees might be more attentive to the specific type of CSR. For instance, the relatively low relationship between CSR principles and employee attitude and behavior might indicate that current employees are more critical about window dressing compared to practices that implement CSR. Future research might dig deeper to better understand how such practices are best communicated to employees to leverage this positive effect.

Testing other moderators such as the publication year did not show any significant results. Even though wear-out effects are likely to occur to the consumer market, potential applicants still seem to value CSR over time. The increased communication of CSR and the increased media and research interest in this topic could possibly cause not only wear-out effects, but also an “agenda-setting” effect (Berger et al., 2007). Marketing literature shows that increased exposure to a brand or a product leads to more positive evaluations of this brand or product (Janiszewski, 1993). This so-called “mere exposure” effect might also apply to CSR, due to its increased public presence. Additionally, the increased public interest in CSR may enhance social pressure on applicants to apply for a job that matches expectations about CSR. According to the theory of planned behavior (Ajzen, 1991), the social pressure of subjective norms has an influence on individuals’ intentions and behavior, including the intentions of potential applicants (Backhaus et al., 2002). As the publicity about CSR rises, the social norm of working at a socially responsible firm (or at least at one with such an image) becomes stronger. This mechanism might have positive implications for the effectiveness of CSR, countervailing negative effects of wear-out.

### 3.5.2 Practical Implications

First, the results of this meta-analytic review illustrate that by emphasizing CSR, human resource managers can increase their competitive advantage. Indeed, investments in CSR pay off for a company and help to increase intangible resources, while unethical behavior clearly poses the risk of reputation loss. Competitive advantage is achieved especially when the existing management addresses stakeholders' expectations specifically by engaging in social behavior. Thus, human resource managers should be aware of the usefulness of CSR as a means of recruitment and employee motivation and leadership.

Second, the results of this study's moderator analyses suggest that there are significant differences in the effect of CSR on organizational attractiveness, in terms of the institutional environment in which the organization and employees reside. HRM should be aware of differences in the interpretation of CSR when using CSR-related topics in the recruitment process, particularly if operating internationally. Moreover, employees seem to be difficult to trick in terms of "talking the talk, but not walking the walk". The effects of CSR principles on employee attitudes and behavior were significantly lower than those of CSR practices. HRM might be well advised to communicate and involve employees in their CSR activities, to increase their experience with CSR and thereby unlock organizational commitment and job satisfaction through a meaningful work environment.

### 3.5.3 Limitations and Avenues for Future Research

As outlined above, this study underpins recent conceptual arguments that CSR unfolds a significant impact on the individual level (Aguinis & Glavas, 2017; De Roeck & Maon, 2018). Furthermore, institutional level variables weakly but partially moderate the effect of CSR on organizational attractiveness. Yet, the meta-analysis is limited in this regard, since it can only include moderators for which enough data exists. Future studies could continue to flesh out the

moderating influences of macro level variables on micro level outcomes of CSR. Important macro level moderators that are fruitful avenues for future studies comprise industry growth (Russo & Fouts, 1997) and culture (Aguilera & Jackson, 2003). Future studies could shed light on industrial, professional, and cultural influences on the CSR-outcome relationship to advance a contextualized view of the CSR-HRM relationship.

Prior studies on CSR have extensively struggled with the causality of CSR. This is especially the case for the CSR-CFP relationship (Orlitzky et al., 2003). It is still unclear if CSR leads to improved CFP, by enhancing firm-internal processes, or if CSR indeed is increased by CFP since more slack resources exist to devote to CSR (Aguinis & Glavas, 2012). While the question cannot be completely unraveled, at least positive and strong correlations exist between CSR and individual-based parameters. Thus, we underline that CSR not only correlates with corporate parameters, such as CFP, but also to important HR-related parameters rooted in the individual level. Organizational attractiveness, as well as employee attitudes and behavior, have been shown to be important determinants of competitive advantage (e.g., Khatri, 2000; Wright et al., 1995) and are indirectly linked with firm performance (Combs, Liu, Hall, & Ketchen, 2006; Ployhart, 2006). Even though reversed causality or feedback-loops between CSR and firm level outcome variables cannot be ruled out, our meta-analysis arguably strengthens the assumption that CSR is indeed an antecedent of CFP. CSR positively influences important HRM parameters, which themselves are predecessors of organizational and financial performance. As such, we propose a mediated relation between CSR and CFP, with HR acting as linchpin between those firm-level parameters. Yet, future studies are needed to underpin this assumption.

Concerning employees' attitudes and behavior our meta-analysis faces some limitations. Since a limited number of studies exist observing the influence of CSR on employee behavior, several constructs are combined under the label of attitudes and behavior, knowing that this



may increase the “apples and oranges” problem. The effect of CSR on employee attitudes and behavior remains heterogeneous after the moderator analyses. This might be due to unobserved moderators or divergent effects of CSR on the separate constructs combined under attitudes and behavior. Thus, it could be that CSR has a much stronger influence on employee attitudes, such as commitment and job satisfaction, than on actual behavior. Working for a reputable employer may increase the commitment, since employees are proud to work for such a firm. In addition, job satisfaction may be higher and turnover rate lower if firms provide internal CSR practices such as additional health care or pension plans. Yet, even though attachment, satisfaction, and commitment may be increased, it does not necessarily mean a decrease in turnover intention. Therefore, future research should include multiple internal consequences of CSR to provide insight into the relative impact on different attitudinal and behavioral components.

## CHAPTER 4 | The Other Side of The Same Coin – How Communal Beliefs About Entrepreneurship Influence Attitudes Toward Entrepreneurship<sup>8</sup>

### Abstract

Drawing on the information processing perspective, this paper investigates how young adults' attitude toward entrepreneurship is shaped by their beliefs about the role and activities of entrepreneurs. Our first study ( $N = 129$ ) reveals that young adults hold a biased set of beliefs. They believe that entrepreneurship affords agentic aspects (e.g., achievement, power, excitement), but significantly less believe in communal aspects which are, however, equally integral to entrepreneurship (e.g., interaction, pro-social behavior). In a subsequent experimental vignette study ( $N = 389$ ), we show, that communicating the communal nature of entrepreneurship, specifically the pro-social aspects, improves both men's and women's attitudes toward entrepreneurship. Overall, our research suggests that portrayals of occupations shape young adults' beliefs about career options and thereby influence their attitude toward respective careers.

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## 4.1 Introduction

*“Believe something and the Universe is on its way to being changed. Because you've changed, by believing. Once you've changed, other things start to follow. Isn't that the way it works?”* — Diane Duane, *So You Want to Be a Wizard*

Portrayals of occupations affect our beliefs (i.e., assumptions, propositions) about the roles and activities of individuals who carry on the respective occupation. In the context of entrepreneurship, narratives about prominent exemplars such as Elon Musk, Steve Jobs and Mark Zuckerberg have nurtured a portrayal of entrepreneurship as a solely agentic-stereotypic occupation demanding self-centered characteristics such as risk-taking and ambition (Gupta, Turban, Wasti, & Sikdar, 2009; Lechner, Sortheix, Obschonka, & Salmela-Aro, 2018; Ogbor, 2000). Occupational portrayals inform about expectable aspects of an occupation and are, therefore, particularly relevant for individuals who tend to lack experience with the respective occupation (e.g., young adults who will soon enter the job market). Although portrayals of occupations are helpful in reducing complex realities, they can bias the belief system of individuals if the stereotype misses integral aspects (Crocker, Fiske, & Taylor, 1984; Walsh, 1995). As beliefs are the basis of attitudes (Petty & Brinol, 2010), it is important to understand how altering an occupational stereotype influences the formation of beliefs about and attitudes toward an occupation.

To fill this void, we adopt an information processing perspective (e.g., Crocker et al., 1984; Fiske & Taylor, 1991) to analyze which beliefs young adults' hold about entrepreneurship and how presenting alternative portrayals changes such beliefs and their attitude toward entrepreneurship. First, we argue that the stereotypical portrayal of entrepreneurship as a purely agentic occupation is incomplete (McMullen, 2017) and therefore misguides individuals' set of beliefs about the role and activities of the occupation. We propose that young adults' belief set

about entrepreneurship is dominated by agentic beliefs, which include self-centered goals such as achievement, power, and excitement (Bakan, 1966; Drakopoulou Dodd & Anderson, 2007) and under-represents an integral part of entrepreneurship: communion (i.e., interaction with and helping others) (Bakan, 1966). Of course, agentic aspects are an essential part of entrepreneurship (McMullen, 2017). Agentic values predict entrepreneurial intentions (Hirschi & Fischer, 2013; Lechner et al., 2018) and agentic characteristics can be beneficial for entrepreneurs' success (Johnson, 1990; Viinikainen et al., 2017) as entrepreneurs must compete with other companies and take risks (Lumpkin & Dess, 1996; McMullen, 2017). However, an agentic-dominated portrayal neglects an equally existing communal part of entrepreneurship. Entrepreneurs often start businesses in teams and/or cooperate in networks (Aldrich & Cliff, 2003; Davidsson & Honig, 2003; Judith, Jeffrey, John, & Aaron, 1990), craft a value proposition that solves customers' problems, network with partners (Davidsson & Honig, 2003) and contribute to society's well-being (Battilana & Lee, 2014; McMullen & Warnick, 2016).

Second, we propose that adding communal aspects to an otherwise agentic-dominated portrayal increases young adults' communal beliefs, which in turn results in an improved attitude toward entrepreneurship. Communicating communal aspects is likely to affect beliefs and attitude because communal aspects a) are distinct to agentic beliefs which dominate individuals' prevalent occupational portrayal and b) correspond to the basic need for belonging and meaningfulness that is particularly pronounced among young adults (D'Netto & Ahmed, 2012; Lechner, Sortheix, Göllner, & Salmela-Aro, 2017; Mayseless & Keren, 2013). Third, we propose that information processing of communal aspects concerning entrepreneurship will differ among gender because women endorse communal goals more highly than men (Bakan, 1966; Eagly, 1987).

We test our predictions by conducting two studies among university students. First, we use a survey to analyze the extent to which entrepreneurship is associated with communal and

agentic beliefs in comparison to other stereotypical careers. Second, we conduct an experimental vignette study that investigates whether and how a verbal description of entrepreneurial activities that stresses communal aspects (e.g., working within a team, doing something useful for other people) increases communal beliefs and the attitude toward entrepreneurship. Furthermore, we analyze whether the effects differ between women and men.

Our research contributes along three lines. First, by integrating an information processing perspective into the analysis of the malleability of beliefs and attitudes within the context of entrepreneurship, we propose a theoretical lens on cognitive processes which may explain the micro-foundations of entrepreneurial intentions of young adults (Baron & Ward, 2004; Grégoire, Corbett, & McMullen, 2011; Shepherd & Patzelt, 2018). Second, integrating the agentic and the communal side into the portrayal of entrepreneurship might provide a new angle to the debate on which role self- or other-orientation might play for the social construction of entrepreneurship and entrepreneurial identity formation (Downing, 2005; Fauchart & Gruber, 2011; Zahra & Wright, 2016). Third, our study extends perspectives in gender research (Gupta, Turban, & Bhawe, 2008; Gupta et al., 2009; Lechner et al., 2018) since our findings indicate how young women might develop a more positive perception of the entrepreneurial career.

## **4.2 Theory and Hypotheses**

### **4.2.1 Information Processing Perspective on the Malleability of Beliefs and Attitudes**

The information processing perspective regards the mind as similar to a computer system that processes and stores information in systematic ways (Brewer & Nakamura, 1984; Miller, 2003). In this regard, beliefs are the unit in which information is stored. All beliefs about one attitude object are structured in a schema that represents the person's overall understanding

or cognitive representation of the object (Fiske & Taylor, 1991; Rokeach, 1968). A belief system renders information manageable by structuring experience, assisting in the acquisition of new information, and providing a basis for inferences (Bower, Black, & Turner, 1979; Snyder & Uranowitz, 1978). Although helpful, inferences based on belief systems can be biased and misleading when the stereotypical portrayal of the attitude object omits realistic and relevant aspects (Crocker et al., 1984; Walsh, 1995). Thus, from an information processing perspective, individuals tend to under-value an attitude object when their belief system of the attitude object misses relevant beliefs (Kruglanski & Stroebe, 2005; Petty & Brinol, 2010).

Beyond the acquisition of beliefs, the information processing perspective explains when and how beliefs change and thereby also offers insights into the malleability of young adults' attitudes. According to this perspective, external informational cues can change beliefs, resulting in altered attitudes (Cacioppo & Petty, 1979; Kruglanski & Stroebe, 2005). Beliefs are likely to change when informational cues are a) *distinct* from the existing set of beliefs and b) *relevant* to the recipient (Crocker et al., 1984; Fiske & Taylor, 1991). Both distinctiveness and relevance of informational cues increase the salience of beliefs, which means that they are easily accessible to the mind when confronted with an attitude object (Krosnick, Judd, & Wittenbrink, 2005; Salancik & Conway, 1975).

Distinct informational cues provide new and unique information that will cause the recipient to question the adequacy of his or her beliefs about the object, either due to inconsistency with corresponding beliefs or by calling attention to attributes of the object that the individual has yet failed to consider (Crocker et al., 1984; Millar & Millar, 1990). Relevant informational cues are processed more intensively, as the recipients are more motivated to invest cognitive resources into perceiving the information (Cialdini, Petty, & Cacioppo, 1981; Crocker et al., 1984). Relevance is high when the information provided and the activated beliefs fit with the person's values, goals, outcomes, or identity (Blankenship & Wegener, 2008; Petty

& Cacioppo, 1990). Beliefs differ in their relevance based on a person's set of beliefs (Rokeach, 1968). Beliefs that are central to a person's portrayal of an attitude object have a greater influence on the formation of the person's attitude (Rokeach, 1968). Thus, the effect of informational cues might differ between different groups of people if their goals vary systematically.

#### 4.2.2 The Stereotypical Portrayal of Entrepreneurship Under-represents Communal Beliefs

We propose that young adults hold an incomplete and biased set of beliefs about entrepreneurship, because they under-estimate the role of communion in entrepreneurship, that is working/cooperating with and helping/supporting others (Clarke & Holt, 2009; Drakopoulou Dodd & Anderson, 2007). Indeed, starting a new venture is related to risk-taking, competing in a market and generating revenues (Shane & Venkataraman, 2000). Nevertheless, key stages of a new venture creation not only depend on agentic aspects but are also achieved by interacting with others (Baron & Markman, 2003; Larson, 1991; Vyakarnam, Jacobs, & Handelberg, 1999) and creating value for others (van Praag & Versloot, 2007). Entrepreneurs often start businesses in teams (Aldrich & Cliff, 2003; Judith et al., 1990), and they craft a value proposition that solves customer problems, cooperate with partners or suppliers, and interact with authorities (Downing, 2005). Furthermore, building social networks consisting of advisors and/or supporters is an essential activity of entrepreneurs (Davidsson & Honig, 2003; Van de Ven, Sapienza, & Villanueva, 2007). Moreover, entrepreneurs interpret themselves to be contributors to society, catalyzers of change, and as embedded in a social system (Clarke & Holt, 2009). Thus, communion is integral to entrepreneurship.

However, theories and narratives have focused on the risk-taking, adventuresome nature and persistence of the individual (Farmer, Yao, & Kung-Mcintyre, 2011; Nicholson &

Anderson, 2005; Rauch & Frese, 2007) rendering agentic beliefs about entrepreneurship more salient than communal beliefs. The essence of entrepreneurship is indeed that entrepreneurial actions take place under conditions of uncertainty (Alvarez & Barney, 2005; Davidsson, 2003; McMullen & Shepherd, 2006). Since coping with uncertainty is linked to concepts such as risk and persistence, interest in agentic aspects of entrepreneurship originate in its very definition. Moreover, the entrepreneurial phenomenon, and especially the process, is fuzzy, complex, and often intangible. Personifying the entrepreneurial process by focusing on narratives about the individual entrepreneur facilitates intelligibility (Drakopoulou Dodd & Anderson, 2007; Welter, Baker, Audretsch, & Gartner, 2017). Also, scientific publications prefer to use the individual as the object of investigation when analyzing the entrepreneurial process. Starting with Schumpeter's (1934) seminal work attributing overall economic growth to innovative entrepreneurs who identify opportunities and transform them into prosperous businesses, a variety of studies have analyzed agentic characteristics (e.g., need for achievement, risk-taking) (Rauch & Frese, 2007) and their influence on entrepreneurial actions and success (Ogbor, 2000). Hence, we propose that young adults under-estimate the role of communal aspects in entrepreneurship, because they are more strongly confronted with an agentic stereotypical portrayal.

**Hypothesis 1:** Young adults' set of beliefs about entrepreneurship contains less communal than agentic beliefs.

#### 4.2.3 Communal Portrayal Activates Communal Beliefs Which Influences Attitudes

We propose that integrating the communal nature of entrepreneurship into the portrayal of entrepreneurship will change young adults' set of beliefs and subsequently their attitude toward entrepreneurship. Based on the information processing perspective, we theorize that



presenting communal cues will strengthen communal beliefs and, thereby, improve young adults' attitude toward entrepreneurship. We propose that this will occur due to two reasons.

First, communal cues are distinct to the agentic-dominated set of beliefs about entrepreneurship. Although agentic and communal goals are not opposite ends of a continuum (i.e., individuals can value both qualities to some degree Wiggins, 1991), individuals connect the fulfilment of these goals with entrepreneurship to different extents. Young adults' prior social reality (i.e., the agentic-dominated set of beliefs) and the new informational cue (i.e., the communal aspects of entrepreneurship) differ considerably.

Second, communal cues constitute relevant information for young adults. Communal qualities imply an orientation toward others (Abele & Wojciszke, 2007). Striving for communal goals emerges from the need to integrate the self into a larger social unit via interaction with, and caring for others (Abele & Wojciszke, 2007). Young adults have a fundamental need for belonging and meaningfulness (D'Netto & Ahmed, 2012; Lechner et al., 2017; Mayselless & Keren, 2013), which makes them likely to value communal cues. Research on occupational identities suggests that, before choosing an entrepreneurial career, young adults first need to identify with the occupation and this identification process depends on the stereotypical portrayal of the occupation (Hytti & Heinonen, 2013; Lechner et al., 2018). Because the agentic stereotypical portrayal depicts entrepreneurship as a career for a chosen few (Lindgren & Packendorff, 2002), we argue that fewer young adults embrace the entrepreneurial identity and see themselves as entrepreneurs (Drakopoulou Dodd & Anderson, 2007; Steyaert & Katz, 2004). Therefore, integrating a communal perspective into young adults' set of beliefs about entrepreneurship might ease their ability to identify with the entrepreneurial role.

In sum, both distinctiveness and relevance render communal beliefs about entrepreneurship more salient. Activating communal beliefs makes them an accessible part of

the set of beliefs about entrepreneurship that will improve young adults' overall evaluation of entrepreneurship.

**Hypothesis 2:** Presenting the communal aspects of entrepreneurial activities will increase communal beliefs leading to an improvement in young adults' attitude toward entrepreneurship.

#### 4.2.4 The Moderating Effect of Gender

We propose that processing communal cues will result in greater changes regarding beliefs and attitudes in young women. Although communion is important to men and women because of a common need to belong and need for meaningfulness (D'Netto & Ahmed, 2012; Lechner et al., 2017; Mayseless & Keren, 2013), it is more relevant to women (Bakan, 1966; Diekmann, Steinberg, Brown, Belanger, & Clark, 2016). Empirical research shows that expecting communion to be part of a career improves women's evaluation of that career (Diekmann, Clark, Johnston, Brown, & Steinberg, 2011; Konrad, Ritchie, Lieb, & Corrigan, 2000; Su, Rounds, & Armstrong, 2009).

Gender research in entrepreneurship has shown that congruence with the stereotypical male entrepreneur increases entrepreneurial motivations in people with high male gender identification (Gupta et al., 2009). However, depicting entrepreneurs with feminine characteristics did not increase women's evaluation of the entrepreneurial career (Gupta et al., 2008). We propose that beyond congruence with sex or characteristics of the stereotypical entrepreneur, beliefs about the entrepreneur's job and the purpose of the job role are relevant because they reflect the extent to which a person feels her/his goals will be fulfilled by this career. Thus, presenting the communal nature of entrepreneurship is likely to result in a more positive attitude toward entrepreneurship for women because a communal-inclusive portrayal lets women believe that communal goals can be fulfilled.

**Hypothesis 3:** Presenting the communal aspects of entrepreneurial activities will increase communal beliefs leading to an improvement in young adults' attitude toward entrepreneurship, to a stronger degree for women than for men.

### 4.3 Methods

In Study 1, we tested the fundamental assumption that young adults' set of beliefs about entrepreneurship contains less communal than agentic beliefs (Hypothesis 1). Building upon the evidence for this assumption, we conducted an experimental study (Study 2), in which we presented cues regarding the communal nature of entrepreneurship to increase communal beliefs and measured their effect on the attitude toward entrepreneurship (Hypotheses 2, 3).

To test our hypotheses, we collected data from two independent samples consisting of undergraduate and graduate students in Germany for three reasons. First, we integrate the information processing perspective into the context of entrepreneurship; this theory has no restrictions regarding age or prior working experience for the population of interest. Given that "any sample in the theory's domain can potentially falsify the theory" (Calder, Phillips, & Tybout, 1981, p. 200), our research sample of young people (i.e., students) is within the theory's domain and, therefore, a relevant sample (Highhouse, 2007). Second, laboratory settings are usually designed to apply theory to a certain context and to explain behavior (Highhouse, 2007; Highhouse & Gillespie, 2009). Given that we take an information processing perspective, design a laboratory setting, and investigate a theoretical relationship between communal cues, beliefs, and the attitude of young people, student samples are appropriate in our case. Third, we consider Germany to be an interesting and relevant setting, as it represents a country with a poor entrepreneurial culture and a low attitude toward entrepreneurship as a good career choice (rank 54 of 61, Foreman-Peck & Zhou, 2013; Global Entrepreneurship Research Association, 2017).

### 4.3.1 Study 1

Following Diekmann et al. (2011), we compared the set of beliefs about an entrepreneurial career to two classical types of careers that are strongly associated with either agentic (e.g., CEO, engineer) or communal stereotypical portrayals (e.g., teacher, nurse). Both types of careers served as a comparison standard to enable testing the hypothesis.

**Participants.** We collected data from 133 graduate and undergraduate business students at a German university. Participation was voluntary, and no incentives were given. The sample included 69% female respondents ( $n = 90$ ), and the mean age was 23.5 ( $SD = 2.10$ ). On average, the students were three years into their studies; 92% were nearing the completion of their bachelor's degree and 8% were working toward their master's degree. All students were pursuing a degree related to business studies. After omitting cases with missing data, our sample included 129 complete responses. The selected sample was appropriate for analyzing our hypothesis because the participants were in a phase of their studies in which they were about to decide on their future career, rendering the topic relevant to participants (e.g., Krueger, Reilly, & Carsrud, 2000; Santos, Wang, & Lewis, 2018; Shinnar, Giacomini, & Janssen, 2012).

**Measures.** To assess the set of beliefs held by participants for each career type, we presented a list of eleven careers that represented the three possible career types (entrepreneurial careers, agency-stereotypic careers, and communion-stereotypic careers). These were “founder of a start-up business”, “entrepreneur”, and “self-employed person” (representing entrepreneurial careers), “CEO”, “senior HR manager”, “engineer”, and “lawyer” (representing agency-stereotypic careers), and “social worker”, “teacher”, “nurse”, and “nursery teacher” (representing communion-stereotypic careers). The match between each career and its respective type was validated with a pre-test. The participants were asked to rate the extent to which each career allows the fulfilment of the following goals: power, achievement, seeking new experiences or excitement (representing agentic beliefs) and intimacy, affiliation, and

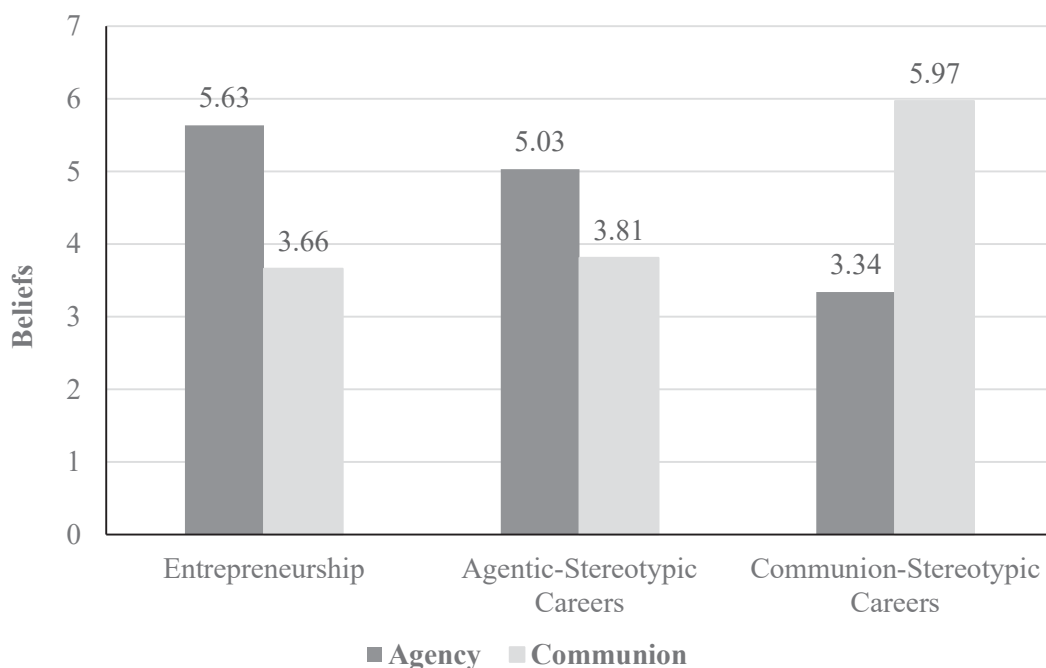
altruism (representing communal beliefs) (Bakan, 1966; Diekmann et al., 2011; Pöhlmann, 2001). The rating format was a seven-point Likert scale ranging from 1 (“not at all”) to 7 (“very much”). After participants rated each career in terms of their belief about the agentic and communal goal fulfilment, we followed Diekmann et al. (2011) in comparing the means of three career types.

**Procedure.** We tested Hypothesis 1 in three ways. First, we compared the arithmetic means between belief types (i.e., agentic vs. communal beliefs) for the entrepreneurial careers to assess the relative extent of communal versus agentic beliefs driving young adults’ perception of entrepreneurship. Second, we compared the means of agentic beliefs between different career types to assess whether entrepreneurship is perceived more agentic than other careers. Third, we compared the means of communal beliefs among the different career types to assess whether entrepreneurship is perceived as less communal than other careers. To evaluate mean differences, we conducted a Welch-test for independent samples, which resembles a t-test and is used in cases of unequal population variances, and we calculated Cohen’s  $d$  (Yuen, 1974). Cohen’s  $d$  is a standardized effect size that represents the difference between the treatment and control group in standard deviation units. Cohen (1988) considered effect sizes of  $|d| \geq .20$  as small,  $|d| \geq .50$  as moderate, and  $|d| \geq .80$  as large.

**Results.** Figure 6 shows the means for the belief about the fulfilment of agentic and communal goals by career type. First, participants believed that entrepreneurship satisfies significantly more agentic ( $M = 5.63$ ;  $SD = .99$ ) than communal goals ( $M = 3.66$ ;  $SD = 1.13$ ; Cohen’s  $d = 1.85$ ;  $t(130) = 19.27$ ;  $p = .00$ ). Second, participants believed that entrepreneurial careers fulfill agentic goals to a higher extent ( $M = 5.63$ ;  $SD = .99$ ) than agentic-stereotypic careers ( $M = 5.03$ ;  $SD = .70$ ; Cohen’s  $d = .70$ ;  $t(128) = 6.45$ ;  $p = .00$ ) or communion-stereotypic careers ( $M = 3.34$ ;  $SD = 1.08$ ; Cohen’s  $d = 2.21$ ;  $t(128) = 19.46$ ;  $p = .00$ ). Finally, participants believed communal goals to be fulfilled to a significantly lower extent by entrepreneurial

careers ( $M = 3.66$ ;  $SD = 1.13$ ) than by communion-stereotypic careers ( $M = 5.97$ ;  $SD = .84$ ; Cohen's  $d = 1.13$ ;  $t(128) = -20.02$ ;  $p = .00$ ). Communal beliefs did not differ significantly between entrepreneurial careers and agentic-stereotypic careers ( $M = 3.81$ ;  $SD = .83$ ; Cohen's  $d = .15$ ;  $t(128) = -1.94$ ;  $p = .06$ ). Thus, we find support for Hypothesis 1.

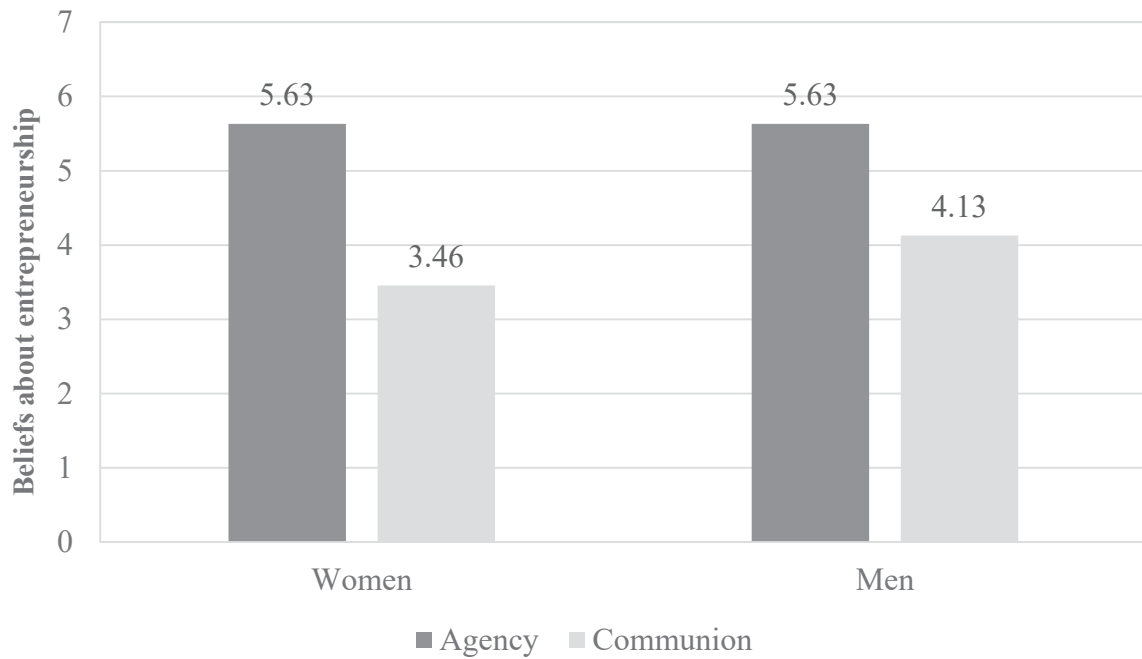
**Figure 6.** The set of beliefs about entrepreneurship compared to other careers – means of communal and agentic beliefs (study 1)



Given the higher number of females in the sample of Study 1 and our proposed gender differences concerning the processing of communal cues (Hypothesis 3), we analyzed differences in the perception of women and men by conducting Welch tests (overview of means, see **Figure 7**). While agentic beliefs about entrepreneurship did not differ between women and men ( $t(77) = 0.00$ ;  $p = 0.99$ ), women believed significantly less in the fulfilment of communal goals through entrepreneurial careers ( $M = 3.46$ ;  $SD = 1.09$ ) compared to men ( $M = 4.13$ ;  $SD = 1.10$ ; Cohen's  $d = -.61$ ;  $t(72) = 3.19$ ;  $p = .00$ ). Although the overall difference between communal and agentic beliefs might be overestimated due to the higher percentage of female participants in this study, the mean differences between communal and

agentic beliefs concerning entrepreneurship are significant for both men ( $t(38) = -9.48; p = .00$ ) as well as women ( $t(88) = -17.46; p = .00$ ).

**Figure 7.** The set of beliefs about entrepreneurship – comparison between women and men (study 1)



### 4.3.2 Study 2

We tested Hypotheses 2 and 3 using a randomized experimental scenario study. We presented a scenario describing a fictitious entrepreneur’s activities during the start-up phase. While the control condition avoided any reference to communal activities, the treatment stressed communal aspects.

**Participants.** The sample consisted of 389 graduate and undergraduate students from a German university who were studying business/economics (60%), social science (20%), or engineering (11%). Participation was voluntary, and no incentives were given. The sample included 219 women (56%), and the average age was 22.9 ( $SD = 2.4$ ). The students were, on average, three years into their studies, with 1.4 years until the completion of their degree. We regarded this sample as appropriate because the students would soon be making decisions regarding their future career and thus, were highly involved in the topic (e.g., Krueger et al.,

2000; Santos et al., 2018; Shinnar et al., 2012). This ensured that participants would be motivated to read the scenario. Moreover, 70% of students had already been exposed to an entrepreneur either in their family or in a close circle of acquaintances. On a scale of 1 (“very bad”) to 5 (“very good”), the participants evaluated their opportunities on the job market with 3.66.

**Experimental procedure.** We invited the respondents to participate in a study on career opportunities – via either an online (56%) or paper survey. A chi-square test of the covariance matrices of the model variables revealed no significant differences between survey methods ( $\chi^2(15) = 17.02, p = .32$ ). Participants were randomly assigned to one of two experimental conditions – communal versus non-communal framing. Following Diekmann et al. (2011), we used a 2 (framing) x 2 (participant sex) between-subject design. Both conditions included scenarios in which an entrepreneur reported about the starting phase of the business; this was done to increase the credibility of the source of the message, thus favoring information processing (Petty & Brinol, 2010). The treatment in the communal scenario consisted of framing the entrepreneurial career as involving communal aspects. Following prior research on the activation of communal beliefs (Diekmann et al., 2011), the communal treatment described (a) interactions between the reporting founder of the business and team members as well as between the founder and customers, and (b) pro-social behavior by describing that the person valued opportunities to do something useful for customers (see **Appendix 4**). The report was formulated in a gender-neutral way to rule out effects of homophily, in which individuals with similar demographics tend to associate with one another (Alsos & Ljunggren, 2016; Brashears, 2008).

**Measures.** The *attitude toward entrepreneurship* was measured using three items on a semantic differential (from -3 to +3) (Ajzen, 2002). The participants were asked to evaluate



entrepreneurship regarding the following: “boring vs. exciting”, “uninteresting vs. interesting”, and “annoying vs. attractive”. Cronbach’s alpha was  $\alpha = .79$ .

*Agentic* and *communal beliefs* were assessed by asking the participants how likely it would be for certain consequences to arise from starting a business. We used scales from Diekmann et al. (2011), Diekmann et al. (2016) and Pöhlmann (2001). For *agentic beliefs*, these were “opportunities to show a high performance”, “a high income”, “autonomy at work”, “high social prestige”, and “influencing other people”. *Communal beliefs* consisted of two distinct facets of beliefs. *Interaction beliefs* referred to “interacting with other people”, “working in a team”, and “having fascinating conversations with other people”. *Pro-social beliefs* referred to “generating solutions for the problems of other people”, “opportunities to do something useful for other people” and “support other people”. The measure of pro-social beliefs was similar to Davidsson (1995a), who developed a societal contribution index (e.g., “Individuals who founded firms created our national wealth.”). Each of these beliefs was measured on a seven-point Likert scale ranging from 0 (“very unlikely”) to 6 (“very likely”). We measured beliefs as expected outcomes following Davidsson (1995b) rationale that individuals tend to hold highly interrelated beliefs, upon which they base a holistic evaluation rather than separately weighing each belief.

Since we regarded beliefs as a formative construct, we formed a summative composite of each respective belief. A formative operationalization implies that the items are facets of the aggregate construct rather than indicators that all reflect the same underlying latent variable (Edwards, 2001; Podsakoff, MacKenzie, Podsakoff, & Lee, 2003). These facets do not necessarily have to correlate with each other. Hence, Cronbach’s alpha does not provide appropriate information about reliability in this case (Coltman, Devinney, Midgley, & Venaiik, 2008). Instead, we checked for reliability (and validity) by applying two approaches. The first was an intense cognitive probing phase, in which the item formulations were qualitatively

pretested, checked and refined in an iterative manner. Cognitive probing is well established in survey research albeit less known in psychology (Krosnick, 1999). Second, we apply an instrumental variable approach that eliminates the potential lack of reliability by separating the variance of the respective variable into a reliable component and the non-reliable component, which is comprised in the variable's error term (Antonakis, Bendahan, Jacquart, & Lalive, 2010).

**Checks of implementation quality.** The length of the treatment and control scenarios were comparable (272 vs. 265 words), and we included items to check for success of implementation, that is whether the scenario was properly understood and perceived as intended (Shadish, Cook, & Campbell, 2002). Among these, participants were asked who ran the business (founder alone or with a team) and which difficulties the founder experienced during the startup process. Consequently, we eliminated 11 participants who did not correctly answer both questions (resulting in a final sample size of  $N = 389$ ). In addition, we measured a) the perceived degree of realism of the scenario, b) the need to concentrate while reading the scenario, c) the participant's level of tiredness, and d) the participant's mood while reading to rule out unintended differences between both scenarios that could affect beliefs and attitude.

All implementation quality questions were measured on a five-point Likert scale. Regressing these four implementation measures on the treatment dummy resulted in small, albeit significant, regression weights for perceived realism ( $\beta = .12, p = .02$ ), the need for concentration ( $\beta = .14, p = .01$ ), and tiredness ( $\beta = .11, p = .03$ ). In contrast, mood showed no significant relationship ( $\beta = .06, p = .23$ ). Because these differences could have had a possible effect on the beliefs and the attitude measured by the study, we tested whether perceived realism, the need for concentration, and tiredness mediated the treatment effect while controlling for the beliefs. We did not find a significant effect. Furthermore, we performed a moderated regression analysis to determine whether the implementation measures moderated

the effect of the treatment on the beliefs. Again, none of these moderator analyses resulted in significant moderator effects. To test for successful randomization, we conducted t-tests on gender, age, exposure to entrepreneurship, and remaining semesters of study. We found no statistical differences between the treatment and control group.

**Analytical procedure.** Following our research model, we analyzed whether the effect of the treatment (communal cues) on the attitude toward entrepreneurship is mediated by communal beliefs (interaction and pro-social beliefs). This model was analyzed using structural equation modeling (SEM). Even with randomization of the treatment variable, incorporating mediators in a model runs the risk of bias due to the possibility of confounding or reverse causation effects (Bullock & Ha, 2011). Hence, we combined a classical experiment (randomized treatment and control groups) with an instrumental variable approach.

An instrument is a variable that 1) must be strongly related to the mediator, 2) must not be correlated with omitted causes of the outcome, and 3) must not have a direct effect on the outcome (Chalak & White, 2011; Levitt, 1997, 2002). If the number of instruments is larger than the number of predicted variables, these assumptions can be tested. When incorporating instruments using SEM, the relevant test is the chi-square test in which the direct effect of the instrument(s) on the outcome is fixed at zero. This test resembles the Sargan test (Sargan, 1958) in econometrics. If the instruments are valid, an estimation of the error covariance between a respective mediator and the outcome allows the identification of confounding or reverse causation. This test resembles the Hausman test in econometrics (Hausman, 1978).

In our research model, we identified two instruments: the perceived importance of achieving interaction goals and the perceived importance of achieving pro-social goals. Adopting a motivation theory perspective (Kanfer, 1990), we predicted that the importance of a particular goal (e.g., interaction information) would correlate with the expected likelihood for this goal to be fulfilled (e.g., interaction belief).

Our research design benefitted from SEM. First, we included agentic beliefs to test and to reject the possibility that the treatment effect is mediated by agentic beliefs. Second, we estimated the correlation between the two instrumental variables but fixed their correlation with the treatment to zero because of the randomization of the treatment. Third, we estimated the error covariances among the beliefs to acknowledge potentially omitted common causes of these variables. Fourth, we included attitude toward entrepreneurship as a latent variable and its measures as reflective indicators to increase the support of the supposed measurement model and, thus, the validity of the outcome measure (Bagozzi, 1977).

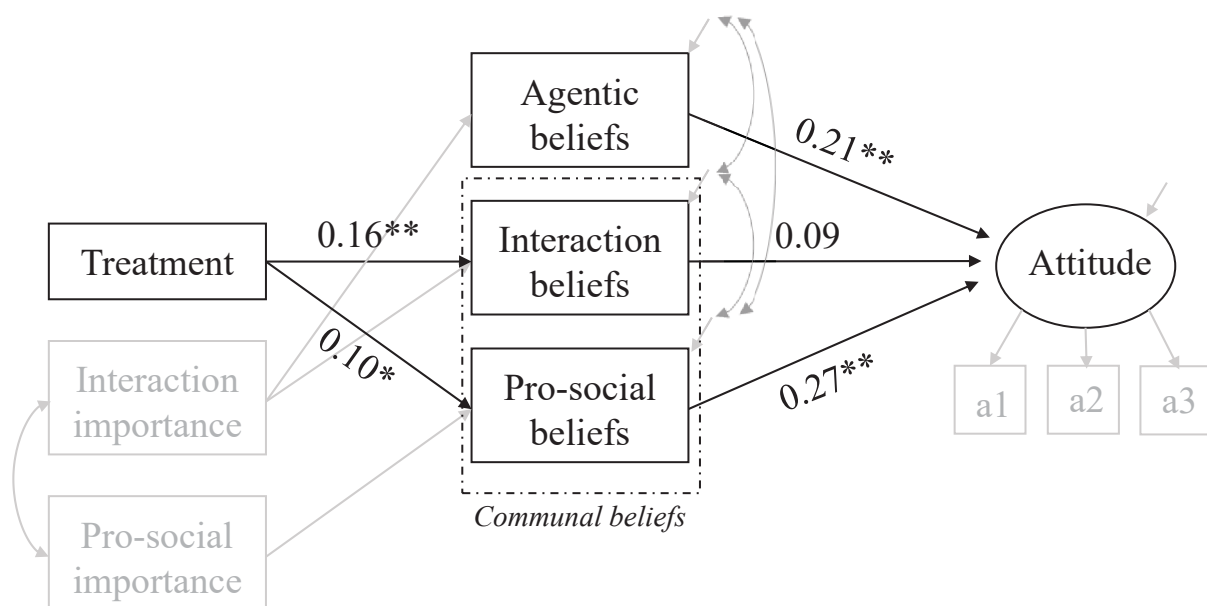
**Modeling procedure.** The SEM was estimated using the Lavaan package within the open-source software R (R Development Core Team, 2010). The chosen estimator was robust maximum likelihood with the Yuan-Bentler correction of the chi-square statistic and standard errors for non-normal data distributions. Missing data were addressed by estimating the model with full-information maximum likelihood (Enders & Bandalos, 2001). Because SEM provides no formal weak instrument test, we applied two-stage least squares regression with the *ivreg* function in the AER package in R. Finally, we estimated the standard errors of the specific and total indirect effects with bootstrapping.

**Results.** Before testing our theoretical process model with instruments, we applied the weak instrument test within a two-stage-least squares regression (Stock, Wright, & Yogo, 2002) to test whether the instruments had sufficient strength. The test was conducted for females and males separately. The instruments passed the test for pro-social beliefs and interaction beliefs in both gender groups with  $p < .001$ .

We estimated a model with a) the effect of the treatment on the attitude mediated by pro-social beliefs and interaction beliefs, b) the effects of the instruments on their respective belief variable, and c) the effect of agentic beliefs on attitude. In contrast, we fixed the direct effects of the instruments and treatment on the attitude (i.e., the Sargan test) and the effect of

the treatment on agentic beliefs, to zero. This model showed a significant misfit ( $\chi^2(44) = 67.62$ ,  $p = .01$ ). Inspection of the standardized residuals (i.e., the differences between the empirical covariances and the model-implied covariances) indicated that the relationship between interaction importance and agentic beliefs was underestimated by the model. Hence, we estimated a direct effect. We interpreted this effect such that individuals who value, for instance, social support (e.g., working in teams) see a higher opportunity to achieve agentic outcomes. Although estimating this effect changed the status of interaction importance from an unconditional instrument to a conditional instrument, it retained its usefulness as an instrument (Van Der Zander, Textor, & Liškiewicz, 2015).

**Figure 8.** Results of the experimental SEM (study 2)



**Figure 8** depicts the final model. The fit of this model was acceptable ( $\chi^2(42) = 47.14$ ,  $p = .27$ ) giving a first indication that our assumptions about a lack of direct effects of the treatment and both instruments and the absence of endogeneity were valid. Furthermore, the fit rejected the possibility of agentic beliefs mediating the treatment effect and hence constituting a competing process. **Table 9** displays the direct, specific indirect, and total indirect effects. As shown, the treatment led to a significant change in beliefs. Furthermore, both agentic beliefs

and pro-social beliefs had substantial effects on attitude. In contrast, although we had increased interaction beliefs, this facet of communal beliefs did not affect the attitude toward entrepreneurship. Likewise, the specific indirect effect of the treatment on attitude was significant for pro-social beliefs as a mediator but not for interaction beliefs. Hence, Hypothesis 2 was only partially confirmed.

**Table 9.** Results of the experimental SEM (study 2)

	B (SE)	$\beta$
<b>Treatment effects</b>		
T → interaction beliefs	0.28 (0.07)**	0.16
T → pro-social beliefs	0.20 (0.08)*	0.10
<b>Effects of the beliefs</b>		
Agentic beliefs → Attitude	0.36 (0.10)**	0.21
Interaction beliefs → Attitude	0.12 (0.08)	0.09
Pro-social beliefs → Attitude	0.34 (0.08)**	0.27
<b>Specific indirect effects</b>		
T → interaction beliefs → Attitude	0.03 (0.03)	0.01
T → pro-social beliefs → Attitude	0.07 (0.03)*	0.03
<i>Total indirect effect</i>	0.10 (0.04)*	0.04

Note. *T* = treatment versus control; \*\* $p < .01$ , \* $p < .05$ ; B = unstandardized effect; SE = standard error;  $\beta$  = standardized effect; the total indirect effect is the sum of both specific indirect effects and addresses in how far the treatment affects the outcome mediated by all mediators together.

Finally, we tested all models using multi-group models with gender as the group variable. We tested Hypothesis 3 by means of equality constraints, which were specified for both gender groups, to test whether men and women differ in the model effects. The results showed that the model with equalized effects across both groups did not significantly decrease

the fit ( $\Delta\chi^2(8) = 4.39, p = .82$ ), implying that the two groups do not differ in terms of effects within the model. Furthermore, we tested the equality of variances to be able to compare standardized betas. The referring equality constraints, however, did not decrease the model fit ( $\Delta\chi^2(10) = 10.86, p = .37$ ). Since we did not find significant differences between men and women for any effects, Hypothesis 3 was rejected.

## 4.4 Discussion

Portrayals of occupations transport important information. They inform the next generation of job entrants about the roles and activities of individuals within occupation and thereby provide a “job preview”. Taking an information processing perspective, our paper underlines that distorting stereotypical portrayals, as in the context of entrepreneurship, changes young adults’ belief set which shapes their attitudes. In particular, we first show that entrepreneurship is not believed to fulfill communal goals, despite the fact that communal aspects such as interaction with various actors and developing solutions for customers are essential parts of entrepreneurial activities (Aldrich & Cliff, 2003; Davidsson & Honig, 2003; Downing, 2005; Judith et al., 1990). Second, we discovered that a communal-inclusive portrayal of entrepreneurship activates communal beliefs about entrepreneurship, specifically pro-social beliefs, and thereby improves young adults’ attitudes toward entrepreneurship – for both women and men.

### 4.4.1 Theoretical Implications

Although the mediated relationship from presenting a communal-integrative portrayal about entrepreneurship via pro-social beliefs to attitude is significant, the treatment effects are low (**Table 9**). Reasons for the low treatment effect might be alternative processes and the resistance of beliefs and attitudes. First, a broad set of beliefs (including agentic, emotional and self-efficacy beliefs) may form attitudes (Edwards, 1990; Mitchell & Olson, 2000). While our

theoretical processes concentrated on the cognitive part of information processing, others have proposed that anticipated emotions play a role for attitudes (Zampetakis, Kafetsios, & Moustakis, 2017). Thus, expected consequences and goal fulfilment as well as beliefs about future emotional states concerning the attitude object may form attitudes. Moreover, the influential role of self-efficacy beliefs on attitudes has been widely discussed (e.g., Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Lent, Brown, & Hackett, 1994). Our studies aimed at investigating the role of communal beliefs for the attitude toward entrepreneurship. Future research may compare the malleability of different belief types on attitudes (e.g., communal/agentive beliefs versus emotional or self-efficacy beliefs).

Second, the effect of the treatment and a translated change in beliefs and attitudes likely depends on the resistance of prior beliefs about and strength of the attitude toward entrepreneurship. Attitude strength determines how resistant an attitude is toward a certain object, and influence the extent to which a prior attitude affects information processing (Krosnick & Petty, 1995) as well as attitudinal change (Fiske & Taylor, 1991). The set of beliefs about entrepreneurship may be resistant because individuals have been repetitively exposed to the agentive-dominated portrayal of entrepreneurship via famous narratives. Because the strength of prior beliefs and of the attitude may also explain the missing gender effect, we discuss their role in more detail when reflecting on non-differences between women's and men's information processing.

Beyond pointing to alternative information processes, our study provides four implications for future research. First, by showing that young adults' set of beliefs about entrepreneurship is dominated by agentive beliefs, our study provides a new angle to interpret prior research on the effect of work values on entrepreneurial intentions. Previous studies found that agentive-related values (e.g., self-enhancement, openness to change values, extrinsic rewards) are linked with entrepreneurial intentions (Hirschi & Fischer, 2013; Lechner et al.,



2018). Our study indicates that agentic values could explain entrepreneurial intentions because agentic values correspond to the beliefs connected with the agentic-stereotypical portrayal of the entrepreneurial career (e.g., an entrepreneurial career provides opportunities to show a high performance and a high income). The results of Study 1 show that the entrepreneurial career is perceived as significantly more agentic than communal. Thus, if young adults do not perceive entrepreneurship to include communal aspects, those holding communion-related values (e.g., self-transcendence values, intrinsic rewards) are unlikely to express high entrepreneurial intentions. Low communal beliefs about entrepreneurship imply that becoming an entrepreneur cannot be expected to fulfill communal-related values. Hence, since entrepreneurship is expected to fulfill agentic values, it seems logical that following an entrepreneurial career attracts individuals holding agentic values rather than communal values.

Although agentic-related beliefs dominate the portrayal of entrepreneurship (see results of our Study 1) and agentic-related values explain who selects into an entrepreneurial career (Hirschi & Fischer, 2013; Lechner et al., 2018), individuals who have become an entrepreneur define their role not only in agentic terms (e.g., making money, creating personal wealth, being professional) but also in pro-social terms (e.g., advancing a cause, contributing to a better world, leading by example) (Fauchart & Gruber, 2011). Thus, although entrepreneurs perceive their role as both agentic and pro-social, they are much more likely to be perceived as agentic from the outside (e.g., by the next generation entering the workforce). The mismatch between entrepreneurs' self-perception and external perceptions of entrepreneurship prompts us to reinforce the call to broaden our understanding of the entrepreneurial role (Welter et al., 2017). The entrepreneurial identity and entrepreneurial activities encompass not only agentic but also pro-social aspects and, as our Study 2 shows, both aspects are important to young adults' attitude formation. Therefore, we encourage future research to embrace greater diversity in examining entrepreneurial phenomena.

Second, we have taken a cognitive perspective of entrepreneurship to better understand how young adults think and, in turn, why young adults make decisions and act the way they do. Following an information processing perspective, we have explored the cognitive processes involved in the evaluation of an occupational field such as entrepreneurship. We have shown that the attitude toward entrepreneurship depends on the individuals' beliefs about entrepreneurship which are formed by the portrayal of the occupation. With our experimental study, we have demonstrated that beliefs and attitudes are malleable by adding missing information to the portrayal of the entrepreneurial occupation. We have shown that providing distinct and relevant information to individuals can change their thinking about, and evaluation of an occupation.

In this way, our study indicates how schematic thinking can be dissolved. Integrating an information processing perspective enhances theoretical understanding beyond the mere identification of schematic thinking. Future research could benefit from further investigation into interventions that manipulate belief schemata or heuristics that can potentially mislead current decision-making in identification processes. Beyond our theoretical contribution to cognition research in (career) identification processes, our study leverages the information processing perspective, as it provides an approach to empirically test mediating effects within experiments without losing the power of causality statements. This approach can prove useful for many process perspectives (e.g., entrepreneurial opportunity recognition and exploitation processes).

Third, our research contributes to the debate regarding the over-individualization and under-socialization of entrepreneurs and their occupational activities. While entrepreneurship research has increasingly proposed that entrepreneurship is an occupation that includes a social dimension because entrepreneurs are embedded in a social system (Downing, 2005; Drakopoulou Dodd & Anderson, 2007; Zahra & Wright, 2016), others have warned against

under-estimating the importance of an individual's courage because entrepreneurs make decisions in an environment marked by high uncertainty (McMullen, 2017; McMullen & Warnick, 2016). Our study has found that pro-social and agentic beliefs are important in shaping young adults' attitude toward entrepreneurship (**Figure 8**). Thus, our results indicate that agentic and pro-social beliefs are two sides of the same coin and play an integral role in the evaluation of the entrepreneurial career, even before one becomes an entrepreneur. The individual entrepreneur and the embeddedness of the entrepreneur are both important perspectives when analyzing phenomena such as entrepreneurial career development and the perception of entrepreneurs.

Although the pro-social aspect of communal beliefs showed relevance in our study, we cannot confirm the same for communal beliefs concerning interaction. While our treatment manipulated interaction beliefs, these beliefs did not significantly influence young adults' attitude toward entrepreneurship. We propose that communal pro-social beliefs better speak to the need of meaningfulness than interaction beliefs do, which renders pro-social beliefs more important for the evaluation of the entrepreneurial career.

Fourth, our findings also add to gender research. Previous research has provided great insights into gender differences in terms of entrepreneurial intentions (Gupta et al., 2008; Gupta et al., 2009), self-efficacy (Kourilsky & Walstad, 1998; Wilson, Kickul, & Marlino, 2007), opportunity recognition (Gupta, Goktan, & Gunay, 2014) and funding decisions of actors in the entrepreneurial system (Gicheva & Link, 2013; Malmström, Johansson, & Wincent, 2017; Marlow & Patton, 2005). Surprisingly, we did not find a significant difference between men and women. While we assumed that providing women with information about the communal aspects of entrepreneurship would have a stronger effect on their communal beliefs and attitude toward entrepreneurship compared to men's beliefs and attitude, our results failed to support

this assumption. Our study shows that communal beliefs improve women's and men's attitude toward entrepreneurship. A difference between genders might not be visible for two reasons.

First, recent gender research indicates that agency and communion may have become less explicitly associated with gender (e.g., Brown, Thoman, Smith, & Diekmann, 2015; Diekmann et al., 2011). Previous studies on science and STEM careers did not find significant gender differences in the effect of communal and/or agentic beliefs on the interest in these careers (Brown et al., 2015; Diekmann et al., 2011). Similarly, in our study, the increase in pro-social beliefs increased both men's and women's attitude toward entrepreneurship. As Bakan (1966) noted, the valence of communion and agency has evolved over decades and, thus, can change. Following this line of thinking, Diekmann and Eagly (2000) introduced a dynamic perspective on gender stereotypes and confirmed that, for instance, women are increasingly associated with masculine characteristics across different cultural contexts (e.g., Bosak, Eagly, Diekmann, & Sczesny, 2018; Diekmann, Eagly, Mladinic, & Ferreira, 2005; Lopez-Zafra & Garcia-Retamero, 2012). Thus, insignificant gender differences across studies might be explained by an increased appreciation of communal (agentic) aspects by men (women), which renders gender differences less apparent.

Second, the non-significant difference between women's and men's information processing concerning a communal-integrative portrayal of entrepreneurship might be due to a difference in attitude strength. Concerning entrepreneurship, women might hold a strong and persistent attitude that is resistant to change, even if they are presented with personally relevant information. Women's prior attitude strength may be enforced by their belief system, which seems to be strongly dominated by agentic beliefs. The results of Study 1 show that communal beliefs are significantly lower among women than among men (Cohen's  $d = -.61$ ;  $t(72) = 3.38$ ;  $p = .00$ ; see also **Figure 7**). Notably, women hold significantly lower communal beliefs about entrepreneurship than men. On the one hand, the agentic dominated portrayal might prevent

women from developing a stronger reaction to communal cues than men. Women might perceive the stereotypical entrepreneurial portrayal as too strongly associated with male characteristics (Gupta, Turban, Wasti, & Sikdar, 2005; Gupta et al., 2009). It may take women more time to overcome the persistent male stereotypical portrayal of entrepreneurship. On the other hand, even if women are presented with a communal-inclusive portrayal, the increase in communal beliefs might not pass a threshold that would render communal beliefs even more valuable for women than for men.

Nevertheless, our study shows that increasing communal beliefs translates into an improved attitude toward entrepreneurship among women, though not significantly more than for men. Therefore, we propose for future research to conduct a long-term study that examines how communal and agentic beliefs about careers evolve over time. Moreover, it would be interesting to design experiments that analyze which types of treatments (e.g., repeated texts, videos, person role models who express communal versus agentic aspects of their careers) more or less strongly influence women's belief system.

#### 4.4.2 Practical Implications

Our findings point to two important practical aspects. First, portrayals of occupations are crucial in shaping attitudes toward careers such as entrepreneurship; thus, they play an important role at the beginning of the career development process. Interest in a career is needed as a basis for an individual's career choice (Lent et al., 1994). If a person discards an occupation based on a biased portrayal, he/she might overlook a career that could have created valued outcomes for that person. Hence, we propose that the media should take an active but cautious role in the diffusion of narratives about entrepreneurship. The media could broaden narratives about entrepreneurship beyond agentic aspects by including pro-social aspects. More precisely, mass narratives could increasingly explain if and how entrepreneurial activities impact customers' or employees' lives by introducing a product or service (e.g., the founders of *Fond*

*of Bag* who recognized that typical school bags had a negative effect on children's posture and, in turn, developed ergonomic school bags).

Second, while prior studies revealed the importance of agentic-related competencies and traits such as risk management, resilience, autonomy and competitiveness (Morris, Webb, Fu, & Singhal, 2013), our findings indicate that competencies related to the pro-social side of entrepreneurship should also be integrated into entrepreneurship education. Educational approaches such as “design thinking” and “lean startup” seem to reflect the call for a stronger “others-orientation” in the development of successful entrepreneurial ideas. These approaches demonstrate that identifying a need and proposing a value to others on a greater scale requires building empathy with customers and iterating with the feedback of users (Elsbach & Stigliani, 2018; York & Danes, 2014). Thus, including the training of competencies such as perspective taking (Davis, 1983) and integrative thinking (Miller, Grimes, McMullen, & Vogus, 2012) are an opportunity for individuals to experience an overlooked but integral part of entrepreneurship and familiarize themselves with competencies that are valuable for an entrepreneurial career.

#### 4.4.3 Limitations

Finally, we would like to discuss the limitations of our study. First, past research has shown that the stereotypical portrayals of occupations and the attitude toward entrepreneurship strongly depends on the cultural context (Farmer et al., 2011; Freytag & Thurik, 2007). As our study is based on a sample from a single country, we must be careful about drawing conclusions for more than the Western world. Future studies could compare the effect of beliefs about entrepreneurship and other occupations on the attitude across national boundaries.

Second, in our experimental study, we concentrated on manipulating communal aspects in the everyday tasks of an entrepreneur. Although entrepreneurial tasks seem to have some relevance for the formation of beliefs and the attitude, other aspects of the entrepreneurial role

might also have explanatory power. In view of the significant results concerning pro-social cues, we propose future research to investigate the influence of a business venture's mission – commercial vs. social – on the attitude toward entrepreneurship.

Third, the effects of the treatment on the attitude toward entrepreneurship as mediated by beliefs were weak (**Table 9**). Our study focused on a text-based treatment by providing a description of an entrepreneur's life in the early stage of his/her venture. The effect of the message has been found to depend on the channel (video, audio versus text) through which recipients receive the message (Shen, Sheer, & Li, 2015). We believe that future research could provide valuable insights into alternative ways of manipulating the portrayal of occupations by testing a different medium (e.g., video) or repeating the cue (e.g., longitudinal design) to better understand the malleability of attitudes.

## **CHAPTER 5 | 50 Shades of Hybridity – A Taxonomy of Organizational Value Logics by Social Enterprises<sup>9</sup>**

### **Abstract**

This article explores how social enterprises differ in enacting hybridity, i.e., combining multiple institutional logics within one organization. Previous research has shed light on the implications of hybridity for the management of social enterprises; however, the content or nature of hybridity remains less clear. To fill this gap, we draw on the concept of organizational value logics to examine how hybridity is enacted by a social enterprise via its relationships with stakeholders that are part of the value proposition, capture, and creation/delivery. By developing a taxonomy of organizational value logics using a sample of 127 social enterprises, we show that organizational value logics systematically fall into three main clusters; socially dominated, blended, and commercially dominated hybrids which differ in the way they integrate social and commercial stakeholders. The analysis of differences between these clusters reveals that the hybrid nature of social enterprises becomes apparent in the configuration of three elements: the former institutional adherence of a social enterprise's stakeholders (social/commercial), the type of relationship to its stakeholders (uni-/bidirectional), and the number of distinct stakeholder groups it relates to.

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<sup>9</sup> This chapter is co-authored by Janina Sundermeier and was accepted at Babson College Entrepreneurship Research Conference 2019.



## 5.1 Introduction

Social enterprises as means to leverage adversity and achieve commercial value have attracted increasing attention among scholars and practitioners (Saebi et al., 2018; Short, Moss, & Lumpkin, 2009). They challenge current theoretical assumptions of organizational theory because social enterprises are hybrid organizations combining multiple institutional logics that have long been regarded as mutually exclusive (Battilana et al., 2015; Mair et al., 2015; Pache & Santos, 2013). Particularly, social enterprises draw on both a social welfare logic, which addresses alleviating societal or ecological issues, and an economic logic, which implies selling goods or services to generate an economic surplus (Mair et al., 2015; Pache & Santos, 2013). One example of a social business hybrid is the for-profit enterprise Dialogue Social Enterprise which offers exhibitions and workshops designed and given by disabled, disadvantaged, or elderly people to enhance learning about inclusion among visitors and within companies (Dialogue Social Enterprise, 2019).

The hybrid nature of social enterprises has provoked intensive discussions about the implications of combining multiple institutional logics within one organization (Besharov & Smith, 2014; Doherty, Haugh, & Lyon, 2014). Combining multiple institutional logics, on the one hand, induces paradoxes and tensions (Battilana & Dorado, 2010; Pache & Santos, 2013; Smith, Gonin, & Besharov, 2013), but on the other hand it can enable innovative solutions (Battilana et al., 2015; Jay, 2013). Thus, while we have learned that tensions require social enterprises to establish an appropriate organizational design and strategy, there is yet limited knowledge about the conditions under which social enterprises face detrimental or beneficial implications resulting from hybridity. According to Besharov and Smith (2014), there is a lack of understanding about differences in the

implications of hybridity because we still miss a systematic understanding of how social enterprises differ in combining institutional logics and thereby enacting hybridity.

To address this gap, the present paper explores heterogeneity in the hybridity of social enterprises by analyzing their organizational value logics. An organizational value logic is a shared meaning system within an organization that implies for whom value is provided and what enables the organization to provide this value (Laasch, 2018a). Organizational value logics were recently introduced as a construct that helps in understanding how institutional logics translate to the organization (Laasch, 2018b). An institutional logic is a socially construed and historically grown meaning system of legitimized goals and practices that is shared within an institutional field (Thornton & Ocasio, 1999; Wry & York, 2017). Thus, institutional logics prescribe and provide goals and practices that inform organizational value logics, while organizational value logics then shape organizational characteristics such as the organizational identity and governance strategies (Jay, 2013; Ocasio & Radoynovska, 2016). Therefore, organizational value logics provide an important angle to understand heterogeneity in the hybridity of social enterprises.

To understand differences in the hybridity of social enterprises, we developed an empirically based taxonomy that indicates distinct and heterogeneous types of organizational value logics reflecting differences in how hybridity is enacted by social enterprises. In an iterative process, we analyzed a sample of social enterprises awarded by international organizations (e.g., Schwab Foundation for Social Entrepreneurship, Echoing Green). Afterwards, we quantified the components of the organizational value logics in a final data set of 127 social enterprises and used cluster analysis to identify patterns of who was how involved in the value generation. The results produced a taxonomy of three meta-clusters implying seven sub-clusters of organizational value logics that depict different forms of hybridity. A comparison of these cluster shows that the hybrid

nature of social enterprises becomes apparent in the configuration of three elements: the former institutional adherence of a social enterprise's stakeholders (social/commercial), the type of relationship to its stakeholders (uni-/bidirectional), and the number of distinct stakeholder groups it relates to.

Our findings advance the literature on social enterprises and hybrid organizations. First, this study integrates the concept of organizational value logics into organizational research of hybrid organizations, in particular hybrid social enterprises. Analyzing organizational value logics in social enterprises allows for answering calls for the advancements in the understanding of how institutional logics are combined and enacted within hybrid organizations (Battilana, Besharov, & Mitzinneck, 2017; Saebi et al., 2018). Second, developed taxonomy shows in which ways organizational value logics by social enterprises differ. Thereby, this paper provides a theoretical foundation to further analyze why and under what conditions hybridity is a source of tensions for some organizations, while for others hybridity is a resource to innovate.

## **5.2 Theoretical Background**

### **5.2.1 Institutional Logics and Hybridity in Social Enterprises**

The hybrid nature of social enterprises has gained increasing attention in recent years (Battilana & Lee, 2014; Doherty et al., 2014). To explain hybridity, scholars have particularly referred to the multiplicity of institutional logics social enterprises combine (e.g., Battilana & Dorado, 2010; Pache & Santos, 2013; Wry & York, 2017). In this vein, the hybridity of social enterprises is described by the combination of at least two institutional logics: social welfare logic and economic logic (Battilana & Dorado, 2010; Saebi et al., 2018). The social welfare logic stresses improving societal conditions by relieving suffering of disadvantaged societal members and by

contributing to ecological sustainability (Mair et al., 2015; Pache & Chowdhury, 2012; Pache & Santos, 2013; Smith et al., 2013). The economic logic implies maximizing surplus from revenue through selling goods or services on the market to generate economic value appropriated by the owners (Mair et al., 2015; Pache & Chowdhury, 2012; Pache & Santos, 2013; Smith et al., 2013). Moreover, the economic logic prescribes efficiency and operational effectiveness (Pache & Santos, 2013; Smith et al., 2013). Thus, social enterprises pursue the solution of a social problem while engaging in economic activities that sustain their operations (Battilana & Lee, 2014).

An institutional logic is a socially construed and historically grown meaning system of legitimized goals and practices that is shared within an institutional field (Thornton & Ocasio, 1999; Wry & York, 2017). Institutions have been examined mainly through the lens of isomorphism, focusing on how common beliefs and practices emerge within a field with which organizations comply with to achieve legitimacy (DiMaggio & Powell, 1983; Meyer & Rowan, 1977a; Zucker, 1987). While institutions in this view were seen as prescribing goals and practices, and the theoretical view concentrated on homogeneity between organizations, the institutional logics approach introduced an element of agency and thereby points to important heterogeneity between organizations (Friedland & Alford, 1991; Thornton & Ocasio, 2008). Entities in an institutional field can not only reinforce but also shape institutional logics (Friedland & Alford, 1991; Thornton & Ocasio, 2008). Therefore, Besharov and Smith (2014) assume that institutional logics frame organizational and individual behavior; however, organizational or professional actors within an institutional sphere also influence how institutional logics are enacted within organizations. Thus, the agency of the entities proposes that differences exist in the way institutional logics are instantiated within organizations.

To better understand which consequences the embeddedness in multiple institutional logics has for the management of social enterprises, research examined hybridity in organizational forms and organizational identities (Battilana & Lee, 2014). First, scholars who analyzed social enterprises' organizational forms such as governance structure, ownership or profit allocation found that social enterprises selectively couple institutional logics or prioritize one of the logics to achieve legitimacy either way (Mair et al., 2015; Pache & Santos, 2013). Thus, heterogeneity exists in the strategies of how social enterprises manage the implications of combining institutional logics within the organization (Battilana & Lee, 2014; Mair et al., 2015).

Second, scholars who follow an organizational identity perspective propose that hybridity in the founders' and employees' identity poses challenges to organizational practices and performance (e.g., Battilana & Dorado, 2010; Smith, Knapp, Barr, Stevens, & Cannatelli, 2010; Wry & York, 2017). In particular, hiring new employees and the socialization of employees can imply organizing and belonging tensions (Smith et al., 2013). While some social enterprises opt for hiring "tabula rasa" employees with weak adherence to a specific institutional logic, others recruit a mix of individuals who are trained within a field that follows a certain institutional logic (Battilana & Dorado, 2010). The heterogeneity in the workforce composition's identities leads to differ approaches in the socialization of the workforce, which has been shown to explain differences in the performance of social enterprises (Battilana & Dorado, 2010; Battilana et al., 2015).

Previous research has contributed to our understanding of how combining different institutional logics provokes implications which social enterprises manage in differing ways. Yet, although past research indicates that hybridity implies differing implications and that social enterprises respond with differing strategies, we do not know the conditions for the diverging

outcomes of hybridity (Besharov & Smith, 2014; Shepherd, Williams, & Zhao, forthcoming). Along with Besharov and Smith (2014) and Shepherd et al. (forthcoming), we propose that we still have too little understanding about differences in the nature of hybridity in terms of degree and type of hybridity that prevents us from explaining why implications of hybridity differ between social enterprises and why different strategies are required to manage the respective type of hybridity.

There are three main reasons we have yet to learn more about heterogeneity in the hybridity of social enterprises. First, differences in enacting institutional logics in social enterprises have not yet gained much attention (Pache & Santos, 2013; Saebi et al., 2018). Although there are some works that explicitly examine differences in facets of social enterprises (e.g., Ebrahim, Battilana, & Mair, 2014; Mair, Battilana, & Cardenas, 2012; Spieth, Schneider, Clauß, & Eichenberg, 2018), these do not explain how institutional logics are combined in differing ways in social enterprises (Saebi et al., 2018). Only one recent contribution by Shepherd et al. (forthcoming) emphasizes that the nature of hybridity, which they define by relativity and intensity of hybridity, is important to understand the organizational outcomes of social enterprises. Although they acknowledge that social enterprises differ in their degree of hybridity, we still miss understanding how different degrees of hybridity are defined.

Second, research that frames hybridity in terms of combining multiple institutional logics concentrates on the implications of hybridity mainly referring to the management and productive use of tensions (e.g., Battilana et al., 2015; Mair et al., 2015). Although hybridity tensions have been regarded as both detrimental and beneficial (Smith et al., 2013), the focus on the management of tensions resulting from combining multiple institutional logics left a blind spot in terms of agency that the institutional logics approach proposes. The increasing number of social enterprises

suggests that hybrid organizations might explicitly settle at the edge of two institutional logics to combine them to create a new type of solution (Tobias, Mair, & Barbosa-Leiker, 2013). We propose that revealing differences in the hybridity of social enterprises allows for learning more about how organizations explicitly translate institutional logics to the organizational level to provide new solutions.

Third, previous work on the consequences of hybridity in social enterprises concentrated on the organization (e.g., organizational design) or agents (e.g., founder's identities) within the organization (e.g., Mair et al., 2015; Wry & York, 2017). We argue that we miss a perspective that allows us to bridge the institutional and organizational level. Following recent works by Laasch (2018b), Jay (2013), and Ocasio and Radoynovska (2016), we suggest that organizational value logics are an important perspective that accounts for an organization's relationship with the institutional environment.

Understanding how hybrid organizations differ in defining their organizational value logic may provide a more differentiated view on hybridity and plurality in organizational sense-making and can particularly contribute to our understanding of sources of innovation, paradoxes, and tensions in hybrid organizations. Systematically identifying these sources might help to explain which types of tensions and innovations result and why some organizations prioritize one institutional logic over the other, while others blend the two logics or selectively couple the logics (e.g., Mair et al., 2015; Pache & Santos, 2013).

### 5.2.2 Hybridity and Organizational Value Logics

Organizational value logics provide a lens that bridges the institutional logics and organizational practices (**Figure 9**) because both consider values that inform practices not only in an organizational field but also by one organization (Ocasio & Radoynovska, 2016). Logics are

“shared meaning systems that justify particular values” (Wry & York, 2017, p. 439). An organizational value logic is the underlying narrative of who the organization exchanges with and how the organization configures the content and type of exchange (Laasch, 2018b). Organizational value logics are embodied in organizational members, materialized in artifacts and enacted in activities (Laasch, 2018a).

**Figure 9.** How organizational value logics relate to existing constructs (building on Laasch, 2018b; Pache & Santos, 2013)

**institutional logics**

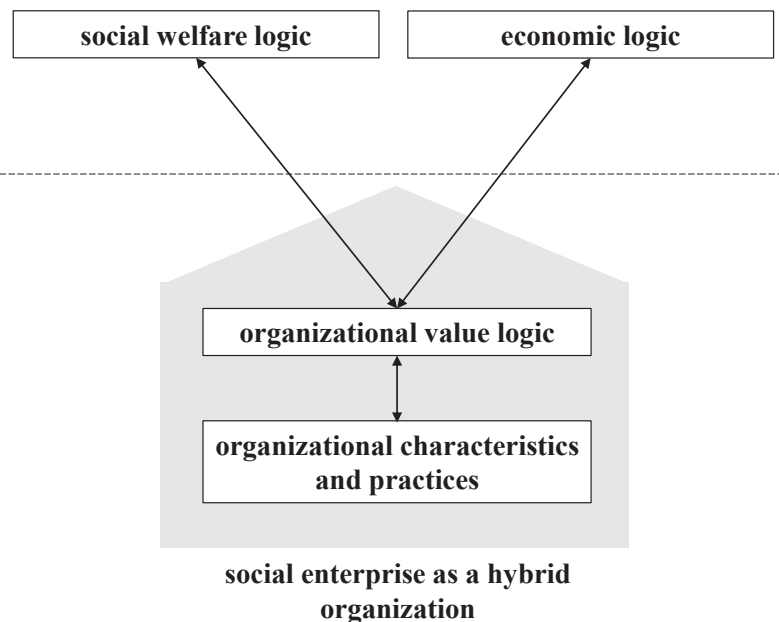
socially construed and historically grown meaning system shared within an institutional setting that implies legitimized goals and practices (Thornton & Ocasio, 1999; Wry & York, 2017)

**organizational value logic**

shared meaning system within an organization that implies for whom value is provided and what enables the organization to provide this value (Laasch, 2018b)

**organizational characteristics and practices**

e.g., organizational governance, organizational identity, recruitment



Organizational value logics can be observed in three different states (Laasch, 2018a). First, entrepreneurs and/or managers develop and cultivate the organizational value logic as a cognitive structure that serves as a heuristic in decision-making situations and as a narrative to communicate with internal and external stakeholders (George & Bock, 2011). Second, an organizational value logic will be enacted in an organization’s system of interdependent activities that relate how, why, and which value the organizations creates and for whom (Zott & Amit, 2010; Zott, Amit, & Massa,



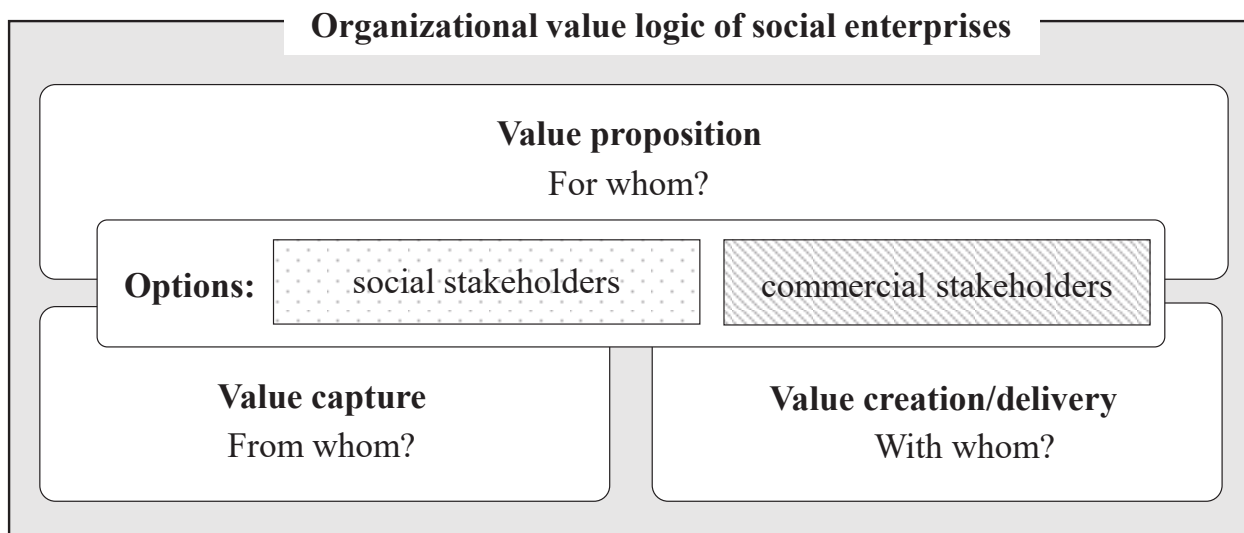
2011). Thus, an organizational value logic determines which values an organization commits to, which aims it follows and how it defines its role within its environment (Ocasio & Radoynovska, 2016). Third, an organizational value logic manifests in a business model that is materialized in verbal, textual, and visual artifacts such as business plans, websites, and pitches (Doganova & Eyquem-Renault, 2009).

Because organizational value logics manifest in business models, there are three important components that more precisely define an organization's relationship with internal and external stakeholders (Laasch, 2018b). First, the value proposition explains what the organization offers, to whom and why certain stakeholders might be willing to provide an exchange value for the offer (Richardson, 2008). Second, the value creation and delivery indicates how value is created and how it reaches the customers (Richardson, 2008). Third, the value capture describes how the organization generates revenues to offer products or services (Richardson, 2008). Thus, all three parts imply who the organization relates with internally and externally (**Figure 10**).

As social enterprises are hybrid organizations in terms of combining multiple institutional logics, they relate with stakeholders from two institutional spheres (**Figure 11**). First, the social welfare logic applies to a system of social stakeholders (social value recipient and social providers) that impact or are impacted by the aim of improving the welfare of society by addressing social needs through the provision of products or services (Mair et al., 2015; Pache & Santos, 2013; Smith et al., 2013). Social providers such as non-governmental institutions, communities and state agencies are those that offer social services (Pache & Chowdhury, 2012). Social value recipients are those that receive and depend on social providers and are not capable of changing their situation (Saebi et al., 2018; Seelos & Mair, 2005). One example would be the Red Cross, which “responds

quickly and efficiently to help people affected by armed conflict” (International Committee of the Red Cross, 2019).

**Figure 10.** Components of organizational value logics by social enterprises

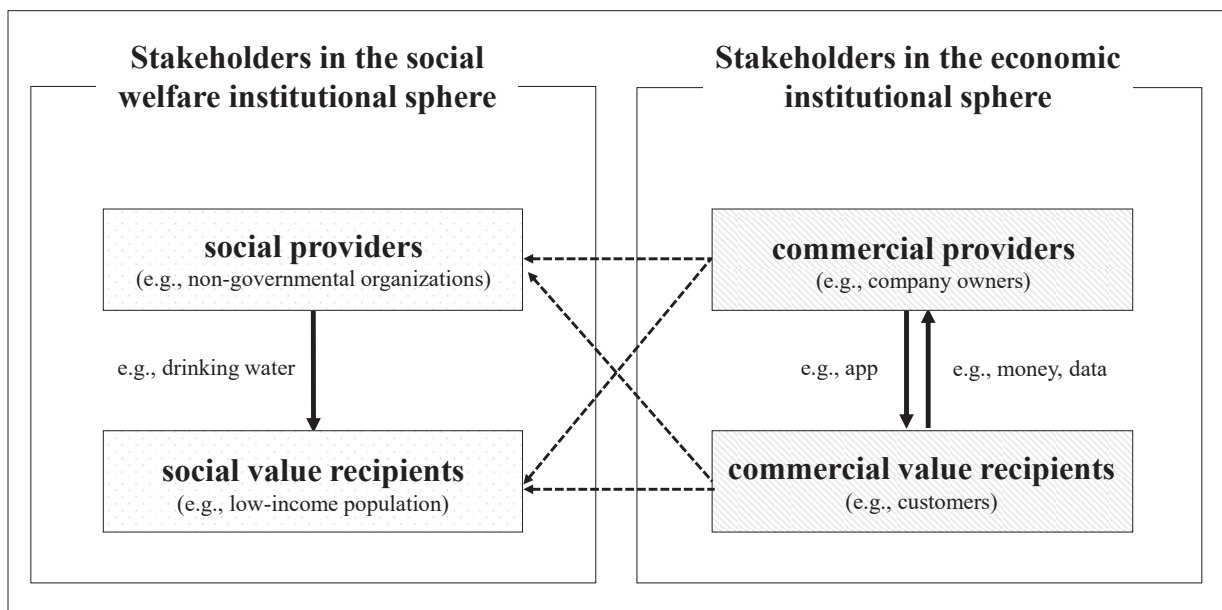


Second, the economic logic implies commercial stakeholders who are involved in the aim of profit-seeking through selling goods or services on the market to generate economic value appropriated by the owners (Mair et al., 2015; Pache & Santos, 2013; Smith et al., 2013). Commercial value recipients are individual or business customers and investors (Pache & Santos, 2013). Although commercial value recipients may be interested in the social mission of the commercial provider, they primarily relate to the organization through their economic power in exchange for its ability to provide goods, services, and financial return (Pache & Santos, 2013). One example would be the messenger service WhatsApp, which offers “fast, simple, secure messaging and calling for free, available on phones all over the world” (WhatsApp Inc., 2019).

Several scholars have recognized that the important role of social enterprises’ stakeholders. The majority of studies that refers to social stakeholders use terms such as “beneficiaries” and “donors/funders” (Ebrahim et al., 2014; Hlady-Rispal & Servantie, 2018; Saebi et al., 2018).

Beneficiaries are described as disadvantaged, low-income populations, low status, low ability for collective movement, and unable or unwilling to pay (Ebrahim et al., 2014; Santos, 2012; Santos, Pache, & Birkholz, 2015). If economic stakeholders are mentioned, then they are described as “customers”, “clients” or “industrial partners” (Battilana et al., 2015; Ebrahim et al., 2014; Pache & Santos, 2013). Customers interact with an organization mainly because it provides goods or services they value, although they may also sympathize with the mission of the organization (Pache & Santos, 2013). Drawing on the economic logic, further economic value recipients are owners or shareholders (Wilson & Post, 2013).

**Figure 11.** Stakeholders in the social welfare and economic institutional sphere



Following the review of the literature, we propose that organizational value logics of social enterprises are configurations of who and to what extent the enterprise creates relationships. We suggest that the stakeholders with which a social enterprise relates in proposing, creating and capturing value stem from two institutional spheres: stakeholders from the social welfare sphere and stakeholders from the economic sphere. Although research on hybridity has highlighted that

hybridity means combining elements from different institutional logics (Battilana et al., 2017; Shepherd et al., forthcoming), configurations have not yet gained much in understanding the heterogeneity of hybridity enacted by social enterprises. We need a more in-depth understanding of the types of configurations of how institutional hybridity translates into one organizational value logic (Pache & Santos, 2013). Building on previously introduced theoretical grounds and aiming to advance our knowledge on differences in the hybridity of social enterprises, we thus explore the following:

**How do social enterprises differ in their organizational value logics? More precisely, how do social enterprises differ in configuring stakeholders in proposing, capturing, and creating/delivering value?**

## **5.3 Data and Methods**

### **5.3.1 Sample Selection**

To identify an appropriate sample for our research question about hybridity in social enterprises, we conducted a rigorous sample selection process (**Table 10**). First, consulting previous academic works on social enterprises (e.g., Casanovas & Bruno, 2013; Dees & Anderson, 2006; Mair et al., 2012; Nicholls, 2010; Seelos & Mair, 2005), we identified five international organizations that regularly award and continuously support social enterprises: Ashoka, Echoing Green, Schwab Foundation, Skoll Foundation, and Unreasonable Group. Drawing on such international support organizations was suitable because awarded organizations are recognized and label themselves as a social enterprise (Nicholls, 2010). Because a standardized official legal form for social enterprises is still missing (Mair et al., 2015; Short et al., 2009), it is common for current social entrepreneurship research to either draw on awarded or certified social enterprises (e.g.,

Grimes, Gehman, & Cao, 2018; Mair et al., 2012; Mair et al., 2015), or on national databases (e.g., Battilana et al., 2015). We opted for drawing on the awarding organizations because their international character reduces potential country biases and potentially increases heterogeneity among social enterprises in our sample.

Second, after selecting the organizations, we compared their admission criteria to assess the fit with our research focus on the hybridity of social enterprises (**Appendix 5**). Despite its prominence, we did not include awardees by Ashoka because the foundation does not require awardees to have founded an organization. Moreover, the selection criteria do not explicitly require revenue generating activities which diminishes the likelihood of explicitly hybrid forms. Third, we drew sample of 70 social enterprises from Echoing Green, Schwab, Skoll Foundation and Unreasonable Group.

Within a team of two individual coders with background in the field of social entrepreneurship and the two authors, we reviewed how observable the components of the organizational value logics of the social enterprises were. During this process, we learned that hybridity in social enterprises was most explicit in for-profit social enterprises. Moreover, older social enterprises often showed great diversification in their organizational value logics, so we decided to concentrate on social enterprises 10 years and younger because we were interested in identifying a parsimonious set of archetypical organizational value logics. A combination of these selection criteria reduced the sample of the Skoll Foundation so drastically that we eventually concentrated on Echoing Green, Schwab Foundation and the Unreasonable Group. Schwab Foundation and Echoing Green had suitable filters to verify the for-profit nature of the social enterprises. The Unreasonable Group prominently hinted at the for-profit model by including it in the qualification requirements for their fellowship.

**Table 10.** Sample selection process

<b>International organizations</b>	<b>Schwab Foundation</b>	<b>Echoing Green</b>	<b>Unreasonable Group</b>
<b>Inclusion criteria</b>			
<b>Awarded individuals<sup>a</sup></b>	345	792	112
<b>For-profit enterprises</b>	89	78	112
<b>Founding year ≤ 10</b>	22	59	90
<b>Exclusion criteria</b>			
<b>Excluded double-awarded cases</b>	-2	0	0
<b>Inactive or acquired</b>	0	-5	-3
<b>No revenue stream yet</b>	-1	-2	-5
<b>Only donation based</b>	-1	-4	-1
<b>Social stakeholders</b>	-1	-2	-11
<b>Inadequate information</b>	0	-5	-1
<b>Sample size</b>	17	41	69
	<i>N</i> = 127		

*Note:* <sup>a</sup> awarded individuals until August 2018

Third, while developing and coding the dimensions of 169 social enterprises (double-awarded cases excluded) that resulted from three international organizations (Schwab Foundation, Echoing Green, Unreasonable Group) and three inclusion criteria (internationally awarded, for-profit, founding year), further exclusion criteria emerged. Social enterprises that were inactive or had been acquired were excluded (e.g., Protoprint, Ampere Vehicles) because the information on the websites was no longer reliable and the legitimacy in terms of being recognized as social enterprise was no longer clear. Moreover, social enterprises that either missed the component value capture (i.e., because no revenue stream was yet developed, or the model was only donation based)

or missed a social stakeholder in its value proposition. Finally, all cases were excluded that did not provide adequate information (e.g., Qorax Energy whose website included dummy text passage instead of “real” content). Applying all exclusion criteria resulted in a final sample of 127 social enterprises. Excluded social enterprises are listed in **Appendix 6** and social enterprises are included in the final sample are listed in **Appendix 7**.

### 5.3.2 Taxonomy Development

To examine how social enterprises differ in configuring the elements of their organizational value logics, we developed a taxonomy that allows categorizing entities with a similar configuration of empirically observed characteristics into common groups (Bailey, 1994; Miller, 1996). Organization and management research values taxonomy development as a method to analyze how several elements or characteristics describing an entity are orchestrated and to bring order to complex undertheorized phenomena (Hambrick, 1984; Miller, 1996). So far, research was mainly defined by conceptual and case-based comparisons (Saebi et al., 2018). Developing a taxonomy adds to research on the hybridity in social enterprises because it allows for deriving new theoretical understanding from a broader sample of social enterprises. Therefore, social entrepreneurship and organizational research still calls for a more fine-grained understanding of heterogeneity in the hybridity of social enterprises (Saebi et al., 2018; Shepherd et al., forthcoming).

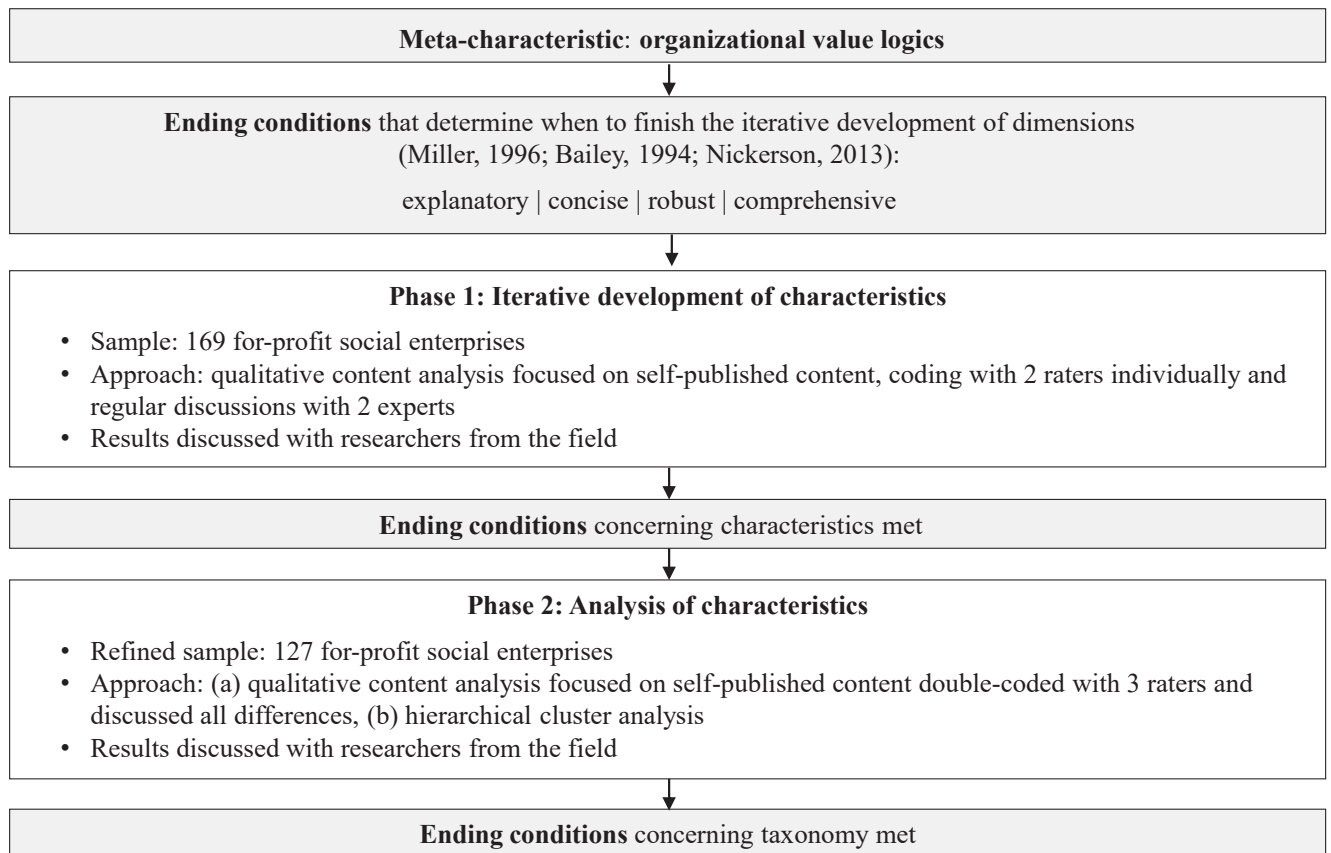
Following a well-established approach for a taxonomy development (Bailey, 1994; Nickerson, Varshney, & Muntermann, 2013), we iteratively developed characteristics for the elements of the organizational value logic via content analysis (phase 1). Afterwards, we coded the characteristics and conducted a cluster analysis to identify dominant configurations in the sample (phase 2). All steps of the taxonomy development are depicted in **Figure 12**. To identify a sample

that allowed for observing heterogeneity in social enterprises' organizational value logics and was sufficient for content analysis as well as numerical coding, we conducted an intensive sample selection process during which we developed selection criteria and access to appropriate data.

The two-step development of the taxonomy was framed by the concept “organizational value logic” as a meta-characteristic that serves as guidance for the development of the characteristics and the taxonomy (Nickerson et al., 2013). In addition, we drew on four ending conditions that require the developed dimensions and the resulting taxonomy to be explanatory, concise, robust and comprehensive (Bailey, 1994; Miller, 1996; Nickerson et al., 2013). The developed characteristics and the resulting taxonomy are required to contribute to our understanding of the nature of hybridity in social enterprises (as opposed to merely being descriptive). The number of dimensions and the resulting cluster in the taxonomy should be concise and thus parsimonious in terms of the quantity of different dimensions and the quantity of clusters. The developed dimensions should be robust, i.e., sufficient to differentiate the organizational value logics between social enterprises. The resulting taxonomy should be comprehensive in terms of being able to classify all social enterprises' organizational value logics. After each phase, we discussed the dimensions and derived a preliminary taxonomy based on the respective dimensions on which we reflected again with experienced scholars not involved in the process of deriving the dimensions. Discussions between coders and experienced researchers helped to determine whether the ending conditions were already met.



**Figure 12.** Methodological approach of the taxonomy development



### Phase 1: Iterative development of characteristics

The aim of the first phase was to identify characteristics that allowed us to detect and code the components of organizational value logic for each of the social enterprises in the sample. As proposed by Nickerson et al. (2013), the characteristics were developed in an iterative approach. For a start, we consulted previous literature to derive characteristics that could describe those the three components of the organizational value logic (e.g., Almqvist, Senior, & Bloch, 2016; Mair et al., 2012; Maslow, 1943; Tuzzolino & Armandi, 1981). Afterwards, we analyzed content published by social enterprises to develop operational definitions, which allowed for a consistent coding in the second phase of the taxonomy development. To arrive at operational definitions for the characteristics of the components of the organizational, two individual coders analyzed 169 social

enterprises. Citations from the websites served as a basis to compare characteristics between social enterprises and arrive with operational definitions for all characteristics. During this process the coders discussed the characteristics and emerging operational definitions with the two authors to evaluate whether the characteristics were concise, robust, and comprehensive.

The result of the iterative process was a detailed coding scheme that implies the characteristics and corresponding operational definitions that operationalize the stakeholder groups and the three components of the organizational value logic (**Appendix 8**). As presented in in **Table II**, social stakeholders were defined by six characterizing groups (disabled/poor/ill/disadvantaged people, organizations/communities, the natural environment) and commercial stakeholders were described by two characterizing groups (individual customers, companies). Value propositions were differentiated by eight social stakeholder needs (physiological, health, access to infrastructure, education, employment, recognition, functional, environment) and two broad commercial stakeholder needs (functional, emotional). The approaches to value capture were differentiated by social stakeholders and/or commercial stakeholders paying for the product or services received. The value creation/delivery could be described by the social enterprises' commercial operations and/or a contribution by social stakeholders.

### **Phase 2: Analysis of characteristics**

During the second phase, the two authors and a third coder familiar with social enterprises independently recoded of the original data (two-thirds each coder) along the developed coding scheme and independently identified quotes from the social enterprises' websites, press releases and social media accounts (profiles on Facebook, Twitter, or LinkedIn) to document their choice.

**Table 11.** Components and characteristics used to code organizational value logics in the sample of social enterprises

		Components of organizational value logics		
Characteristic	Social stakeholders	Value proposition (for whom?)	Value capture (from whom?)	Value creation/delivery (with/by whom?)
Characteristic	Social stakeholders disabled/poor/ill/disadvantaged people, organization/community, environment	Social enterprise addresses physiological, health, access to infrastructure, education, employment, recognition, and functional or environmental need.	Social stakeholders pay for the service or product they are provided with.	Social stakeholders are significantly involved in the creation and/or delivery of the value. Their capabilities or local knowledge is needed to be able to propose and deliver the value.
Example quote	e.g., disabled: "There is very little public sympathy for the deaf, and by connection, a severe lack of government support for them in India." (Mirakle Couriers, 2018)	e.g., access to infrastructure: "BuffaloGrid is connecting the next billion. Providing power to those that need it most and laying the foundations to expand the internet globally." (BuffaloGrid, 2018)	e.g., "they would pay about 20 U.S. cents per week for lighting. This is compared to about \$2 a week that they would spend on kerosene before" (Curnow & Kermeliotis, 2012)	e.g., "By training women to assemble and sell our stoves, we have helped in the past create a new generation of female entrepreneurs." (Prakti, 2018)
Characteristic	Commercial stakeholders customers/companies	Social enterprise addresses functional or emotional need.	Commercial stakeholders pay for the service or product they are provided.	Main capabilities to propose value are sourced from the social enterprise as a producer/service provider, and/or a cooperating commercial provider, and/or distributed with the help of a commercial provider (commercial partner).
Example quote	e.g., customers: "SolSource Sport is ideal for outdoor enthusiasts who need to travel light and for families who want to cook with the sun in small places or on-the-go." (Wong, 2017)	e.g., "Our team will work with you to develop a customized and cost-effective recycling plan that meets your organization's needs." (Wecyclers, 2018)	e.g., "We supply bulk moringa oil and bulk moringa tea and powder to brands around the world." (Moringa, 2018)	e.g., "BEMPU offers innovative life-saving health products for children in low-resource areas" (Bempu, 2018)

In case the social enterprises' website did not provide sufficient information to code the characteristics, the coders drew on content approved by the social enterprises (mostly interviews containing direct citations by the founders). In this way, our analysis ensured that the organizational value logic by the social enterprise – and not an external interpretation of its value logic – was mapped. Actors of the organization are important because they filter institutional value logics within the organization (Pache & Santos, 2013) and create and communicate their organizational value logic (Laasch, 2018b). We focused on information provided by the enterprises themselves because we wanted to follow their reasoning on for whom and how they create value.

After a double-coding of all social enterprises in the sample, the team of coders discussed each coding decision based on the coding scheme and the individually derived quotes. We thereby ensured consistency in the coding throughout the sample. The final data set included 127 social enterprises, binarily coded characteristics describing stakeholder groups, value propositions, value capture approaches, and value creation/delivery approaches. To derive a taxonomy that is explanatory, concise, robust, and comprehensive, we divided our dataset in explanatory characteristics to be used in the subsequent cluster analysis and descriptive characteristics to further understand the sample and the resulting clusters.

***Explanatory characteristics.*** According to our three components of the organizational value logic, we included five characteristics that described all three organizational value logics and the respective role of the stakeholders. One characteristic used to describe differences in the *value proposition* was a characteristic that described whether commercial stakeholders were included in the value proposition (1 = commercial stakeholder need addressed; 0 = no commercial stakeholder need addressed). As social enterprises are defined addressing social needs (Mair & Martí, 2006), we excluded all enterprises in our sample that did not specify a need in a social stakeholder group (as addressed before in the exclusion criteria). Therefore, we

only included the characteristic that measured the commercial stakeholder involvement in the value proposition and used the social stakeholder involvement in the value proposition in its fine-grained version as a descriptive characteristic defined below.

Further, *value capture* was differentiated by two characteristics: one that described whether social stakeholders were included in the value capture and another that described whether commercial stakeholders were included in the value *capture* (for each characteristic: 1 = stakeholders pay for the product/service provided; 0 = stakeholders do not pay for the product/service provided).

In addition, *value creation/delivery* was coded using two characteristics: one that described whether social stakeholders were involved and another one that described whether the social enterprise or commercial partners created/delivered the value (for each characteristic: 1 = stakeholder group does contribute to creation/delivery of product/services; 0 = does not contribute). In this combination, obviously one of the two characteristics had to be fulfilled for a product or service to be produced.

***Descriptive characteristics.*** To further describe the sample and the resulting clusters and to later validate differences between the clusters (Bailey, 1994), we coded the characteristics that described the different stakeholder (disabled/poor/ill/disadvantaged people, organizations/communities, the natural environment, customers, companies; for each: 1 = social enterprise propose value to; 0 = does not propose value to) and characteristics that described the specific need the social enterprise nourishes (physiological, health, access to infrastructure, education, employment, recognition, functional, environment, commercial functional, commercial emotional; for each: 1 = social enterprise addresses; 0 = social enterprise does not address). Moreover, we coded the year the social enterprise was founded, the number of employees, and the country in which the social enterprise was founded.

Patterns in the five explanatory characteristics were analyzed using cluster analysis which is a common method in taxonomy development (Hambrick, 1984; Ketchen & Shook, 1996). Similar to Mair et al. (2012) and Khelil (2016), we conducted a hierarchical cluster analysis to identify patterns in the data. The aim of cluster analysis is to group empirical observations into homogenous clusters through a set of explanatory characteristics (Bailey, 1994; Khelil, 2016). Observations within a cluster are similar, while observations between clusters are heterogenous (Ketchen & Shook, 1996). We decided to use a hierarchical clustering technique that allows the number of clusters to emerge from the data (Bailey, 1994).

In a first step, a distance measure is calculated for each observation in relation to all other observations (Bailey, 1994). As a distance measure we used the Jaccard index because it focuses on similarities in existing characteristics (e.g., both social enterprises propose value to social value recipient), while it does classify non-existent characteristics as similarities (e.g., both social enterprises do not propose value to commercial value recipients). Besides theoretical considerations concerning the distance measure, simulation studies have shown that the Jaccard index is suitable for binary data (Finch, 2005). In a second step, an algorithm is chosen that regulates how observations are joined in groups (Bailey, 1994). For the clustering algorithm we decided to use the Ward method, which showed suitable in simulations with binary data (Finch, 2005; Hands & Everitt, 1987).

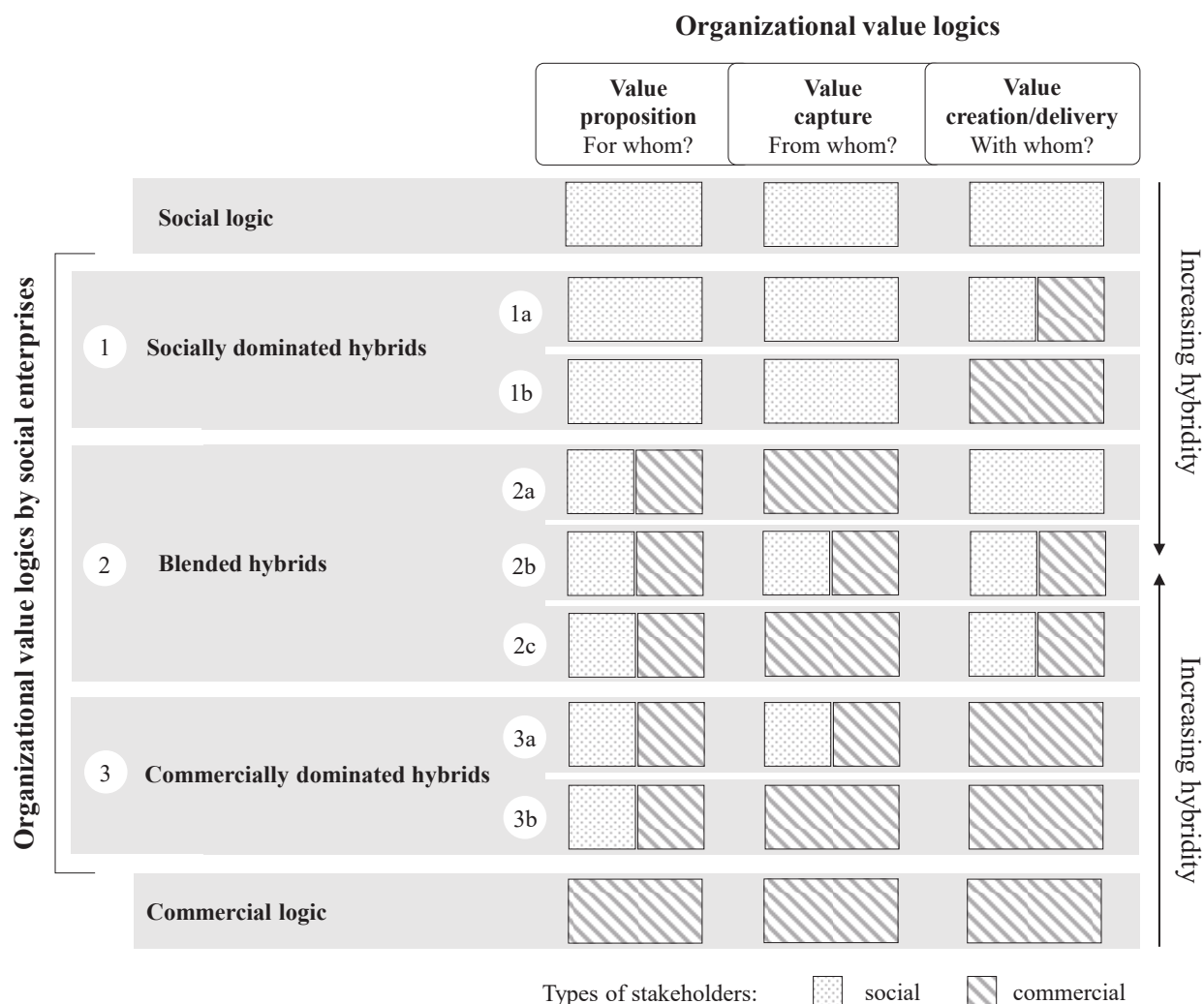
To obtain the optimal number of clusters, we follow recommendations to draw on multiple techniques (Ketchen & Shook, 1996). First, we calculated indexes, which measure the dispersion of the data points within and between clusters, to identify the optimal number of clusters that have shown to perform well with binary data (Dimitriadou, Dolničar, & Weingessel, 2002) using the package “NbClust” in the software R: the index by Ratkowsky and Lance (1978) resulted in an optimal number of three, the indexes by Davies and Bouldin (1979) and by Caliński and Harabasz (1974) resulted in an optimal number of seven. Second, we

interpreted the results of differing cluster numbers to understand which number of clusters meaningfully divided the cases of our dataset. When comparing the taxonomy with three and seven clusters and consulting the results of a dendrogram that depicts the increase in heterogeneity when joining observations into groups, we discover that the three-cluster and seven-cluster solution could be meaningfully integrated: the taxonomy with three meta-clusters overarched the more fine-grained seven-cluster taxonomy.

## 5.4 Results

The hierarchal cluster analysis resulted in a two-stage taxonomy that contains three meta-clusters and seven sub-clusters that describe the heterogeneity in the configuration of organizational value logics in our sample of 127 social enterprises. In *Figure 13*, we integrate the meta- and sub-clusters into an overview that structures the clusters in relation to the degree of hybridity, i.e., the integration of social and commercial stakeholders in the organizational value logic. The social and commercial organizational logics on the upper- and lower-part display two theoretical extremes that help systematize the organizational value logics along their degree of hybridity increasing from the outside to the inside of the taxonomy. While *socially dominated hybrids* (meta-cluster 1) and *commercially dominated hybrids* (meta-cluster 2) integrate one stakeholder type stronger than the other, *blended hybrids* (meta-cluster 3) focus on a mix of stakeholders. The seven sub-cluster show that social enterprises further differ in the way they configure the dominated or blended organizational value logics, as they significantly differ in the way they integrate stakeholders into the value creation and value capture.

Figure 13. Taxonomy of organizational value logics by social enterprises



As shown in the descriptive statistics of the three meta-clusters (Table 12), across all clusters social enterprises tend to integrate commercial stakeholders into the value proposition (80%), the value capture (80%), and the value creation/delivery (92%). Yet, social enterprises significantly differ in the way they integrate commercial stakeholders into the value proposition and capture ( $F = 7.88; p < 0.01$ ) as well as the value creation/delivery ( $F = 42.55, p < 0.001$ ). Moreover, the meta-clusters significantly differ in the extent to which they integrate social stakeholders in the value creation/delivery ( $F = 374.50; p < 0.001$ ). The cluster that is most prominent is the group of commercially dominated hybrid social enterprises ( $n = 75$ ). To further describe the sample the meta-clusters, Table 12 also displays the number of employees, the



founding year, the region in which the social enterprise was founded, and the international organization from which the social enterprises were drawn (Schwab Foundation, Echoing Green, Unreasonable Group).

**Table 12.** Meta-clusters of hybrid organizational value logics

	Means			<i>F</i> -test	sample
	1	2	3		
<b>Explanatory characteristics</b>					
<b>Value Proposition</b>					
Social	1.00	1.00	1.00	0.00	1.00
Commercial	0.00	1.00	1.00	7.88 **	0.80
<b>Value Capture</b>					
Social	1.00	0.31	0.49	0.13	0.56
Commercial	0.00	1.00	1.00	7.88 **	0.80
<b>Value Creation</b>					
Social	0.35	1.00	0.00	374.50 ***	0.28
Commercial	1.00	0.62	1.00	42.55 ***	0.92
<b>Descriptive characteristics</b>					
<b>Number of employees</b>					
1-10	0.23	0.27	0.29	0.14	0.28
11-50	0.35	0.50	0.49	0.07	0.46
51-100	0.00	0.04	0.05	0.37	0.04
101-250	0.08	0.08	0.07	0.04	0.07
251-500	0.00	0.00	0.03	1.17	0.02
501-1000	0.08	0.00	0.00	0.46	0.02
N/A	0.27	0.12	0.07	1.67	0.12
<b>Founding Year</b>	2012	2011	2012	5.19 *	2012
<b>Continent</b>					
Africa	0.27	0.23	0.05	8.06 **	0.13
Asia	0.31	0.19	0.32	1.31	0.29
Europe	0.04	0.15	0.17	0.42	0.14
North America	0.35	0.38	0.32	0.36	0.34
Central/South America	0.00	0.04	0.12	2.90	0.08
Oceania	0.04	0.00	0.01	0.04	0.02
<b>Database</b>					
Schwab Foundation	0.19	0.15	0.33	0.68	0.13
Echoing Green	0.19	0.42	0.11	0.18	0.32
Unreasonable Group	0.62	0.42	0.56	0.93	0.54
<i>n</i>	26	26	75		127

Note: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . *F*-statistic from ANOVA.

As shown in the descriptive statistics of the seven sub-clusters (**Table 13**), further differentiating the meta-clusters renders more homogenous configurations; characteristics are shared within the sub-cluster (= 1.00) or not (= 0.00). Standard deviations are not depicted as they are all zero within the respective sub-clusters. Significant differences can be observed in the integration of social stakeholders into the value capture ( $F = 58.14; p < 0.001$ ), which were not observable in the meta-clusters. Moreover, the integration of social and commercial stakeholders in the value creation/delivery differs significantly between the sub-clusters ( $F = 5.124; p < 0.05; F = 43.03; p < 0.001$ ). Opposed to the meta-clusters, the sub-clusters did not show significant differences in the integration of stakeholders in the value proposition. **Appendix 7** lists the social enterprises that belong to the respective clusters.

**Table 13.** Sub-clusters of hybrid organizational value logics

	Means per sub-cluster							<i>F</i> -test	sample
	1a	1b	2a	2b	2c	3a	3b		
<b>Value Proposition</b>									
Social	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00 (0.00)
Commercial	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.331	0.80 (0.41)
<b>Value Capture</b>									
Social	1.00	1.00	0.00	1.00	0.00	1.00	0.00	58.14 ***	0.56 (0.50)
Commercial	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.331	0.80 (0.41)
<b>Value Creation</b>									
Social	1.00	0.00	0.00	1.00	1.00	0.00	0.00	5.124 *	0.28 (0.45)
Commercial	1.00	1.00	1.00	1.00	1.00	1.00	1.00	43.03 ***	0.92 (0.27)
<i>n</i>	9	17	10	8	8	37	38		127

Note: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . *F*-statistic from ANOVA.

In the following, we will explain the nature of each of the three meta-clusters by visualizing the relationships of one sub-cluster’s organizational value logic (highlighted in grey in **Table 13**). We selected these sub-clusters to depict the degree of hybridity: the organizational value logics that were “most” socially dominated, the “most” blended, and the “most” commercially dominated. Moreover, we introduce a social enterprise that exemplifies the

respective meta- and sub-cluster (**Figure 14**). Each sub-cluster was given a conceptual name to differentiate between the distinct profiles of organizational value logics. Furthermore, we use descriptive statistics on the type of stakeholders and type of value that social enterprises offer to provide a more tangible understanding of the clusters (**Table 14**). The social enterprises belonging to all other sub-clusters as well as the visualization and explication are displayed in **Appendix 9**.

**Table 14.** Detailing characteristics on the stakeholders and value proposition of the meta-clusters

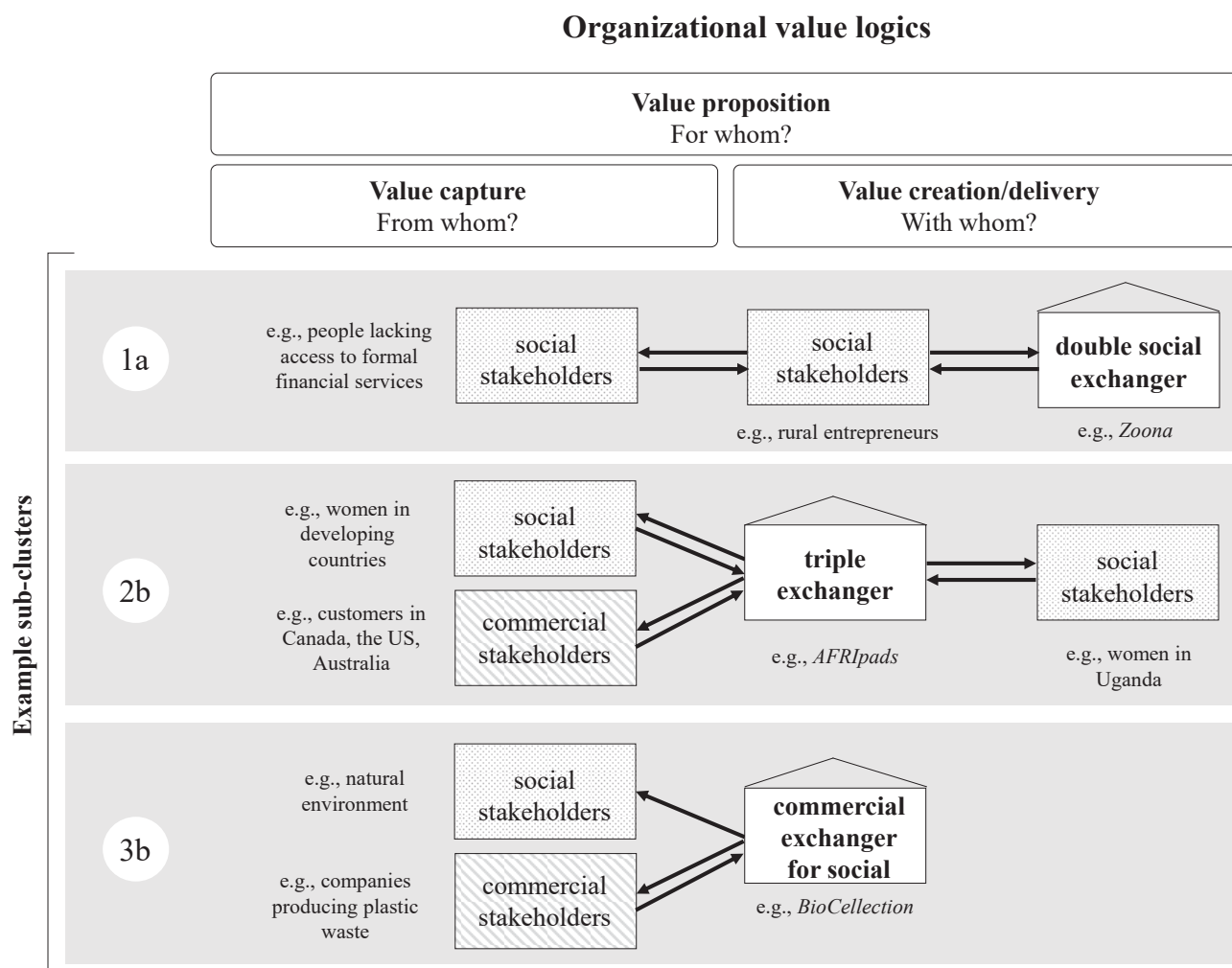
	Means (SD) per cluster						<i>F</i> -test	sample
	1	2	3					
<b>Social stakeholders</b>								
disabled	0.08 (0.27)	0.08 (0.27)	0.03 (0.16)			1.44	0.05 (0.21)	
poor	0.42 (0.50)	0.35 (0.49)	0.15 (0.36)			6.80 *	0.24 (0.43)	
ill	0.08 (0.27)	0.00 (0.00)	0.08 (0.27)			1.75	0.06 (0.24)	
disadvantaged	0.46 (0.51)	0.50 (0.51)	0.36 (0.48)			1.85	0.41 (0.49)	
environment	0.08 (0.27)	0.38 (0.50)	0.37 (0.49)			0.37	0.31 (0.47)	
organization/community	0.46 (0.51)	0.31 (0.47)	0.43 (0.50)			0.77	0.41 (0.49)	
<b>Commercial stakeholders</b>								
customers	0.00 (0.00)	0.38 (0.50)	0.37 (0.49)			0.64	0.30 (0.46)	
companies	0.00 (0.00)	0.77 (0.43)	0.83 (0.38)			5.89 *	0.65 (0.48)	
<b>Social needs</b>								
physiological	0.04 (0.20)	0.08 (0.27)	0.03 (0.25)			0.00	0.06 (0.24)	
health	0.27 (0.45)	0.15 (0.37)	0.17 (0.38)			0.01	0.20 (0.39)	
infrastructure	0.42 (0.50)	0.23 (0.43)	0.29 (0.46)			0.05	0.31 (0.46)	
education	0.31 (0.47)	0.15 (0.37)	0.23 (0.42)			0.22	0.23 (0.42)	
employment	0.19 (0.40)	0.62 (0.50)	0.04 (0.20)			56.18 ***	0.19 (0.39)	
recognition	0.04 (0.20)	0.12 (0.33)	0.03 (0.16)			3.00	0.05 (0.21)	
functional	0.42 (0.50)	0.15 (0.37)	0.20 (0.40)			0.22	0.24 (0.43)	
environmental	0.23 (0.43)	0.54 (0.51)	0.53 (0.50)			0.39	0.47 (0.50)	
<b>Commercial needs</b>								
functional	0.00 (0.00)	0.81 (0.40)	0.95 (0.23)			14.05 ***	0.72 (0.45)	
emotional	0.00 (0.00)	0.31 (0.47)	0.24 (0.43)			0.00	0.20 (0.41)	
<i>n</i>	26	26	75				127	

Note: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . *F*-statistic from ANOVA.

### 5.4.1 Meta-Cluster 1: Socially Dominated Hybrids

The meta-cluster of socially dominated hybrids encompasses social enterprises that focus their value proposition and value capture on social stakeholders. In this meta-cluster social enterprises provide infrastructure (42%), education (31%) and/or functional value (42%) to disadvantaged people (46%), non-profit organizations/communities (46%) and/or poor people (42%). The meta-cluster consists of two sub-cluster: *double social exchangers* (1a; n = 9) and *single social exchangers* (1b; n = 17). While *double social exchangers* reach out to two different groups of social stakeholders which they integrate in the value proposition, capture and value/delivery (Figure 14), *single social exchanger* concentrate on one group of social stakeholders they propose value to and capture value from (Appendix 9).

Figure 14. Example sub-clusters of organizational value logics by social enterprises



An illustrative example of *double social exchangers* is Zoona, a social enterprise that sets out to support African people who live without access to formal financial services (Zoona, 2018). Zoona explains that these people need to rely on their family and community for support in helping them pay, for instance, their school fees or cope with emergencies. To provide financial services in underserved regions Zoona establishes a franchise system by turning locals into entrepreneurs that offer financial services by setting up local box-office. Thus, in this sub-cluster, the distributing social stakeholders not only receive value in terms of employment or income opportunities but also serve to reach the receiving social stakeholders. Thereby, the final social stakeholders receive access to financial infrastructure for which they pay transaction services and thereby contribute to the value capture (Zoona, 2017).

#### 5.4.2 Meta-Cluster 2: Blended Hybrids

The meta-cluster of blended hybrids is characterized by a strongly intertwining net of relationships between the social enterprise and up to three different stakeholder groups. In comparison to the cluster of socially dominated hybrids, blended hybrids additionally include commercial stakeholders in their value proposition and value capture. Moreover, they all integrate social stakeholders into their value creation/delivery. In this meta-cluster social enterprises serve disadvantaged individuals (35%), poor people (35%), non-profit organizations/communities (31%) and /or the environment (38%) and combine these with commercial stakeholders, that is companies (77%) or individual customers (38%). The meta-cluster consist of three sub-clusters: *social stakeholder creators* (2a;  $n = 10$ ), *triple exchangers* (2b,  $n = 8$ ) and *double exchangers for social* (2c;  $n = 8$ ). While *social stakeholder creators* are integrating social stakeholders into their value creation/delivery to propose and capture value for/from commercial stakeholders (**Appendix 9**), both *triple exchangers* (**Figure 14**) and *double exchangers for social* (**Appendix 9**) include an additional group of social stakeholders into their

value proposition. Moreover, *triple exchangers* integrate the social stakeholder group in their value capture.

An illustration for *triple exchangers* is the social enterprise AFRipads, which addresses the unavailability of sanitary products for women in developing countries (AFRipads, 2018). AFRipads sells low-cost menstrual kits to women and gifts menstrual kits to girls in developing countries. In addition, the social enterprise reaches women in developed countries via buy-one-give-one programs offered by business partners in Canada, Australia, and the United States. Thus, AFRipads includes social stakeholders in the value proposition and capture by proposing enhanced health to women and girls who often relied on improvised materials such as old clothing to manage their menstruation (AFRipads, 2018). Moreover, the social enterprise proposes an emotional value to and captures value from women in developed countries and strengthens the purchasing programs through international business partners. Thereby, AFRipads reached over 2.3 million women across 30 countries (AFRipads, 2018). Eventually, AFRipads included social stakeholders in the value creation as the social enterprise employs young women in rural Uganda to manufacture the menstrual kits (AFRipads, 2018).

### 5.4.3 Meta-Cluster 3: Commercially Dominated Hybrids

The meta-cluster of commercially dominated hybrids includes organizational value logics that provide a dominant role to commercial stakeholders which are part of the value creation and value capture. In comparison with blended hybrids, social enterprises in this meta-cluster do not include a social stakeholder group in their value creation. In commercial dominated hybrids social stakeholders take a receiving role being provided with a product or service. Commercially dominated hybrids provide value to disadvantaged people (36%), non-profit organizations/communities (43%), and/or the environment, and they combine these with companies (83%) or individual customers (37%). Compared to the two other meta-clusters, social enterprises in these cluster are the least likely to provide value for poor individuals (**Table**

14). The meta-cluster encompasses two clusters: *cross exchanger* (3a;  $n = 37$ ; **Appendix 9**) and *commercial exchanger for social* (3b;  $n = 38$ ; **Figure 14**). Both clusters differ in the integration of social stakeholders in the value capture.

An example of a *commercial exchanger for social* is BioCellection, a social enterprise that develops solutions for the over 90% of plastic waste that is contaminated and thus so far too difficult to recycle (BioCellection, 2018). BioCellection offers a new recycling technology to the industrial sector to upcycle plastics waste into chemical intermediates that can be reused. Thus, the social enterprise exchanges mainly with commercial stakeholders that are interested in reducing plastic waste in their supply chain and access unused resources. Via the exchange with the commercial stakeholders, BioCellection aims to provide value to a social stakeholder, i.e., the environment in terms of reducing harmful plastic waste. In this sub-cluster the social stakeholder is neither integrated in the value capture nor in the value creation.

## 5.5 Discussion

The hybridity of social enterprises defined by a combination of the social welfare and economic institutional logic within one organization has gained great scholarly interest. From previous work, we have learned much about the challenges of combining distinct institutional logics within a social enterprise and the strategies to successfully cope with these challenges (e.g., Battilana & Lee, 2014; Mair et al., 2015; Pache & Santos, 2013). However, there is still limited understanding of what constitutes hybridity and how social enterprises differ in their hybridity. Increasing knowledge of the heterogeneity in the hybrid nature of social enterprises provides theoretical grounds to systematically analyze why some social enterprise are less likely to face tensions and under which conditions certain strategies to harvest from and cope with the multiplicity of institutional logics may be appropriate. For this reason, we developed a taxonomy of organizational values logics that depicts how social enterprises differ in their

relation to social and/or commercial stakeholders. Below we elaborate the findings of our taxonomy development and discuss the implications of our knowledge of social entrepreneurship and hybrid organizations.

### 5.5.1 Hybridity as Configuration of Three Elements

Following a taxonomy development approach, we could identify three meta-clusters and seven sub-clusters that show social enterprises differ in the extent and way they integrate social and/or commercial stakeholders into their organizational value logic. Comparing the different clusters of organizational value logics we made three observations that characterize the differences in how social enterprises enact hybridity (*Figure 15*).

First, the results of our analysis indicate that the nature of hybridity in social enterprises depends on its type of stakeholders. Social enterprises may draw on a pool of opportunities to integrate social and/or commercial stakeholders to varying degrees in proposing, capturing and creating/delivering value. These results propose that hybridity of social enterprises is characterized not only by the organizational members' adherence to a certain institutional logic (e.g., Battilana & Dorado, 2010; Wry & York, 2017) but also by the institutional logics that its stakeholders follow. Thus, by building an organizational value logic that links stakeholders from different institutional spheres introduces hybridity in terms of expected practices, beliefs and values grown in a specific institutional sphere and carried by stakeholders to the organizational level.

Second, our analysis uncovers that social enterprises differ according to the type of relationship they establish particularly with their social stakeholders. Social enterprises sustain unidirectional or bidirectional relationships, particularly with their social stakeholders (*commercial exchangers for social*, 3b versus *triple exchangers*, 2b). Unidirectional relationships imply that social stakeholders are integrated in the value proposition and therefore



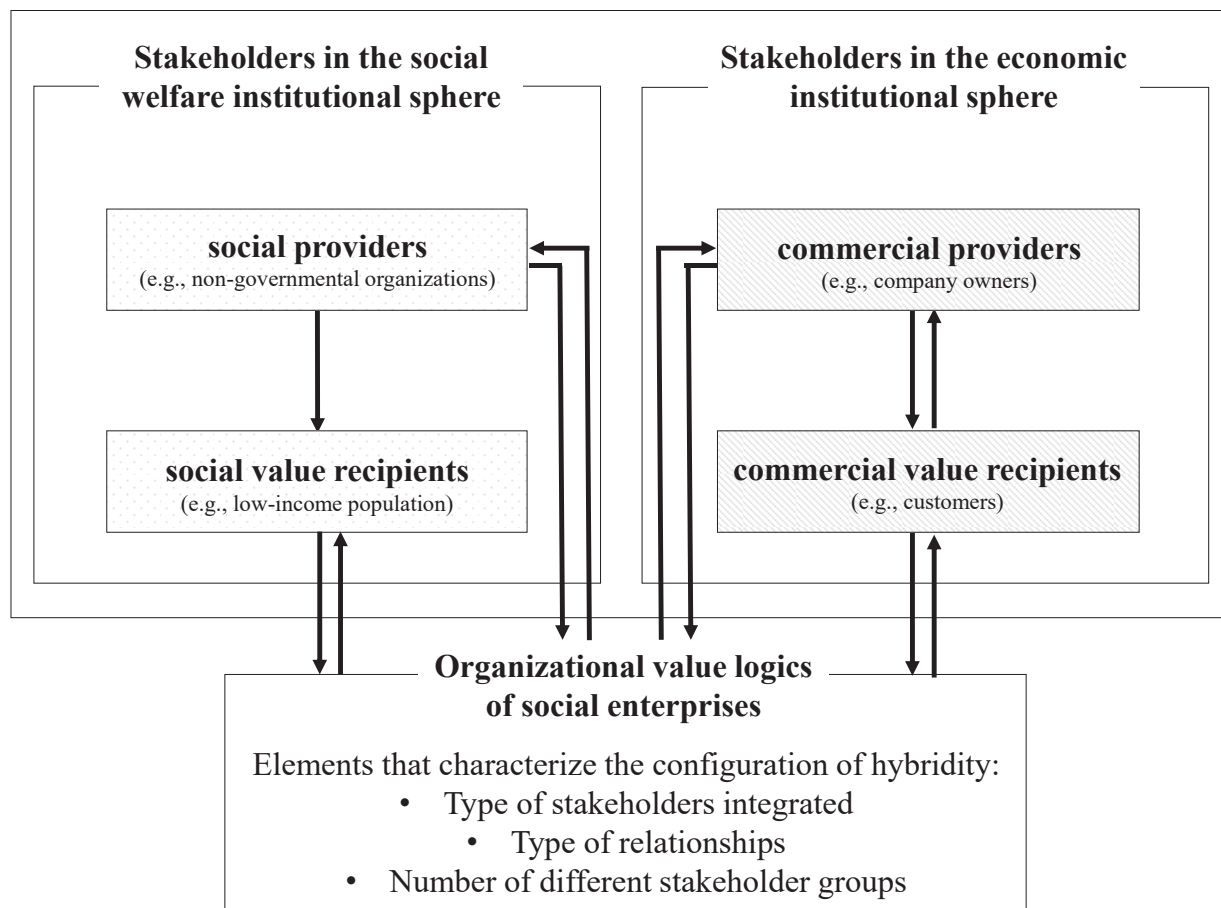
receive a value form a product or service (e.g., education for school kids). Bidirectional relationships express that the social stakeholder receives value (e.g., access to financial services) and provides a value in return (e.g., revenue, work performance, capabilities); the stakeholder is integrated into both value proposition and capture. Depending on the types of stakeholders a social enterprises targets, it may sustain a unidirectional relationship with a group of social stakeholders, while it relates bidirectionally with a group of commercial stakeholders (e.g., commercial exchangers for social, 3b).

Third, while social enterprises combine different types of stakeholders (social and/or commercial stakeholders), they also vary in terms of the number of stakeholder groups from one (e.g., in the sub-cluster of *single social exchangers*, 1b) to several stakeholder groups (e.g., in the sub-cluster of *triple exchangers*, 2b). Thus, the number of stakeholder groups belonging to one institutional sphere can also determine the degree of hybridity in a social enterprise. For instance, *double exchangers* (2a) include a group of social stakeholders in their value proposition and value creation to propose and capture value from a group of commercial stakeholders (e.g., Dialogue Social Enterprise which offers workshops held by disabled people to companies). In contrast, *triple exchangers* (2b) add another group of social stakeholders that are integrated into the value creation and capture (e.g., AFRIPads). Hence, *double exchangers* combine one group of stakeholders from each institutional sphere, while *triple exchangers* combine stakeholders from two groups of social and one group of commercial stakeholders.

All in all, we propose that social enterprises enact hybridity via the type of stakeholders they relate to, the type of relationship they establish with the stakeholders, and the number of stakeholder groups they serve. The three elements of hybridity indicate that institutional logics are translated to the organization via its organizational value logics that implies with whom and why the social enterprise establishes relationships (**Figure 15**). As shown in the cluster of organizational value logics, we propose that the nature of hybridity of social enterprises is best

understood by regarding hybridity as a configuration of elements rather than independent characteristics.

**Figure 15.** Elements that characterize the hybridity of social enterprises



### 5.5.2 Theoretical Implications

This paper suggests two main theoretical implications. First, this study integrates the concept of organizational value logics into organizational research of hybrid organizations, in particular hybrid social enterprises. Analyzing organizational value logics in social enterprises allows for answering calls for the advancements in the understanding of how institutional logics are combined and enacted within hybrid organizations (Battilana et al., 2017; Saebi et al., 2018). Investigating hybridity in organizational value logics introduces stakeholders as important carriers of institutional logics and thereby crucial translators of institutional logics to the organizational level (Figure 15). Stakeholders are socialized in the respective institutional

sphere; when social enterprises create relationships with stakeholders, their (former) adherence to an institutional logic might translate into expectancies toward values and practices of the social enterprise (Shepherd et al., forthcoming). While founders and employees have been recognized as important carriers of institutional logics (e.g., Besharov & Smith, 2014; Wry & York, 2017), we strengthen the argument put forward by Shepherd et al. (forthcoming) that stakeholders are an important additional perspective to understand the translation of institutional logics to the organizational level.

Moreover, we argue that organizational value logics are important for further developments concerning the hybridity of organizations because they acknowledge two perspectives from which institutional logics are translated to the organization. On the one hand, founders and employees might deliberately seek to create relationships with stakeholders that are part of a particular institutional sphere while developing their organizational value. Thus, by seeking to work with certain types of stakeholders, founders and employees might also express and introduce their adherence to a certain institutional logic. On the other hand, as soon as the venture has created stakeholder relationships, the organization is likely to be driven by these stakeholders' expectations that stem from their adherence to a certain institutional logic.

The introduction of agency of founders and employees in the translation of institutional logics to organizational value logics, also provides a flipped perspective from the organizational level to the institutional level. We propose that the findings of this study also indicate how behavior at the organizational level might translate to the institutional level. As proposed by McMullen (2018), hybrids might at some point mutate into a new form of organizations. As depicted in **Figure 15**, the explicit combination of stakeholders of different institutional spheres could lead to a new institutional logic that sits in-between the social welfare and economic institutional logic. The breadth of hybrid organizational value logics identified via the presented

taxonomy development lends support to this proposition because it indicates a proliferation of the hybridity enacted by social enterprises.

Second, this study shows that hybridity in social enterprises is a heterogeneous phenomenon and can be understood as a configuration of elements that expresses hybridity in a joined way. These findings add in several ways to research on the relationship among hybridity and tensions, the management of tensions and performance of social enterprises (e.g., Battilana et al., 2015; Jay, 2013). On the one hand, heterogeneity in hybridity provides a systematic ground to examine under which circumstances tensions in social enterprises arise. The three elements of hybridity identified in this paper may serve as important explanatory factors to the emergence of tensions within social enterprises. However, we propose that the impacts of the element of hybridity on the emergence of tensions are best understood in configurational way rather than as independent factors. The way in which the stakeholders of different institutional spheres are interconnected through the social enterprise will explain how far stakeholder demands match or depend on one another. Therefore, we propose that the more types and groups of stakeholders and bidirectional relationships, the higher the tensions concerning operational decisions will be but, the lower the likelihood of a mission drift towards prioritizing one stakeholder group's needs over those of another.

On the other hand, the heterogeneity in the nature of hybridity of social enterprises has several implications for the strategies used to encounter and leverage hybridity. For instance, in the presented taxonomy some clusters of organizational value logics were more present (commercially dominated hybrids,  $n = 79$ ) than others (socially dominated hybrids,  $n = 26$ ; blended hybrids,  $n = 26$ ). This skewed distribution may indicate that some organizational value logics have provided greater organizational performance because they tend to fit the selection criteria of the international support organizations that served as the basis for our sample. Because of potential differences in the implications of the hybrid nature of social enterprises,

we suggest that the respective nature of hybridity might demand for a particular strategy to positively leverage hybridity. While past empirical work has sometimes been based on only one type of hybrid social enterprise (e.g., workforce integration), our taxonomy offers the possibility to make explicit the type of hybridity when conducting empirical research on social enterprises. It would be interesting to learn whether the selectively coupling mechanisms will be equally successful with other types of hybrid organizational value.

### 5.5.3 Practical Implications

The present study provides important implications for social entrepreneurs and policy makers. First, emerging social entrepreneurs may use the proposed taxonomy to understand their pool of opportunities when creating an organizational value logic for a new venture. Moreover, established social enterprises might draw on the present taxonomy to structure and visualize their organizational value logic as a map of relationships between the enterprise and its stakeholders. Thereby, the social enterprise can identify the institutional logic to which these stakeholders adhere, helping them not only legitimize their values and practices according to the stakeholders' expectancies but also realize when they introduced un-legitimized practices for a specific stakeholder group. Using the taxonomy of hybrid organizational value logics and continuously mapping it in the organization might help social enterprises proactively detect tensions and systematically develop solutions to those tensions.

For policy makers, it is important to understand what constitutes the hybrid nature of social enterprises; hybridity holds the potential for innovative solutions, but it is equally reason for tensions that imply crucial risks to social stakeholders. Particularly in countries in which the segregation between the social welfare and an economic logic is strong (e.g., Germany), developing an understand for hybrid organizational forms such as social enterprises is important. This paper's findings in terms of the variety of organizational value logics (socially dominated, blended, and commercially dominated hybrids), expresses that sharp frontiers

between institutional logics may exist in legal organizational forms but not in the heuristics of social entrepreneurs. Policy makers' increased understanding of hybridity and forms of hybridity will be needed to establish a new institutional logic that allows a merge between societal welfare and economic prosperity.

#### 5.5.4 Limitations and Avenues for Future Research

Our study's results should be interpreted in view of three main limitations that prompt a variety of questions for future research. First, our analysis was based on content provided by social enterprises in publicly available sources. All communication has strategic meaning; for instance, marketing literature defines value propositions as strategic tool to communicate with customers (Payne, Frow, & Eggert, 2017). Thus, the organizational value logic might not be shared by all organizational members, equally and to achieve legitimacy the communicated organizational value logic might also differ depending on the communication channel and potential message recipient. Therefore, our analysis can provide insights from one of the different states whereby organizational value logics exist (Laasch, 2018a). Future research could collect data from stakeholders to provide a different perspective on an organizational value logic.

Second, as with most other classifications our taxonomy is a static (Bailey, 1994). To detect the spectrum of organizational value logics proposed by hybrid organizations, our sample focused on providing a snapshot of types of organizational value logics. Moreover, we focused our sample selection on social enterprises not older than 10 years. While we reduced some complexity to identify "basic" forms of hybridity, our sample does not account for changes in organizational value logics over time and variations between younger and older social enterprises. Nevertheless, we acknowledge that organizational value logics can evolve from one type into the other or combine characteristics of our identified types. To gain a more valid understanding of the development of organizational value logics over time, we propose future

research to take a process perspective to unveil patterns in the changing states of organizational value logics, which are important to understand mission drifts that pose a particular challenge for hybrid organizations.

Third, our sample depends on the selection processes of well-established international organizations. The selection criteria (social/environmental impact, sustainable business model, scalability of the model) propose a fit to the focus of this paper on hybrid social enterprises; however, the competitive selection process of the international organizations is likely to favor the most developed and most successful social enterprises. Although a taxonomy of organizational value logics of successful social enterprises is of great value, future research might compare organizational value logics of successful and failed social enterprises to gain a systematic understanding of potential differences in the organizational value logics. Our taxonomy revealed seven of 15 statistically possible configurations. It might be worthwhile to explore those differences to understand which organizational value logics are more prevalent and how such organizational value logics determine the performance of social enterprises.

## **CHAPTER 6 | Conclusion**



## 6.1 Conclusions from Four Research Projects

This dissertation contributes to central issues related to the role of social responsibility in established and emerging companies. Although research about business in society has proliferated (Aguinis & Glavas, 2012; Carroll & Shabana, 2010), this dissertation identified important research gaps that challenge current scientific knowledge about the antecedents and effects of companies' engagement in social responsibility. Overall, this dissertation highlights that expectations in the organizational context form how established and newly emerging companies integrate socially responsible activities in their strategies and business operations. Moreover, the findings of this dissertation show that established and young companies' socially responsible activities are appreciated by employees, job candidates, and the next generation that is about to enter the job market.

More precisely, this work provides four main findings which will be summarized in the following. First, in view of pressing environmental challenges that require companies' actions, *Chapter 2* analyzed under which conditions established companies proactively engage in the alleviation of their environmental impact. Examining German energy sector firms shows that the pursuit of proactive environmental strategies (PES) depends on their strategic orientation toward markets, technology and customers. The more companies monitor and strategically integrate external market demands and technological trends, the more they are likely to pursue a PES. However, the effect of the strategic orientation on the pursuit of PESs weakens the more managers perceive pressure from the regulatory context.

Second, considering the growing need for a qualified and motivated workforce, scholars and companies wonder whether performing CSR activities is a means to vitalize a company's relationship with employees (Aguinis & Glavas, 2017). The meta-analysis included in *Chapter 3* integrates empirical research on the effect of CSR on potential and current employees and shows that both stakeholder groups positively acknowledge companies' engagement in social

responsibility. However, the relationship between CSR and potential employees' evaluation of the firm varies according to the institutional context: the stronger the rule of law and the higher governmental interventions in a country, the stronger the effect of CSR on organizational attractiveness. Moreover, current employees' reactions depend on the type of CSR as CSR practices are significantly stronger related with employee attitudes and behavior than CSR principles.

Third, following the positive effects of CSR on organizational attractiveness, *Chapter 4* analyzes how the communal side of entrepreneurship – i.e. social interaction, pro-social behavior – influences the attitude toward entrepreneurship. The results of the chapter's survey show that young adults perceive entrepreneurship rather as a self-centered than as a communal job that allows to interact with people and contribute to other peoples' life. A subsequent scenario-based experiment revealed that presenting a realistic but counter-stereotypical portrayal of entrepreneurship including communal aspects, increases beliefs about the pro-social side of entrepreneurship. Resulting from the increased pro-social beliefs young adults' attitude toward entrepreneurship improves – both for women and men.

Fourth, the advent of social enterprises that care for disadvantaged people or the natural environment by following commercial activities (Mair & Martí, 2006), raises the question how they enact those competitive aims within one organization. *Chapter 5* develops a taxonomy of organizational value logics by social enterprises. The taxonomy reveals that the hybrid nature of social enterprises becomes apparent in the configuration of three elements: the former institutional adherence of a social enterprise's stakeholders (social/commercial), the type of relationship to its stakeholders (uni-/bidirectional), and the number of distinct stakeholder groups it relates to. These results underline that hybridity can be understood as configuration rather than independent facets which explains that important differences exist in social enterprises approach to combine social welfare and economic logics.

## 6.2 Theoretical Implications

Integrating the findings of the former four chapters, this dissertation offers three superordinate theoretical implications and opportunities for future research. First, this dissertation adds to research on social responsibility in established companies by highlighting that the regulatory context has a two-sided role. On the one hand, *Chapter 2* shows that perceived regulatory stakeholder pressure buffers the positive relationship between firms' strategic orientation and the pursuit of a PES. This conditional effect indicates that when managers perceive high regulatory stakeholder pressure, firms' self-driven motivation to achieve a competitive advantage is crowded out by an external intervention, similar to the effects predicted by motivational crowding theory (Frey & Oberholzer-Gee, 1997). Hence, the motivation of a strategically oriented firm's management to follow a PES to gain competitive advantage is, to a certain extent, weakened by the firm's extrinsic need to align with its regulatory context to achieve legitimacy. Hence, while regulatory stakeholder pressure might push some firms toward the adoption of an environmental strategy (Darnall, 2006; Sharma et al., 2007), it might undermine prospector firms' use of their resources, processes, and routines to take a proactive approach toward environmental issues.

On the other hand, *Chapter 3* reveals that in the context of strong rule of law and high governmental intervention CSR is more strongly related to organizational attractiveness. Thus, in this case the reliability of the regulatory environment may provide general guidance for companies' external stakeholders such as job candidates to estimate how far they can rely on firms' signals concerning CSR. Strong formal institutions might substitute information asymmetry that external stakeholders experience as it increases the general reliance on regulated exchange and value in transparency. Thus, the findings of *Chapter 3* propose that a strong regulatory context may play an enabling role because it strengthens the effect of companies' CSR signals on potential employees. At the same time, the findings of *Chapter 2*

suggest that a strong regulatory context exerts a buffering role when it crowds out the effect of market-oriented motivations to pursue socially responsible strategies.

While the comparison of the chapters' findings holds valuable insights for research, interpretation needs to be cautious. The study in *Chapter 2* measures managers' perception of regulatory stakeholder pressure. The meta-analysis in *Chapter 3* uses archival data to analyze the contextual effect of the institutional environment. It would be valuable for future research to advance our understanding of differences in the contingent effects of the "actual" regulatory context and the perceived regulatory context when analyzing CSR phenomena. An enhanced knowledge on differences is worthwhile because regulatory stakeholders play a strong role in the formation of CSR (Arya & Zhang, 2009; Campbell, 2007; Young & Marais, 2012). Moreover, CSR is a multifaceted phenomenon that implies the interaction of various actors and stakeholders which pose different expectations on firms in society (Carroll & Shabana, 2010). Mapping the interpreted effect of the regulatory context could reveal how differences in sense-making create tensions in terms of the expectations about companies' engagement in socially responsible activities. Moreover, the perspectives in the two chapters concentrate on the contextual effects of formal institutions. Because CSR is strongly linked to moral obligations (Carroll, 1999), informal institutions such as cultural values could explain important differences in the interpretation of CSR as an appropriate company practice and as a means to attract and motivate employees.

Second, this dissertation advances perspectives on the effect of companies' engagement in social responsibility on employees, job candidates and the next generation of job market entrants. Findings of *Chapter 3* and *4* underline that established companies' and new ventures' engaging role in society positively influences attitudes toward the organizations. The meta-analytic review in *Chapter 3* joins the two rather separate strands of research on the effects of CSR on potential and current employees. The review shows that signaling and social identity

theory are commonly used in both strands. Therefore, the underlying reasoning for the positive effects of CSR is similar for potential and current employees. The results of the meta-analyses underline the comparability of the relationship between CSR and the two HR stakeholder groups because they are both strongly positive.

*Chapter 4* introduces the information processing perspective to understand how young adults perceive and evaluate newly emerging companies' interaction with and pro-social behavior with stakeholders. The chapter leverages the information processing perspective, as it provides an approach to empirically test mediating effects within experiments without losing the power of causality statements. Thereby, the chapter could demonstrate that a communal-inclusive portrayal of entrepreneurship – i.e. being entrepreneur means interaction with and helping other – activates communal beliefs about entrepreneurship, specifically pro-social beliefs, and thereby improves young adults' attitudes toward entrepreneurship. In this way, the chapter shows that providing information about a relevant namely pro-social side of entrepreneurship to individuals can change their thinking about, and evaluation of an occupation or organization.

Both *Chapter 3* and *4* contribute to our knowledge about the positive role of employees and external stakeholders' perception of socially responsible engagement by companies. However, recent examples show that signals about the social performance of businesses may be more ambiguous. For instance, Danone has been criticized for its business practices such as commercializing water or selling unhealthy food with medical claims (Greenpeace, 2005). Yet, lately Danone became the largest company was certified for its socially responsible business management (Schlagenhauf, 2018). Hence, future research could investigate the interaction between socially responsible and socially irresponsible signals to learn how ambiguity concerning businesses role in society affects attitudes and behaviors of employees and young

job entrants. As illustrated in *Chapter 4*, the information processing perceptive and the proposed methodological approach could be helpful to approach this research gap.

Third, this dissertation sheds light on the duality between agency and communion as well as business and society in entrepreneurship. *Chapter 4* identifies agency and communal beliefs (in particular, pro-social beliefs) as two crucial factors that explain why young adults get attracted by entrepreneurship. Entrepreneurship research has increasingly proposed that entrepreneurship includes a social dimension because entrepreneurs are socially embedded (Downing, 2005; Drakopoulou Dodd & Anderson, 2007; Zahra & Wright, 2016). Yet, others have warned against under-estimating the importance of risk-taking because entrepreneurs make decisions under high uncertainty (McMullen, 2017; McMullen & Warnick, 2016). The results of this chapter indicate that agentic and pro-social beliefs are two sides of the same coin and play an integral role in the evaluation of the entrepreneurial career.

*Chapter 5* analyzes how social enterprises combine a social welfare logic and an economic logic within their organizational value logic. The chapter shows that social enterprises differ in the way they combine those two logics in their organizational value logic. Three main types of social enterprises vary according to the extent they serve and combine social and commercial stakeholders' interests: socially-dominated hybrids, blended hybrids, and commercially dominated hybrids. The systematic heterogeneity in hybridity of social enterprises provides theoretical grounds to examine which social enterprises are more and which less prone to tensions in identity or performance. These findings add to research on the relationship among hybridity and tensions as well as the management of tensions within social enterprises (e.g., Battilana et al., 2015; Jay, 2013).

*Chapter 4* and *5* pinpoint at conflicting goals that are important during the emergence of new ventures and thereby indicate potential for future research. *Chapter 4* reveals that agentic and communal beliefs are relevant to the attitude formation toward entrepreneurship in a

German context. Past research has shown that the stereotypical portrayals of entrepreneurship and the attitude toward entrepreneurship strongly depend on the cultural context (Farmer et al., 2011; Freytag & Thurik, 2007). Future studies could compare the effect of beliefs about entrepreneurship and other occupations on the attitude across national boundaries. Although *Chapter 5* does include an international sample, country-level differences could not be examined. Like *Chapter 4*'s opportunity for future research, cultural differences could explain the type of organizational value logics that social enterprises chose. Future research could compare systematic differences in the way social enterprises combine the social welfare and economic logics depending on cultural values prevalent in their institutional context. Examining cultural differences in the portrayals of entrepreneurs and the practice of social enterprises would contribute to our understanding of important boundary conditions.

### **6.3 Practical Implications**

The findings of this dissertation offer four main practical implications. *Chapter 2* indicates that strategically oriented firms should be crucial for policy makers because they tend to proactively approach their environmental impact. The study pinpoints that strategically oriented organizations might lose their self-driven approach to environmental issues due to perceived regulatory stakeholder pressure. Policies that emphasize moving toward the desired behavior rather than command-and-control approaches could provide more flexibility and thereby increase managerial discretion in strategic decision making. This could enhance self-driven engagement for company's engagement in the reduction of their environmental impact.

The outcomes of *Chapter 3* are important for organizational practices, particularly HRM. The positive relationships between CSR and HR stakeholders suggest that CSR increases competitive advantage via a strong influx of potential employees and a motivated workforce. In view of differences in the effects of CSR on organizational attractiveness across national boundaries, HR manager may consider national specificities when promoting CSR in recruiting

processes. Moreover, employees seem to be able to differentiate between “talking the talk” (CSR principles) and “walking the talk” (CSR practices) which is why HR managers could invest in making employees experience CSR to achieve a stronger effect on their work behavior.

*Chapter 4* holds implications for educators and the media. The chapter’s findings show that beliefs and attitudes toward entrepreneurship can be influenced by narratives about what it means to be an entrepreneur. Therefore, the media and educators should take an active but cautious role in the diffusion of narratives about entrepreneurship. Because young adults’ beliefs about entrepreneurship are currently dominated by agentic beliefs that depict entrepreneurship as a self-centered occupation, the media and educator could take an important step by broaden narratives about entrepreneurship including pro-social aspects. Thereby beliefs in entrepreneurship as a self- and other-oriented career could increase, which in turn could improve young adults’ evaluation of entrepreneurship. Given the low entrepreneurial venturing rates in industrial states such as Germany – particularly among women (Sternberg et al., 2018), an integration of the communal side into the prototypal of entrepreneurship seems needed.

*Chapter 5* has implications for social entrepreneurs as it develops a taxonomy of organizational value logics which can provide useful guidance during the emergence and growth of social enterprises. Because the taxonomy depicts different ways in which social enterprises provide solutions to social and commercial stakeholders, emerging social entrepreneurs may use the taxonomy to understand the pool of opportunities when creating a new venture. Moreover, established social enterprises might draw on the present taxonomy to structure and visualize their organizational value logic as a map of relationships between the enterprise and its stakeholders. Thereby, the social enterprise can identify the institutional logic to which their stakeholders adhere and compare the legitimized practices of these logics with their current practices. In this way, social enterprises may detect potential conflicts early on.



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# Appendix

## Appendix 1. Measurements

### MEASUREMENTS

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#### Proactive Environmental Strategy

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##### Pollution Prevention

Please indicate to what extent you agree with the following statement concerning your firm's approach.

(1=do not agree at all to 5=strongly agree)

Our firm streamlines production processes to prevent firm processes from impacting the natural environment.

Our firm reduces waste on the basis of an environmental management system.

Our firm applies resource recycling to prevent firm processes from impacting the natural environment.

(Bansal, 2005; Chan, 2005; Sharma and Vredenburg, 1998)

##### Top Management Support

Please indicate to what extent you agree with the following statement concerning your firm's environmental awareness.

(1=do not agree at all to 5=strongly agree)

Environmental management is positively related to efficient resource utilization

Environmental management is positively related to cost efficiency

Environmental management is positively related to market competitiveness

(Wagner and Schaltegger, 2004)

#### Strategic Orientations

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##### Customer Orientation

Please indicate to what extent you agree with the following statement concerning your firm's customer orientation.

(1=do not agree at all to 5=strongly agree)

Our firm is proactive in collecting information on customers needs.

Our firm possesses the capacity to analyze this information.

Our firm has the will to meet the needs of the customers.

(Gatignon and Xuereb, 1995; Narver and Slater, 1990; Zhou and Li, 2010)

##### Competitor Orientation

Please indicate to what extent you agree with the following statement concerning your firm's competitor orientation.

(1=do not agree at all to 5=strongly agree)

Our firm is proactive in identifying competitor activity.

Our firm possesses the capacity to react to competitor activity.

Our firm has the will to respond to competitor activity.

(Gatignon and Xuereb, 1995; Narver and Slater, 1990; Zhou and Li, 2010)

##### Technology Orientation

Please indicate to what extent you agree with the following statement concerning your firm's technology orientation.

(1=do not agree at all to 5=strongly agree)

Our firm uses sophisticated technologies in new product development.

Our firm rapidly integrates new technologies into products and processes.

Our firm is proactive in developing new technologies.

Our firm is proactive in developing product ideas.

(Gatignon and Xuereb, 1995; Zhou and Li, 2010)

#### Regulatory Stakeholder Pressure

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In the context of the renewable energy sector, please rate the importance of the following sources of pressure on your company.

(1=not at all intensive to 5=very intensive)

regulations

politics

lobby groups

(Buysse and Verbeke, 2003; Delmas and Toffel, 2008; Henriques and Sadorsky, 1996)



*Appendix 2.* Studies including effect sizes for organizational attractiveness

<b>Authors</b>	<b>Year</b>	<b>Study type</b>	<b>Country</b>	<b>n</b>	<b>CSR</b>	<b>Organizational Attractiveness</b>	<b>CSR type</b>	<b>CSR facet</b>	<b>Instit.</b>
Turban, Greening	1996	field study	USA	160	KLD community relations	attractiveness as employer	mixed	social	/
					KLD employee relations	attractiveness as employer	mixed	social	/
					KLD environment	attractiveness as employer	mixed	environmental	/
					KLD product quality	attractiveness as employer	mixed	economic	/
					KLD treatment of women and minorities	attractiveness as employer	mixed	social	/
Waddock, Graves	1997	field study	USA	281	responsibility to community environment	ability to attract keep talent	outcomes	mixed	/
Greening, Turban	2000	scenario	USA	292	employee relations	job pursuit intention	practices	social	yes
					employee relations	attempting interview	practices	social	yes
					employee relations	accepting offer	practices	social	yes
					women minorities	job pursuit intention	mixed	social	yes
					women minorities	attempting interview	mixed	social	yes
					women minorities	accepting offer	mixed	social	yes
					concern environment	job pursuit intention	mixed	environmental	yes
					concern environment	attempting interview	mixed	environmental	yes
					concern environment	accepting offer	mixed	environmental	yes
					product quality	job pursuit intention	mixed	economic	yes
product quality	attempting interview	mixed	economic	yes					
product quality	accepting offer	mixed	economic	yes					
Albinger, Freeman	2000	field study	USA	25	csp	high choice attractiveness	practices	mixed	yes
					csp	medium choice attractiveness	practices	mixed	yes
					csp	low choice attractiveness	practices	mixed	yes
Aiman-Smith, Bauer, Cable (sample 1)	2001	scenario	USA	38	ecological rating	organizational attractiveness	outcomes	environmental	yes
Aiman-Smith, Bauer, Cable (sample 2)	2001	scenario	USA	34	ecological rating	job pursuit intention	outcomes	environmental	yes
Luce, Barber, Hillman	2001	field study	USA	100	corporate social performance activity	organizational attractiveness	mixed	mixed	yes

Appendix

Turban, Cable (sample 1)	2003	field study	USA	149	reputation	reputation	number of applicants	outcomes	economic	yes
Turban, Cable (sample 2)	2003	field study	USA	64	company reputation	company reputation	grade point average	outcomes	economic	yes
					company reputation	company reputation	number of interview schedules	outcomes	economic	yes
					company reputation	company reputation	applicants attending info session	outcomes	economic	yes
					company reputation	company reputation	applicants bidding	outcomes	economic	yes
					company reputation	company reputation	points bid for company	outcomes	economic	yes
					company reputation	company reputation	applicant gmat	outcomes	economic	yes
Collins, Han	2004	field study	USA	99	firm reputation	firm reputation	number of applicants	outcomes	economic	yes
					firm reputation	firm reputation	percentage of positions filled	outcomes	economic	yes
					firm reputation	firm reputation	perceived quality	outcomes	economic	yes
					firm reputation	firm reputation	applicant gpa	outcomes	economic	yes
					firm reputation	firm reputation	applicant work experience	outcomes	economic	yes
Behrend, Baker, Thompson	2009	scenario	USA	183	manipulation check	manipulation check	job pursuit intentions	mixed	environmental	yes
Kim, Park	2011	scenario	USA	126	csr	csr	attractiveness	practices	social	yes
					csr	csr	intent to apply	practices	social	yes
Zhang, Gowan (sample 1)	2012	scenario	USA	201	legal responsibility	legal responsibility	attraction to organization	mixed	mixed	yes
					legal responsibility	legal responsibility	probability of accepting offer	mixed	mixed	yes
					ethical responsibility	ethical responsibility	attraction to organization	mixed	mixed	yes
					ethical responsibility	ethical responsibility	probability of accepting offer	mixed	mixed	yes
Zhang, Gowan (sample 2)	2012	scenario	USA	66	legal responsibility	legal responsibility	attraction perception	/	/	yes
					legal responsibility	legal responsibility	probability of accepting offer	/	/	yes
					ethical responsibility	ethical responsibility	attraction perception	/	/	yes
					ethical responsibility	ethical responsibility	probability of accepting offer	/	/	yes
Lis	2012	scenario	Germany	193	product	product	organizational attractiveness	mixed	economic	yes
					diversity	diversity	organizational attractiveness	mixed	social	yes
					environment	environment	organizational attractiveness	mixed	environmental	yes
					employee relations	employee relations	organizational attractiveness	mixed	economic	yes
Rupp, Shao, Thornton, Skarlicki	2013	scenario	USA	81	csr	csr	organizational prestige	practices	mixed	yes
					csr	csr	job pursuit intentions	practices	mixed	yes

Appendix

Jones, Willness, Madey (sample 1)	2014	scenario	Canada	180	csp community vs no csp csp community vs no csp csp environment vs no csp csp environment vs no csp	anticipated pride organizational attractiveness anticipated pride organizational attractiveness	practices practices practices practices	social social environmental environmental	yes yes yes yes
Jones, Willness, Madey (sample 2)	2014	field study	USA	171	csp community csp community csp environment csp environment csp community perceived csp environment perceived csp environment perceived csp community perceived	organizational prestige organizational attractiveness organizational prestige organizational attractiveness organizational attractiveness organizational prestige organizational attractiveness organizational prestige	mixed mixed mixed mixed mixed mixed mixed mixed	social social environmental environmental social environmental environmental social	yes yes yes yes yes yes yes yes
Tsai, Joe, Lin, Wang	2014	field study	Taiwan	402	economic citizenship legal citizenship ethical citizenship philanthropic citizenship	job pursuit intention job pursuit intention job pursuit intention job pursuit intention	mixed mixed mixed mixed	economic mixed mixed mixed	yes yes yes yes
Strobel, Tumasjan, Welpe	2015	scenario	Germany	617	ethical leadership ethical leadership ethical leadership	general attractiveness prestige intentions to pursue employment	practices / practices / practices /	/ / /	yes yes yes
Joo, Moon, Choi	2016	scenario	Korea	376	csr negative vs positive attribute motives	organizational attractiveness organizational attractiveness	practices principles	economic social	yes yes

Note: The column "CSR" and "employee attitude and behavior" contain the name of variables in the original articles.

**Appendix 3.** Studies including effect sizes for employee attitudes and behavior

<b>Authors</b>	<b>Year</b>	<b>Study type</b>	<b>Country</b>	<b>n</b>	<b>CSR</b>	<b>Employee attitude and behavior</b>	<b>CSR type</b>	<b>CSR facet</b>	<b>Instit.</b>
Riordan, Gatewood, Bill	1997	field study	USA	174	image	satisfaction with top management	outcomes	mixed	yes
					image	job satisfaction	outcomes	mixed	yes
					image	intention to turnover [r]	outcomes	mixed	yes
Viswesvaran, Deshpande, Joseph	1997	field study	India	77	top management support	pay	mixed	mixed	yes
					top management support	promotion	mixed	mixed	yes
					top management support	coworkers	mixed	mixed	yes
					top management support	supervision	mixed	mixed	yes
					top management support	work	mixed	mixed	yes
Maignan, Ferrell, Hult (sample 1)	1999	field study	USA	210	economic	employee commit	practices	economic	yes
					legal	employee commit	practices	economic	yes
					ethical	employee commit	practices	mixed	yes
					discretionary	employee commit	practices	mixed	yes
Maignan, Ferrell, Hult (sample 2)	1999	field study	USA	154	economic	employee commit	practices	economic	yes
					legal	employee commit	practices	economic	yes
					ethical	employee commit	practices	mixed	yes
					discretionary	employee commit	practices	mixed	yes
Koh, Boo	2001	field study	Singapore	237	top management support for ethical behavior	job satisfaction pay	principles	mixed	yes
					benevolent ethical climate	job satisfaction pay	principles	social	yes
					top management support for ethical behavior	job satisfaction promotion	principles	mixed	yes
					benevolent ethical climate	job satisfaction promotion	principles	social	yes
					top management support for ethical behavior	job satisfaction coworkers	principles	mixed	yes
					benevolent ethical climate	job satisfaction coworkers	principles	social	yes
					top management support for ethical behavior	job satisfaction supervision	principles	mixed	yes
					benevolent ethical climate	job satisfaction supervision	principles	social	yes

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Peterson	2004	field study	USA	278	top management support for ethical behavior	job satisfaction work	principles	mixed	yes
					benevolent ethical climate	job satisfaction work	principles	social	yes
Brammer, Millington, Rayton	2007	field study	UK	4712	economic	organizational commitment	practices	economic	yes
					legal	organizational commitment	practices	economic	yes
					ethical	organizational commitment	practices	mixed	yes
					discretionary	organizational commitment	practices	mixed	yes
Carmeli, Gilat, Waldman	2007	field study	Israel	161	procedural justice	organizational commitment	practices	social	yes
					external csr	organizational commitment	mixed	mixed	yes
					procedural justice	job satisfaction	practices	social	yes
					external csr	job satisfaction	mixed	mixed	yes
De Luque, Washburn, Waldman, House	2008	field study	international	520	perceived social responsibility and development	organizational identification	mixed	economic	yes
					perceived social responsibility and development	job performance	mixed	economic	yes
					employee relations	stimulates extra effort	principles	economic	/
					employee relations	contributes 100 percentability	principles	economic	/
					employee relations	makes personal sacrifice	principles	economic	/
					employee growth and development	effort beyond duty	principles	economic	/
					employee growth and development	stimulates extra effort	principles	economic	/
					employee growth and development	contributes 100 percentability	principles	economic	/
					employee growth and development	makes personal sacrifice	principles	economic	/
					employee growth and development	effort beyond duty	principles	economic	/
					effect on environment	stimulates extra effort	principles	environmental	/
					effect on environment	contributes 100 percentability	principles	environmental	/
					effect on environment	makes personal sacrifice	principles	environmental	/
effect on environment	effort beyond duty	principles	environmental	/					
welfare of local community	stimulates extra effort	principles	social	/					
welfare of local community	contributes 100 percentability	principles	social	/					
welfare of local community	makes personal sacrifice	principles	social	/					
welfare of local community	effort beyond duty	principles	social	/					

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Rettab, Brik, Mellahi	2009	field study	United Arab Emirates	280	customer satisfaction customer satisfaction customer satisfaction customer satisfaction	stimulates extra effort contributes 100 percentability makes personal sacrifice effort beyond duty	principles principles principles principles	economic economic economic economic	/ / / /
Turker	2009	field study	Turkey	269	community responsibilities environmental responsibilities employee responsibilities investor responsibilities customer responsibilities supplier responsibilities	employee commitment employee commitment employee commitment employee commitment employee commitment employee commitment	practices practices practices practices practices practices	social environmental economic economic economic economic	yes yes yes yes yes yes
Perez, Achichai- Hamburger, Shierental (sample 1)	2009	field study	Israel	24	environmental commitment employees perception environmental commitment managers perception	ocq ocq ocq ocq	mixed mixed mixed mixed	mixed economic economic /	yes yes yes yes
Perez, Achichai- Hamburger, Shierental (sample 2)	2009	field study	Israel	23	environmental commitment employees perception environmental commitment managers perception	ocb job performance ocb job performance ocb job performance	practices practices practices	environmental environmental environmental	yes yes yes
Chun, Shin, Choi, Kim	2011	field study	Korea	130	external ethics internal ethics	organizational commitment organizational commitment	practices mixed	social mixed	yes yes
Müller, Spiess, Hattrup, Lin-Hi (sample 1)	2011	field study	international	761	Gcsr Gcsr csr csr	affective commitment affective commitment meyer and allen affective commitment affective commitment meyer and allen	mixed mixed mixed mixed	mixed mixed mixed mixed	/ / / /
Müller, Spiess, Hattrup, Lin-Hi (sample 2)	2011	field study	international	1084	csr	affective organizational commitment	mixed	mixed	/

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Hansen, Dunford, Boss, Boss, Angermeier (sample 1)	2011	USA	1116	perceived csr		turnover intentions [r]	mixed	mixed	yes
Hansen, Dunford, Boss, Boss, Angermeier (sample 2)	2011	USA	2422	perceived csr		turnover intentions [r]	mixed	mixed	yes
Doh, Stumpf, Tymon	2011	India	4811	stakeholder culture		pride in organization	mixed	mixed	yes
				stakeholder culture		satisfaction with organization	mixed	mixed	yes
				stakeholder culture		intention to leave [r]	mixed	mixed	yes
				stakeholder culture		turnover [r]	mixed	mixed	yes
Stewart	2011	USA	348	diversity climate		intention to leave [r]	practices	economic	yes
				ethics climate		intention to leave [r]	practices	mixed	yes
Shen, Zhu	2011	China	784	lchrm	ac		practices	economic	yes
				lchrm	cc		practices	economic	yes
				lchrm	nc		practices	economic	yes
				cohrm	ac		practices	economic	yes
				cohrm	cc		practices	economic	yes
				cohrm	nc		practices	economic	yes
				gfhrm	ac		practices	social	yes
				gfhrm	cc		practices	social	yes
				gfhrm	nc		practices	social	yes
Stites, Michael	2011	USA	136	perceived community related csp		affective commitment	mixed	social	yes
De Roeck, Delobbe	2012	Europe	154	perceived environmentally related csp		affective commitment	practices	environmental	yes
Jain	2013	India	90	perceived csr	oi		practices	environmental /	
				csr		intention to stay	/	/	yes
				csr		motivation	/	/	yes
You, Huang, Wang, Liu, Un, Tseng	2013	Taiwan	234	csr		organizational commitment	mixed	mixed	yes

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					csr	job satisfaction			
Powell	2013	field study	UK	107	ethical climate benevolent ethical climate benevolent	affective commitment continuance commitment	mixed mixed	mixed economic social	yes yes yes
Korschun, Bhattacharya, Swain	2014	field study	USA	221	perceived management support for csr perceived customer support for csr perceived management support for csr perceived customer support for csr	organizational identification organizational identification job performance job performance	mixed mixed mixed mixed	mixed mixed mixed mixed	yes yes yes yes
Doegl, Holtbruegge	2014	field study	international	215	green strategy and culture green technology and products green recruitment and evaluation green communication environmental reputation	employee commitment employee commitment employee commitment employee commitment employee commitment	practices practices practices practices outcomes	environmental / environmental / environmental / environmental / environmental /	
Hollingworth, Valentine	2014	field study	USA	187	corporate social responsibility corporate social responsibility	organizational commitment turnover intention [r]	mixed mixed	mixed mixed	yes yes
Gosh, Gurunathan	2014	field study	India	501	csr to society csr to customers	intention to quit [r] intention to quit [r]	mixed mixed	mixed economic	yes yes
Glavas, Kelley	2014	field study	North America	775	pcsr pcsr	job satisfaction organizational commitment	mixed mixed	mixed mixed	/
Hofman, Newman	2014	field study	China	280	csr toward society csr toward society csr toward employees csr toward employees csr toward customers and government csr toward customers and government	affective commitment normative commitment affective commitment normative commitment affective commitment normative commitment	mixed mixed mixed mixed mixed mixed	mixed mixed economic economic mixed mixed	yes yes yes yes yes yes
Farooq, Payauf, Merunka, Valette- Florence	2014	field study	Pakistan	378	csr to employees csr to employees csr to community	identification aoc identification	mixed mixed mixed	economic economic social	yes yes yes



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Wang	2014	field study	Taiwan	626	corporate citizenship	aoc	mixed	social	yes
Moon, Hur, Ko, Kim, Yoon	2014		SouthKorea	253	legal dimension ethical dimension discretionary dimension	identification aoc identification aoc	mixed mixed mixed mixed mixed	environmental environmental economic economic	yes yes yes yes yes
Zhang, Fan, Zhu	2014	field study	China	700	csp	ac	practices	mixed	yes
Wong, Gao	2014		China	379	csr to stakeholder csr to employee csr to customer csr to government	affective commitment affective commitment affective commitment affective commitment	mixed mixed mixed mixed	mixed economic economic /	yes yes yes yes
Vlachos, Panagopoulos, Theotokis, Singh, Singh (sample 1)	2014	scenario	Netherlands	63	csp perceptions	positive recommendations	mixed	mixed	yes
Vlachos, Panagopoulos, Theotokis, Singh, Singh (sample 2)	2014	scenario	India	48	csp perceptions	intention to stay	mixed	mixed	yes
De Roeck, Marique, Stinglhamber, Swaen	2014	field study	Belgium	181	perceived external csr perceived external csr perceived internal csr perceived internal csr	oi job satisfaction oi job satisfaction	mixed mixed mixed mixed	economic economic economic economic	yes yes yes yes
Raub, Blunschi	2014	field study	UK	211	csr awareness	job satisfaction	/	/	yes
Wei, Egri, Lin	2015	field study	international	360	employee csr	employeecommitment	practices	economic	/
Du, Bhattacharya, Sen	2015		USA	322	csr	job satisfaction	mixed	social	yes

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				csr		intention to quit [r]	mixed	social	yes
D'Aprile, Talo	2015	Italy	345	pcsr	oc		mixed	mixed	yes
Zientara, Kujawski, Bohdanowicz-Godfrey	2015	Poland	412	self related csr	satisfaction		mixed	mixed	yes
				self related csr	commitment		mixed	mixed	yes
				self related csr	work engagement		mixed	mixed	yes
				other related csr	satisfaction		practices	environmental	yes
				other related csr	commitment		practices	environmental	yes
				other related csr	work engagement		practices	environmental	yes
Felix	2015	Mexico	83	csp	employee commitment		mixed	mixed	yes
Senasu, Virakul	2015	Thailand	1277	implemented csr	job satisfaction		mixed	mixed	yes
Newman, Nielsen, Miao	2015	China	184	csr toward social and nonsocial stakeholders	job performance		mixed	mixed	yes
				csr toward social and nonsocial stakeholders	ocb		mixed	mixed	yes
				csr toward employees	job performance		mixed	economic	yes
				csr toward employees	ocb		mixed	economic	yes
				csr toward customers	job performance		mixed	economic	yes
				csr toward customers	ocb		mixed	economic	yes
				csr toward government	job performance		mixed	/	yes
				csr toward government	ocb		mixed	/	yes
Barakat, Barakat, Isabella, Isabella, Boaventura, Boaventura, Mazzon	2016	Brazil	85167	csr	employee satisfaction		mixed	mixed	yes
Suh	2016	South Korea	1249	csr	affective commitment		mixed	mixed	yes
				csr	job satisfaction		mixed	mixed	yes

Note: The column "CSR" and "employee attitude and behavior" contain the name of variables in the original articles. [r] = reversed coded

*Appendix 4.* Scenario descriptions

**Scenarios of Vignette Study (Study 2)**

In the following, you will find a short report of a person who has just finished his/her studies and has set up his/her own company. S/he explains how s/he experienced that move.

**Scenario – Treatment group (communal-inclusive)**

“My job involves many different activities. At the beginning, our team of founders strove to better understand the needs of potential customers. Therefore, we did a lot of research on the internet, dealt intensively with the offers of our competitors, and spoke with a lot of clients. By means of that feedback, we could identify the problems of our customers and are now able to solve these problems with the help of our business idea.

After adapting our offer to address the problems of the customers, we needed to obtain financing for our business idea. We created a business plan (project plan) for banks and other potential investors that summarized our business idea clearly and illustrated how profitable it would be. Organizing the financing was quite stressful. During this period, we could support each other within the team and we were very glad when we finally received a financial commitment. In times when I felt stressed by all the responsibilities, the other team members were there for me. By the time the financing was guaranteed, we needed to win over customers. To this end, we were often on the road, attended many fairs, gave numerous presentations, and talked to many customers. Meanwhile, the first customer orders arrived. We now spend most of our time handling orders. Moreover, we are negotiating with suppliers and partners about better conditions to further improve our offer. At the same time, we are crafting a plan to reach even more customers. Although every team member oversees his/her own area of responsibility, we help each other out whenever necessary.

All in all, I like my job because I work a lot with people and I help solving their problems. Exchanging with other team members contributes to the progress of our business idea.”

**Scenario – Control group (non-communal)**

“My job involves many different activities. In the early stage of the business creation, it was all about identifying a potential market gap. Therefore, I did a lot of research on the internet, dealt intensively with the offers of our competitors, and analyzed customer reviews of different providers. By means of the collected data, I developed my own offer. With my business idea, I had good opportunities on the market.

After identifying a market gap, in which there have not been any other providers yet, I needed to obtain financing for my business idea. I needed to create a business plan (project plan) for banks and other potential investors that summarized my business idea clearly and illustrated how profitable it would be. Organizing the financing was quite stressful. I was very glad when I finally received a financial commitment.

By the time the financing was guaranteed, I needed to win over customers. To this end, I was often on the road, attended many fairs, and gave numerous presentations. Meanwhile, the first customer orders arrived. At the moment, I am spending most of my time handling these orders. Moreover, I am negotiating with suppliers and partners about better conditions to improve the positioning of my offer on the market. At the same time, I am crafting a plan to reach even more customers. I am responsible for all the different tasks that arise during the work.

All in all, I like my job because I have developed my own business idea and I am my own boss at work. This independence helps me to make quick progress. In addition, I believe that I can achieve something with my business idea.”

**Appendix 5.** Admission criteria of international organizations from which the samples were sourced

		<b>International organizations that award and support social enterprises</b>				
<b>Admission criteria</b>	<b>Schwab Foundation</b>	<b>Echoing Green</b>	<b>Unreasonable Group</b>	<b>Ashoka</b>	<b>Skoll</b>	
<b>social and/or environmental impact</b>	"Demonstrated Impact: beyond proof of concept; has a monitoring and evaluation system in place; can provide compelling impact metrics."	"Potential for big, bold impact: We're looking for dramatic change, not incremental change. So, we ask entrepreneurs to show us how their project will directly impact many lives or change a big system. Or, how their solution will set an important example that can change big systems by being replicated by others."	"Commitment to a Global Goal: The CEO of each venture selected needed to demonstrate a clear commitment to solving one of the Sustainable Development Goals by 2030."	"Ashoka cannot elect someone to the Fellowship unless he or she is possessed by a new idea—a new solution or approach to a social problem—that will change the pattern in a field, be it human rights, the environment, or any other."	"The mission of the organization addresses a critical and timely issue identified as one of the world's most pressing problems."	
<b>sustainable business model</b>	"Market-based: leverages market forces, strategic partnerships, and business practices wherever possible, e.g. charges fees for products or services or for some subset of them."	"Great ideas fall flat without a solid plan. Applicants' start-up plan, budget, timeline, staffing should be well thought-out."	"For-profit model: Every venture invited into the program is leveraging a for profit business model."		"The organization has a sound and viable business model and a compelling plan for achieving long-term growth and sustainability."	
<b>scalability of the model/solution</b>	"Potential to scale: has the potential to be successfully expanded nationally or internationally, either by branch expansion or via replication partners."	"Potential for big, bold impact: We're looking for dramatic change, not incremental change. So, we ask entrepreneurs to show us how their project will directly impact many lives or change a big system."	"Highly scalable: We are scaling what works. We only invited ventures that we believe are setup to scale internationally and eventually globally."	"Ashoka is only interested in ideas that it believes will change the field significantly and that will trigger nationwide impact or, for smaller countries, broader regional change."	"The organization's innovation is positioned to effect large-scale policy, behavior, and/or infrastructure/systems change and shows evidence of significant impact already achieved."	
		<a href="https://www.schwabfound.org/">https://www.schwabfound.org/</a> ; accessed 12/07/18	<a href="https://www.echoinggreen.org/">https://www.echoinggreen.org/</a> ; accessed 12/07/18	<a href="https://unreasonable-goals.com/">https://unreasonable-goals.com/</a> ; 12/07/18	<a href="https://www.ashoka.org/en/">https://www.ashoka.org/en/</a> ; 12/07/18	<a href="http://skoll.org/about/skoll-awards/">http://skoll.org/about/skoll-awards/</a> ; 12/07/18

**Appendix 6.** Excluded social enterprises

<b>Name</b>	<b>Database</b>	<b>Country</b>
<b>Excluded because organization inactive or acquired</b>		
Weird Enough Productions	Echoing Green	United States
Cerplus	Echoing Green	United States
Love Grain	Echoing Green	United States
GreenChar	Echoing Green	Kenya
Ampere Vehicles	Unreasonable Group	India
GrowUp Urban Farms	Unreasonable Group	United Kingdom
Lightsail	Unreasonable Group	United States
Protoprint	Echoing Green	India
<b>Excluded because no revenue stream developed yet</b>		
Aeropowder	Echoing Green	United Kingdom
Opus 12	Echoing Green	United States
Alesca Life	Unreasonable Group	China
Exergyn	Unreasonable Group	Ireland
Glowee	Unreasonable Group	France
Memphis Meats	Unreasonable Group	United States
mimica	Unreasonable Group	United Kingdom
Utopia	Schwab Foundation	United States
<b>Excluded because only donation based</b>		
Coral Vita	Echoing Green	United States
True School	Echoing Green	United States
Practice Makes Perfect	Echoing Green	United States
Ubongo	Unreasonable Group	Tanzania
Big Green	Schwab Foundation	United States
Oorja: Em'power'ing Rural Communities	Echoing Green	India
<b>Excluded because no clear social stakeholder</b>		
Sproxil	Schwab Foundation	United States
EVmatch	Echoing Green	United States
Mobius Motors	Echoing Green	Kenya
Agri Info Design	Unreasonable Group	Japan
agrivi	Unreasonable Group	United Kingdom
eFishery	Unreasonable Group	Indonesia
Plant Prefab	Unreasonable Group	United States
Snact	Unreasonable Group	United Kingdom
Sundar	Unreasonable Group	United States
Vitargent	Unreasonable Group	Hong Kong
Arcola Energy	Unreasonable Group	United Kingdom
Arcstone	Unreasonable Group	Singapore
Bitty Foods	Unreasonable Group	United States
BreezoMeter	Unreasonable Group	United States

<b>Excluded not enough information</b>		
G.R.I.D.	Echoing Green	India
Arqlite	Echoing Green	Argentina
Cloud to Street	Echoing Green	United States
EQuotaenergy	Echoing Green	China
Qorax Energy	Echoing Green	United States
Letrus	Unreasonable Group	Brazil

*Appendix 7.* Final sample ( $N = 127$ ) sorted by clusters (= C.)

<b>C.</b>	<b>Name</b>	<b>Database</b>	<b>Country</b>
1a	Bridge International Academics	Unreasonable Group	Kenya
1a	Emote	Unreasonable Group	United States
1a	KickUp	Unreasonable Group	United States
1a	Malo	Echoing Green	Mali
1a	Maths Pathway	Echoing Green	Australia
1a	Nuru Energy Group	Schwab Foundation	Rwanda
1a	Prakti Design	Unreasonable Group	India
1a	Vaya Powering Aspirations	Schwab Foundation	India
1a	Zoona	Unreasonable Group	South Africa
1b	Andiamo	Unreasonable Group	United Kingdom
1b	bKash	Schwab Foundation	Bangladesh
1b	Delight	Schwab Foundation	South Korea
1b	Edovo	Unreasonable Group	United States
1b	Greenlight Planet	Unreasonable Group	United States
1b	Greenway Appliances	Echoing Green	India
1b	gridComm	Unreasonable Group	Singapore
1b	Guru-G	Unreasonable Group	India
1b	Khethworks	Unreasonable Group	India
1b	Literator	Unreasonable Group	United States
1b	Off Grid Electric	Unreasonable Group	United States
1b	RocketLit	Unreasonable Group	United States
1b	SunCulture	Unreasonable Group	Kenya
1b	Telemed Medical Services	Echoing Green	Ethiopia
1b	ThinkCERCA	Unreasonable Group	United States
1b	Tugende	Echoing Green	Uganda
1b	Zipline	Ashoka + Schwab Foundation	United States
2a	Dialogue Social Enterprise	Ashoka + Schwab Foundation	Germany
2a	EcoFlora	Unreasonable Group	Colombia
2a	Growing Underground	Unreasonable Group	United Kingdom
2a	Human Nature	Schwab Foundation	Philippines
2a	LaborVoices	Echoing Green	United States

2a	Liberty & Justice	Unreasonable Group	United States
2a	Mirakle Couriers	Echoing Green	India
2a	MoringaConnect	Echoing Green	United States
2a	VOZ	Unreasonable Group	United States
2a	Wecyclers	Echoing Green	Nigeria
2b	10Power	Echoing Green	United States
2b	AFRipads	Unreasonable Group	Uganda
2b	Awethu	Echoing Green	South Africa
2b	BuffaloGrid	Unreasonable Group	United Kingdom
2b	Drinkwell	Echoing Green	United States
2b	Frontier Markets	Echoing Green	India
2b	Paga	Unreasonable Group	Nigeria
2b	Village Energy	Echoing Green	Uganda
2c	EcoPost	Unreasonable Group	Kenya
2c	Kanpur Flowercycling	Echoing Green	India
2c	Kennemer Foods International	Schwab Foundation	Philippines
2c	One Earth Designs	Unreasonable Group	United States
2c	Pelagic Data Systems	Unreasonable Group	United States
2c	PUR Projet	Schwab Foundation	France
2c	Stockboxes Grocers	Echoing Green	United States
2c	Thread	Unreasonable Group	United States
3a	1mg Technologies	Unreasonable Group	India
3a	Agua Inc	Unreasonable Group	United States
3a	Airlabs	Unreasonable Group	United Kingdom
3a	Altaeros	Unreasonable Group	United States
3a	Angaza	Echoing Green	United States
3a	b condoms	Echoing Green	United States
3a	bempu	Echoing Green	India
3a	BioLite	Unreasonable Group	USA
3a	Biosense	Echoing Green	India
3a	Boond	Echoing Green	India
3a	Clínicas del Azúcar	Schwab Foundation	Mexico
3a	Desolenator	Unreasonable Group	United Kingdom
3a	Ecofiltro	Schwab Foundation	Guatemala
3a	Ecosoftt	Unreasonable Group	Hong Kong
3a	Ecozen Solutions	Unreasonable Group	India
3a	EKG-energy	Echoing Green	United States
3a	eneza education	Echoing Green	Kenya
3a	Essmart	Echoing Green	United States, India
3a	Ethmar for Islamic Finance	Schwab Foundation	Jordan
3a	Farmer Line	Echoing Green	Ghana
3a	Guten	Unreasonable Group	Brazil
3a	Hello Tractor	Echoing Green	United States



3a	Hybrid Social Solutions	Schwab Foundation	Philippines
3a	Karadi Path	Unreasonable Group	India
3a	Kingo	Unreasonable Group	Guatemala
3a	Kodable	Unreasonable Group	United States
3a	Learning Games Studios	Unreasonable Group	United States
3a	salauno	Schwab Foundation	Mexico
3a	Sou Sou	Echoing Green	United States
3a	Stones2Milestones	Unreasonable Group	India
3a	Sure Chill	Unreasonable Group	United Kingdom
3a	Suyo	Echoing Green	Colombia
3a	Tamboro	Unreasonable Group	Brazil
3a	Telegraph Academy	Echoing Green	United States
3a	TOHL	Echoing Green	United States
3a	Vita Beans Neural Solutions	Unreasonable Group	India
3a	WizeNoze	Unreasonable Group	Netherlands
3b	Aceleron	Unreasonable Group	United Kingdom
3b	Ampd Energy	Unreasonable Group	Hong Kong
3b	AYZAH Health and Livelihood	Echoing Green	India
3b	Bakeys Food	Unreasonable Group	India
3b	Banyan Nation	Unreasonable Group	India
3b	Biocarbon Engineering	Unreasonable Group	United Kingdom
3b	BioCollection	Echoing Green	United States
3b	Cell-Ed	Unreasonable Group	United States
3b	Chakr Innovation	Echoing Green	India
3b	ChironX	Unreasonable Group	India
3b	Chirps Chips	Echoing Green	United States
3b	Ecoelectro	Echoing Green	United States
3b	Eduze	Unreasonable Group	South Africa
3b	Eggplant	Echoing Green	Italy
3b	Embrace Innovations	Schwab Foundation	USA
3b	FatHopes Energy	Unreasonable Group	Malaysia
3b	Fourth Partner Energy	Unreasonable Group	India
3b	Headspring	Unreasonable Group	Japan
3b	Iris Speaks	Unreasonable Group	United Kingdom
3b	Kelda Technology	Unreasonable Group	United Kingdom
3b	Kiverdi	Unreasonable Group	United States
3b	Leaf Resources	Unreasonable Group	Australia
3b	Lithium Urban Technologies	Unreasonable Group	India
3b	Livox	Schwab Foundation	Brazil
3b	loop closing	Echoing Green	United States
3b	Magnuss	Unreasonable Group	United States
3b	Pasture Map	Echoing Green	United States
3b	Plentify	Echoing Green	South Africa

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3b	RAD Green Solutions	Unreasonable Group	Philippines
3b	re:3D	Unreasonable Group	United States
3b	Recycling Technologies	Unreasonable Group	United Kingdom
3b	Riversimple	Unreasonable Group	United Kingdom
3b	SEaB Energy	Unreasonable Group	United Kingdom
3b	Semtive	Unreasonable Group	United States
3b	Smart Joules	Echoing Green	India
3b	Soscience	Echoing Green	France
3b	Terramera	Unreasonable Group	Canada
3b	Triciclos	Ashoka + Schwab Foundation	Chile

Appendix 8. Coding scheme developed in phase 1 and used for consistent coding in phase 2

	Characteristic	Definition	Example codes	Examples quotes	
stakeholders	social	<b>disabled</b>	Disabilities are permanent physical or mental impairments affecting in the person's everyday life and/or full participation in society.	“There is very little public sympathy for the deaf, and by connection, a severe lack of government support for them in India.” (Mirakle Couriers)	
		<b>poor</b>	People related to "absolute" (individuals belong to the bottom-of-the-pyramid) as well as "relative" poverty (lack of financial resources in relation to the economic surrounding).	"Across sub-Saharan Africa, 220 million farmers live on less than \$2 a day. Many of them struggle to produce enough food to feed their families [...]”(Hello Tractor)	
		<b>ill</b>	People that suffer from illness. Illnesses in relation to disabilities can be treated.	ill, illness, patients, diseases, health, treatment, medicine, medical	“Biosense is encouraging people to assess their own risk of developing type 2 Diabetes by giving them a better solution for this problem.” (Biosense)
		<b>disadvantaged</b>	People being exposed to disadvantages because of e.g. race, age, ethnicity, gender, religion, sexual orientation, political orientation, ideology.	disadvantage, discriminate, racism, sexism, political persecution, women, gay, elderly, aging, elderly, low literacy, students	“Millions of people have been using informal savings and loan practices for centuries as a way to save and invest when banks and venture capital are not an option.” (Sou Sou)
		<b>environment</b>	A problem that threatens the natural environment thereby affects human life.	emissions, agroforestry, waste reduction, pollution, deforestation, destruction of habitats, oil spills, soil erosion, destruction of biodiversity	“The collection, management and disposal of waste continues to feature prominently as a challenge in our towns and cities.” (EcoPost)
commercial	customer	<b>organization/ community</b>	Social providers such as schools, universities, other education institutions, cities or clubs.	clubs, schools, universities, colleges, education institution, teachers, students, educators	“Today, much of the pesticides and fertilizers applied are not taken up by crops and are washed away, accumulating in our waterways and environment.” (Terramera)
			Customers paying for products or services. These customers are not directly harmed by the social/environmental issue tackled by the social enterprise.	customer, client, retail market, consumer, you, B2C	“SolSource Sport is ideal for outdoor enthusiasts who need to travel light and for families who want to cook with the sun in small places or on-the-go.” (One Earth Designs)

	<b>company</b>	<p>Companies paying for products or services. These companies are not directly harmed by the social/environmental issue tackled by the social enterprise.</p>	<p>companies, firms, businesses, ventures, enterprises, corporations, B2B, B2C</p>	<p>“[...] leading industrial companies and global shipping organizations that believe adopting a proactive plan to understand and manage their fuel requirements” (Magnuss)</p>	
<p><b>value proposition</b></p> <p><b>social</b></p>	<p><b>Sub-dimensions</b></p>	<p><b>Definition</b></p>	<p><b>Example codes</b></p>	<p><b>Examples quotes</b></p>	
		<p><b>physiological</b></p>	<p>Needs concerning human survival, such as air, warmth, water, shelter, sleep, food.</p>	<p>shelter, drinking water, survival, water, life-saving, sanitation</p>	<p>“In Mali, 81% of children under 5 are anemic and half of deaths are attributable to malnutrition. [...] crushing rice into a flour, fortifying it with vitamins and minerals” (Malo)</p>
		<p><b>health</b></p>	<p>Needs to have access to health ensuring, preserving medical products or services.</p>	<p>health, health products, medicine, patient, healthcare, immunization, disease, medical care, medical treatment</p>	<p>“Nearly 70% of Indian homes cook with primitive mud stoves [...], exposing families to harmful smoke and diseases [...]. Greenway's cooking stove offers a solution.” (Greenway)</p>
		<p><b>access to infrastructure</b></p>	<p>Needs to have access to basic infrastructure such as electricity, financial service infrastructure, basic telecommunication.</p>	<p>infrastructure, grid, off-grid, electricity, telecommunication, unbanked, connect, connection, financial services, energy, access to services, technology dissemination, availability of services</p>	<p>“BuffaloGrid is connecting the next billion. Providing power to those that need it most and laying the foundations to expand the internet globally.” (BuffaloGrid)</p>
		<p><b>education</b></p>	<p>Needs to learn, have access to basic education programs, elementary school education, access to better education.</p>	<p>education, school, learner, educator, basic education, student, educational, learning</p>	<p>“Education decreases recidivism by 43%, but 4 out of 5 people in custody don't have regular access.” (Edovo)</p>
		<p><b>employment</b></p>	<p>Needs to have access to or engage in professional trainings, education directly enabling employment, need to engage in regular employment, providing security, order, stability.</p>	<p>employment, income, profession, professional training, work, increase productivity, creating jobs, job opportunities, inclusion</p>	<p>“We provide entrepreneurs with a micro-franchise “business-in-a-box” that enables them to offer financial services, serve their communities, employ staff, and earn an income.” (Zoona)</p>
		<p><b>recognition</b></p>	<p>Needs related to emotional (human) feelings: feelings of belongingness, respect from others, esteem for oneself and self-fulfillment.</p>	<p>confidence, connection, appreciated, realizing one's dreams/ideas, love, respect</p>	<p>“Women and girls everywhere deserve equal access to the ease, comfort, and dignity of disposable pads” (AYZAH Health and Livelihood)</p>

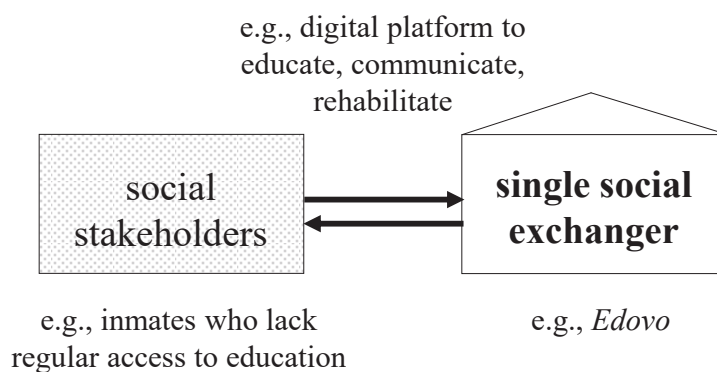
		Needs that concern risk, cost, time, or complexity.	increased productivity/income, makes it easier to, efficient, saves time, cheaper, less risky	“[...] livelihoods organizations and farmers [...] to deploy and test pilot systems that have led to increased income, rental transactions, and first-ever summer season harvests.” (Khehworks)
		<b>environment</b>	emission, waste disposal, climate change, green energy, biodiversity, renewable energy, greenhouse gas, global warming, extinction of animals, genetic manipulation	“We are proud to be building a global regenerative agriculture movement that is restoring soil health, sequestering carbon, and providing clean water [...].” (Pasture Map)
	<b>commercial</b>	<b>functional</b>	cost, cost reduction, saving, economic benefit, reduce effort, avoid hassles, simplify, gain information, connect, networking, improvement, cost effective	“Our team will work with you to develop a customized and cost-effective recycling plan that meets your organization’s needs.” (WeCyclers)
		<b>emotional</b>	design, appeal, feelgood, look, wellness, fun, entertainment, fashionable, desirable, style, attractiveness, experience	“You’re on your way to empowering tomorrow’s innovators“ (Kodable)
	<b>value capture</b>	<b>social</b>	subscription, product sale, lending, pay-per-use	“they would pay about 20 U.S. cents per week for lighting. This is compared to about \$2 a week that they would spend on kerosene before” (Nuru Energy Group)
		<b>commercial</b>	subscription, product sale, lending, renting, leasing	“We supply bulk moringa oil and bulk moringa tea and powder to brands around the world.” (MoringaConnect)
	<b>value capture</b>	<b>social</b>	together, co-creation, engagement, local workforce, integration, employ, employee, empower, enable, themselves, involvement, involve, work with	“By training women to assemble and sell our stoves, we have helped in the past create a new generation of female entrepreneurs.“ (Prakti Design)

Appendix

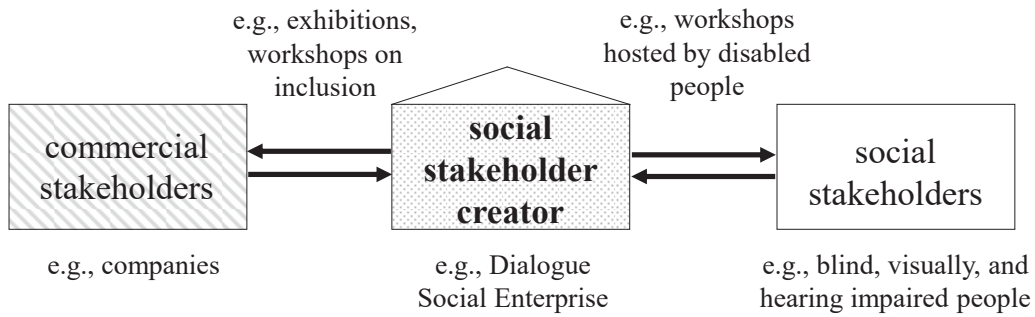
commercial	contributing	Main capabilities to propose value are sourced from the social enterprise as a producer/service provider, and/or a cooperating commercial provider, and/or distributed with the help of a commercial provider (commercial partner).	provision, provide, receive, receiver, allow, offer, offering, bringing, supporting, equip	“BEMPU offers innovative life-saving health products for children in low-resource areas“ (BEMPU)
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**Appendix 9.** Descriptions of the remaining sub-clusters of hybrid organizational value logics

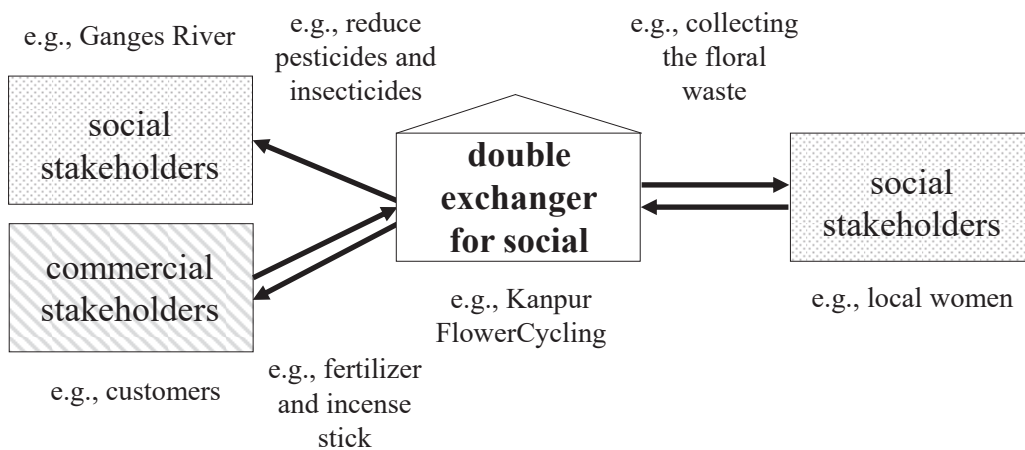
**Single social exchangers** (1b;  $n = 17$ ) provide value to social stakeholders without any intermediary. Illustrative for this sub-cluster is the US-based social enterprise Edovo which offers a digital platform to inmates and jails (Edovo, 2018). Edovo aims to improve rehabilitation of inmates by providing access to education and communication opportunities. Inmates pay for the service so that they are integrated into the value capture of the social enterprise (Dhakappa, 2018).



**Social stakeholder creators** (2a,  $n = 10$ ) propose value to both social and commercial stakeholders, capture value from commercial stakeholders and create value by drawing on the capabilities of another group of social stakeholders. One example is Dialogue Social Enterprise in the business-to-consumer sector who propose value to disabled people and companies. The value creation is enabled by social stakeholders such as disabled, disadvantaged and elderly people (Dialogue Social Enterprise, 2019). Commercial stakeholders that pay for the service are individuals who visit the exhibitions or companies who receive diversity trainings. Moreover, Dialogue Social Enterprise runs a franchise system with commercial business partners that operate exhibitions and facilitate workshops.

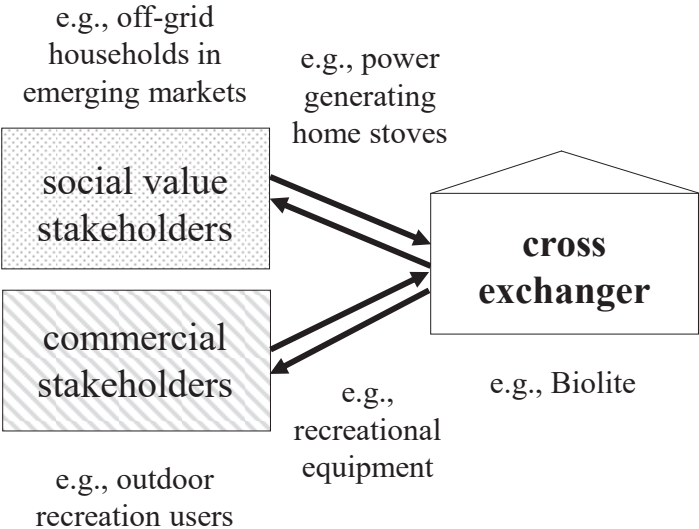


**Double exchanger for social** (2c,  $n = 8$ ) source from a group of social stakeholders to create value for social and commercial stakeholders. One example is Kanpur Flowerecycling who set out to preserve the environment by upcycling of flowers collected in temples and mosques (HelpUsGreen, 2019). Disadvantaged people collect the flowers and thereby contribute to the value and then sold as organic products to end customers.



**Cross exchangers** (3a,  $n = 37$ ) do not include social stakeholders in their value creation/delivery but create and deliver the value themselves, while the value proposition and capture are hybrid. One example is the social enterprise Biolite which proposes value for and capture value from disadvantaged households who lack affordable energy and customers of outdoor recreation (Biolite, 2018). While both receive access to energy independent cooking equipment, they also both pay. Biolite calls its model “parallel innovation” (Biolite, 2018).





## **Eidesstattliche Erklärung**

Ich, Eva Alexandra Jakob, versichere an Eides statt, dass die vorliegende Dissertation von mir selbstständig und ohne unzulässige fremde Hilfe unter Beachtung der Grundsätze zur Sicherung guter wissenschaftlicher Praxis an der Heinrich-Heine-Universität Düsseldorf erstellt worden ist.

Düsseldorf, im Mai 2019

Eva Alexandra Jakob