Success as a multi-dimensional construct – an empirical investigation that goes beyond the social-commercial entrepreneurship distinction

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ABSTRACT

This paper raises three research questions: what are the empirically held success criteria and how do they differ among social and commercial entrepreneurs? How are these different criteria associated to each other empirically? Are there typical bundles that allow distinguishing different types of entrepreneurs, thus refining or partially transcending the social versus commercial dichotomy? Qualitative and quantitative analyses of 88 interviews suggests that success is a bundle of (some) interlinked success criteria. I derived six types of entrepreneurs that go beyond the social – commercial entrepreneur distinction: the missionary, the profit-seeker, the lukewarm impassionate, the outward-looker, the sturdy machine, and the bonding self-made person.

INTRODUCTION

More than half of the literature on social entrepreneurship deals with its definition i.e. in the majority its delineation from commercial entrepreneurship (Sassmannshausen & Volkmann, 2013). To date, the most frequently used delineation is the distinction between profit as the key driver for commercial entrepreneurs and impact – i.e. creating positive externalities – for social entrepreneurship (see list of definitions in Dacin, Dacin, & Matear, 2010; Short, Moss, & Lumpkin, 2009).

Put differently, the two phenomena and their key protagonists – the (social) entrepreneurs – are distinguished based on their targeted success. Yet, this almost dichotomous distinction stands somewhat in stark contrast to the extant literature on success criteria of entrepreneurs. Here, the recent literature indicates that commercial entrepreneurs do not only define success based on profitability but also on personal satisfaction, public recognition, or giving back to society (e.g., Gorgievski, Ascalon, & Stephan, 2011). Moreover, recent studies suggest that success is not a one-dimensional construct (Germak & Robinson, 2014; Gorgievski et al., 2011; cf. Jayawarna, Rouse, & Kitching, 2011; Rockström et al., 2009).

If success is not a one-dimensional but a multi-dimensional construct, however, the debate on social and commercial entrepreneurship invites three novel research questions. First, if entrepreneurs can follow multiple success criteria at the same time, then an empirical investigation into these success criteria embraced by real-life entrepreneurs may generate a more fine-grained understanding of the similarities and differences of social and commercial entrepreneurs. What are the empirically held success criteria and how do they differ among social and commercial entrepreneurs?

Second, if entrepreneurs can embrace different success criteria simultaneously, then how are these different criteria associated to each other empirically? Research on success criteria largely neglected this question but rather seeks to single out the primary success criterion for the entrepreneurs studied. Some identify profit as the key success criterion (Fan & Karnilowicz, 1997) while other studies found personal gratification to be of greatest interest to the entrepreneur (Paige & Littrell, 2002). Yet, whether an entrepreneur who follows one success criterion is more ore less likely to follow a further success criterion has not been researched. Interestingly, the debate on social and commercial entrepreneurs indirectly proposes such a link between the success criteria profit and impact. The suggestion that social and commercial entrepreneurship represent two ends of a spectrum (Austin, Stevenson, & Wei-Skillern, 2006; Tan, Williams, & Tan, 2005) actually implies a negative correlation between the two success criteria. This alleged correlation, though prominent in the literature, has not been tested empirically. So how do these success criteria relate to each other empirically?

Third, if real-life entrepreneurs are actually characterized by a bundle of several success criteria, then this offers the opportunity to test whether there are typical bundles that allow distinguishing different types of entrepreneurs, thus refining or partially transcending the social versus commercial dichotomy. At the same time, such different entrepreneur types might explain why the dominant success criteria have varied between different studies (df. Gorgievski et al., 2011).

In short, this paper raises three research questions. First, it seeks to investigate empirical success criteria and how they differ between social and commercial entrepreneurs? Second, it then asks if and how so these success criteria are linked to each other. Finally, the paper wishes to determine whether these links may lead to distinct types of entrepreneurs based on their unique combination of success criteria.

To this end, the paper employs a three-step empirical approach. The data of 88 conducted interviews with commercial and social entrepreneurs are analyzed using abductive coding so as to identify and clarify success criteria. These criteria are then used to conduct descriptive statistical analyses that investigate potential links between the success criteria. The final step then uses cluster analysis to determine distinct types of entrepreneurs based on their success criteria bundle.

By so doing, I contribute to the literature in multiple ways. (1) This paper presents six distinct types of entrepreneurs that will help future research to conduct more fine-grained analyses of the influence of various success combinations on the choice e.g. of firm strategy or organizational culture. Moreover, it thereby responds to the call by Jaouen and Lasch (2013) for more nuanced taxonomies of entrepreneurs that do not focus on behavior but on underlying mechanisms. (2) It provides first empirical insights into interdependencies of success criteria, which allow for more tailor-made support programs. (3) Both the suggested links between the various success dimensions as well as the six types of entrepreneurs offer a more nuanced perspective on the potential differences and similarities between social and commercial entrepreneurs in regards to their success understanding. For instance, a few of the social entrepreneurs in the sample did not refer to their mission nor their impact when describing their success definitions. (4) While not intentionally looking for it, my study also revealed that some entrepreneurs struggle to express their understanding of success. This opens up questions about the often-supposed assertive nature of entrepreneurs.

The paper proceeds in four steps. First, it will briefly outline the literature on social entrepreneurship. In particular, I will focus on the definitional debate. Taking this as a starting point the paper then turns to the literature on success criteria. Here, I will focus on the extant research on links between success criteria. In particular, this paper points to gaps in the methods chosen to investigate success criteria of entrepreneurs.

Second, I will provide detailed information on the three-step methodological approach. Generally speaking, the approach combines quantitative and qualitative analyses to carve out the highest potential insights into the afore-mentioned research questions.

Third, I will first present the unintended findings that some entrepreneurs either struggle to express their definition of success or do so through the means of numerical indicators. I discuss these findings in light of institutional isomorphic pressures.

Fourth, I will outline the findings of the quantitative analyses. Following the presentation and discussion of various correlations between success criteria, the paper then turns back to the question of difference between social and commercial entrepreneurs. Based on the overall sample results, the paper actually mirrors the conceptualizations of these two types of entrepreneurs by finding that profitability received the highest score for commercial entrepreneurs and impact for social entrepreneurs. Yet, as all categories used the full spectrum of the 5-point scale, cluster analysis seemed a plausible next step, which yielded six types of entrepreneurs. These are the missionary, the profit-seeker, the lukewarm impassionate, the sturdy machine, the bonding self-made person, and the outward looker. These clusters are described and their contingencies are discussed. Moreover, the

final part of this section delineates these clusters from extant typologies. The paper concludes with some final remarks.

SOCIAL ENTREPRENEURSHIP, COMMERCIAL ENTREPRENEURSHIP AND THE MULTI-DIMENSIONALITY OF SUCCESS

This section introduces the relevant literature. It first provides details on the distinction between social and commercial entrepreneurship. It then links this debate to the research on success criteria of entrepreneurs. Based on this merge of two strands of literatures, I then derive the research questions underlying this paper.

The distinction between social and commercial entrepreneurship

Since 2004, the number of peer-reviewed publications on social entrepreneurship has exponentially accelerated (Sassmannshausen & Volkmann, 2013). Despite this immense increase in academic attention, social entrepreneurship is still poorly understood (Felicio, Martins Gonçalves, & da Conceição Gonçalves, 2013; Welsh & Krueger, 2012). Thus, not surprisingly more than half of the publications on social entrepreneurship deal with definitional aspects of this phenomenon (Sassmannshausen & Volkmann, 2013). To give an example, Short et al. (2009) identified 20 different definitions in a review of the literature and similarly Dacin et al. (2010) found 37. While these definitions differ in some respects e.g. whether or not social entrepreneurship necessitates financial self-sustainability (for a detailed discussion see Dees & Anderson, 2006; Defourney & Nyssens, 2010), researchers agree on the central role of the social mission of the venture (Dacin et al., 2010). These missions are as diverse as the societal problems humankind faces and thus include poverty reduction as well as environmental protection (Dees, 1998, 2012).

In other words, scholars delineate social entrepreneurship from commercial entrepreneurship by arguing that in contrast to social entrepreneurs, commercial entrepreneurs pursue profits rather than impact (e.g., Dacin et al., 2010) i.e. positive externalities for society (Nicholls, 2005). Thus, the key element of distinction is the *objective* of the entrepreneur when founding and then running their venture.

While I do not wish to offer yet another definition of social entrepreneurship, I nonetheless intend to at least partially engage in this debate, as I consider it a worthwhile starting point for a more fine-grained discussion on success in entrepreneurship research. First, it further underpins the centrality of the entrepreneur. Similar to entrepreneurship research in general (McCarthy, 2003; Mintzberg, 2003; Williams & Tse, 1995), social entrepreneurship research also emphasizes the role of the entrepreneur in shaping both strategy and structure of their venture based on their respective desires, values, and subsequent perceptions of reality (e.g., Lumpkin, Moss, Gras, Kato, & Amezcua, 2011; Witkamp, Raven, & Royakkers, 2011). In other words, by understanding what the (social) entrepreneur wants to achieve, a much deeper and more nuanced understanding of social and commercial entrepreneurship becomes feasible. Second, I insinuate that the delineation of social and commercial entrepreneurship lacks clarity as it suffers from a lack of complexity. In a nutshell, the vast majority of the proposed distinctions offer an almost dichotomous view on the matter wherein social entrepreneurs strive for social betterment and commercial entrepreneurs for profit. This, however, stands in stark contrast to the complex notion of success that is otherwise found in the more

research.

4

¹ In addition to more dichotomous distinctions, some scholars provide a continuum perspective on social and commercial entrepreneurship where social mission focus and profit focus are two ends of a spectrum (e.g., Austin et al., 2006; Tan et al., 2005). However, while entrepreneurs in the "middle" may follow both a financial and social objective, this reduction to two success criteria still misrepresents the multi-dimensionality of success criteria known to he entrepreneurship

recent entrepreneurship literature (e.g., Gorgievski et al., 2011). To overcome this shortcoming, the subsequent subsection will engage more closely with the literature on success in entrepreneurship.

Success - a multi-dimensional construct!?

Success is a term that is frequently used but it's underlying meaning often remains vague and unclear. According to the Oxford Dictionaries, success is when "[a] person or thing that achieves desired aims or attains fame, wealth, etc." (Oxford Dictionnaries, 2014, p. 1.2). Interestingly, this definition has evolved from a previous version that only contains wealth and fame (Oxford Dictionnaries, 2014) and does not include the more general phrasing of "achieving a desired aim" or the "etc." that indicates that there are many more meanings possible.

Almost analogous, the entrepreneurship research on success criteria of entrepreneurs has also evolved to include more and more potential success criteria. For decades, the emphasis was placed on growth and profit (Julien, 1998; Kuratko, Hornsby, & Naffziger, 1997a; Wang, Watkins, Harris, & Spicer, 2004). Indeed, three separate literature reviews on success criteria in the entrepreneurship literature underpin the dominance of these two success criteria (Adams & Sykes, 2003; Gorgievski et al., 2011; Paige & Littrell, 2002).

Despite their dominance, these success criteria are not able to explain a variety of empirical phenomena. For instance the profit and growth dogma cannot explain why some entrepreneurs closed profitable ventures (Bates, 2005; Wennberg, Wiklund, DeTienne, & Cardon, 2010) nor why some entrepreneurs juxtaposes this profit focus to a focus on impact (Grant & Crutchfield, 2007).

As a result of these and additional developments, the diversity of success criteria has greatly increased. By building on psychology, sociology as well as empirical studies, current research argues that the following are also potential success criteria: innovation (Adams & Sykes, 2003; Gorgievski et al., 2011), continuity/ survival (Carsrud & Brännback, 2011; Cowling, 2007; Gorgievski et al., 2011; Mariussen & Wheelock, 1997), impact (Foley, 2003; Germak & Robinson, 2014; Paige & Littrell, 2002), satisfied stakeholders (Adams & Sykes, 2003; Gorgievski et al., 2011), personal satisfaction (Gorgievski et al., 2011; Newby, Watson, & Woodliff, 2003; Paige & Littrell, 2002), work-life balance (Gorgievski et al., 2011; Nelson & Burke, 2000), public recognition (Gorgievski et al., 2011; Kuratko, Hornsby, & Naffziger, 1997b), utility / usefulness of their product or services (Gorgievski et al., 2011), or family security (Kuratko et al., 1997b).

Moreover, studies do not only show that the diversity of known and acknowledged success criteria is much greater than originally supposed, but research also points to a difference in the relevance of the respective criteria for different entrepreneurs. Whereas some studied find profit to be the most important (Adams & Sykes, 2003), others find that entrepreneur rank personal satisfaction as their success criterion (Gorgievski et al., 2011; Rockström et al., 2009).

Despite the reoccurring finding that there is a dominate success criterion albeit different (e.g., Fan & Karnilowicz, 1997; Paige & Littrell, 2002), other authors came to ambiguous conclusions and were not able to identify a clearly dominant criterion (Gorgievski et al., 2011). Based on their ambiguous findings, Gorgievski et al. (2011) raised the question of whether there are various success criteria that exist independently or whether they are rather all part of a success criteria bundle.

This question is of great relevance to the entrepreneurship literature. To substantiate this claim, I will refer to value theory (Schwartz & Bardi, 2001; Schwartz & Bilsky, 1987; Schwartz, 1994). Value theory identified ten universal values – i.e. beliefs - that may guides behavior (Bardi & Schwartz, 2003). In particular, value theory refers to the idea of multi-dimensionality (Schwartz & Bardi, 2001). Put differently, an individual follows a bundle of values where some are more prevailing than others, yet all of them play a role in decision-making processes. Moreover, values found a key base for an entrepreneur's success criteria (cf. Gorgievski et al., 2011). Consequently, if entrepreneurs have multiple interlinked values, they necessarily will have multiple (and interlinked)

success criteria. This would then provide a potential explanation for some of the more ambiguous results found in the literature.

However, this notion of multi-dimensionality also carves out methodological shortcomings in the extant research. First insights on subjective success criteria are still very limited (Gorgievski et al., 2011; for an exception see Fauchart & Gruber, 2011 or Newby et al., 2003).. Second, most studies use questionnaires that do not allow analyzing interdependence. Specifically, many success studies ask participants to rank a given set of success criteria (Fan & Karnilowicz, 1997; Gorgievski et al., 2011; Ioniță, 2013). As a consequence, participants have to also rank items that might not be part of their success understanding, yet nonetheless they need to assign a value. Additionally, rankings also do not allow discovering success criteria with equal importance. Thus, despite the recognition that success has multiple dimensions, current research methods do not allow gaining insights into if and how they are associated with each other.

Such research is greatly relevant to both entrepreneurship research in general as well as to the subfields of commercial and social entrepreneurs. I ground this claim in the centrality of success definitions in making choices (Fan & Karnilowicz, 1997). From a psychological perspective, goals – i.e. the path towards success – create a mental image for an entrepreneur that guides their decision-making processes as well as it sometimes "just" keeps them going (Perwin, 2003). It is thus a crucial element to overcome challenges in the entrepreneurial process. Therefore, in order to better understand entrepreneurs as well as to best support them, a better understanding of their success criteria seems essential.

In conclusion, the research on social and commercial entrepreneurs does not reflect the sheer diversity of success criteria known to the literature nor does it reflects the concept of multi-dimensionality. On the other hand, success research suffers from at least two methodological issues. Against this background, this paper raises the following research questions. First, if entrepreneurs can follow multiple success criteria at the same time, then what are the empirically held success criteria and how do they differ among social and commercial entrepreneurs? Second, how are these different criteria associated to each other empirically? Third, if real-life entrepreneurs are actually characterized by a bundle of several success criteria, then are there typical bundles that allow distinguishing different types of entrepreneurs, thus refining or partially transcending the social versus commercial dichotomy? To address these research questions as well as the shortcomings of the current success criteria literature, this paper uses subjective success criteria as well as employs multiple analyses to carve out potential connections between them.

METHODOLOGY

This empirical study employs a three-step approach. First, based on 88 interviews conducted with social and commercial entrepreneurs, the study uses qualitative abductive coding to determine success criteria of the entrepreneurs included in the sample. Second, it then quantifies the data by use of a scoring system to then employ descriptive statistics to understand both differences between social and commercial entrepreneurs' success criteria as well as the links between various success dimensions. Third, the paperderives a taxonomy of entrepreneurs based on their unique combination of success criteria. An often-used tool for developing classifications or taxonomies is cluster analysis. This powerful statistical tool enables researchers to find structures within datasets by identifying subgroups with high intergroup heterogeneity but high intragroup homogeneity (Kleinbaum, Lawrence, Nizam, & Rosenberg, 2013; Punj & Stewart, 1983; Rencher & Christensen, 2012). Thus, on that score, cluster analysis would appear suitable for the purposes of this paper.

Sample

The purpose of this paper is to understand the link between multiple success criteria in the context of social and commercial entrepreneurs. To do so, the sample needs to include members of

both groups and thus purposive sampling was done (Kerlinger, 1973; Warwick & Lininger, 1975). Put differently, if the sample only included "social" entrepreneurs, it would not be possible to identify any overlap of this type with "commercial" entrepreneurs, much less discover any new types that go beyond the social-commercial distinction. Thus, the sample purposively comprises social and commercial entrepreneurs who were identified by award-bestowing agencies through a standardized selection process. Moreover, the analysis focuses on one country—Germany—to minimize effects of cultural diversity in responses and thus obtain clearer data.

Social entrepreneurs: The Ashoka² database was relied on to procure a sample of social entrepreneurs, as Ashoka Fellows are widely recognized as being social entrepreneurs (e.g. Sen, 2007). Following Meyskens, Robb-Post, Stamp, Carsrud, and Reynolds's (2010) call and to ensure diversity within the subsample, the subsample contains social entrepreneurs from all fields of work. The raw sample included all 47 German Ashoka Fellows (as of end of 2012), all of whom were contacted. In contrast to Ashoka Fellows in many developing nations, all German Ashoka Fellows included in the final sample started their venture before becoming Fellows. As such, they are all in a post-founding stage.

Additionally, winners of the *startsocial* program were also included in the sample. startsocial is a German-wide social entrepreneurship competition under the patronage of German Chancellor Angela Merkel (Startsocial, 2014).

Commercial entrepreneurs: Commercial entrepreneurs – i.e. entrepreneurs with no apparent social or environmental mission - were chosen on the basis of their receipt of awards similar to an Ashoka Fellowship—in terms of prizes and selection process and criteria (see Table 1) to enable comparability. This created a list of 217 commercial entrepreneurs. The entrepreneurs were then randomly chosen until 50 interviews were reached.

"Please insert Table 1 about here"

The final sample contains 38 social entrepreneurs and 50 commercial entrepreneurs. Details of the sample in terms of demographics and so forth can be found in Table 2.

Data collection

Interviews provided the opportunity to obtain non-guided responses (Creswell, 2009). Spontaneous responses were of particular interest as such are less likely to be influenced by social desirability. To ensure spontaneity, interviewees were not informed about the subject of the interview either prior or during the interview. The essential question as to their notion of success was asked within an interview that also addressed questions of scaling strategies, barriers to and success factors of their ventures, as well as their understanding of social entrepreneurship (if applicable). Thus it is unlikely that the interviewees were aware of the actual purpose of the interview, further reducing the chances of their answers being affected by a social desirability bias. Interviewees were asked to describe future circumstances in which they would consider themselves successful. The interviewees did not receive prompting in any particular direction, even if they appeared to struggle with the answer.

All interviews were conducted in German via phone or Skype. The interviews were then transcribed and translated into English. Translations were double-checked at random by a person not personally involved in the research project. The interviews were between 20 and 45 minutes in length with an average of 36 minutes, resulting in 53 hours of interview data. The interviews were

² Ashoka is a dominant player in social entrepreneurship as it was the first and is still the largest organization that seeks social entrepreneurs to support with its fellowship program (Ashoka, 2013).

conducted between January 2011 and July 2014 (social entrepreneurs) and between July 2012 and March 2013 (commercial entrepreneurs). In total, 88 entrepreneurs were interviewed.

"Please insert Table 2 about here"

Research Design and Analysis

This study employs a three-step approach.

Step 1 – Qualitative analysis and category development

As a starting point for its qualitative analysis of success criteria, this paper made use of the ten success criteria identified by Gorgievski et al. (2011) in their comprehensive literature review. These ten categories are profitability, growth, innovation, continuity / survival, giving back to society, personal satisfaction, satisfied stakeholders, public recognition, and usefulness / utility. By following, an abductive coding approach (Saldana, 2009) using the software MaxQDA, I further developed these success criteria. For the analysis of step 2 and 3, I split the category satisfied stakeholder into satisfied internal stakeholders and satisfied external stakeholders as this gave a better representation of the richness of the responses provided by the entrepreneurs. Furthermore, I renamed the success criterion giving back to society to impact. This led to a greater fit to the data as well as to the terminology used in the extant social entrepreneurship literature. In addition to these slight alterations to Gorgievski et al. (2011)'s success criteria, the inductive portion of the qualitative analysis also yielded some additional codes that are of interest to this paper's research agenda. The first code is difficulty to express which was given to all quotes that strongly suggested that the respective interviewee did not have an immediate and clear response. This either refers to time delays in response – e.g. up to ten seconds before answering – as well as to multiple repetitions of initial sentences that did not contain any content. Second, the code indicator was given to those interview fragments that referred to a clear numerical indicator rather than a prose description of success. Table 3 contains an overview of the categories and exemplary quotes

"Please insert Table 3 about here"

Step 2—Quantifying qualitative data and descriptive analysis

The 11 code categories (see Table 3) then served as a basis for quantifying the qualitative data and preparing it for a statistical cluster analysis. A scoring system was employed in which the code categories were included as column headings. The second part of the scoring table was made up of interview fragments. Each case (entrepreneur) could have multiple interview fragments. These fragments were taken from step 1 and constitute the smallest content items that nonetheless allowed the score coders to grasp the context of the quote. Therefore, the final table contained 215 rows, i.e., one row per interview fragment, even though there were only 88 interviews. The 215 fragments were then sorted alphabetically so that the different fragments from one entrepreneur were much less likely to appear near each other. Furthermore, the fragments were made anonymous, i.e., every mention of the name of the entrepreneur or his or her organization and any identifying detail of activity was erased or replaced with generic phrases such as "our company" or "our product." This was necessary to ensure the anonymity of the interviewees but even more so to reduce a bias during the scoring process as knowing which fragment came from a social or a commercial entrepreneur might have influenced the scoring coders in their interpretation.

Three researchers (excluding the author) then assigned a score between 1 (not applicable) and 5 (fully applicable) to each interview fragment for each category. The scoring coders were taught the meaning of the categories during two workshops. Inter-coder reliability was 92%. Following the scoring process, the interview fragments and their respective scores were cumulated into one set of scores for each case (entrepreneur). The maximum score approach, i.e., the highest overall score of each category for each case, was used for the final case score. For example, imagine a case

(entrepreneur) with two interview fragments: "I want to have fun" and "I want to make profit." The first fragment would score a "5" in the *personal satisfaction* category and "1"s in the remaining ten categories, whereas the latter would score a "5" in the *profitability* category and "1"s in the other categories. In this scenario, the maximum score approach merely means that this entrepreneur would accumulatively score a "5" in both *profitability* and *personal satisfaction* and a "1" in the nine remaining categories. This would not change even if the second quote would also have score a "5" in *personal satisfaction*. This process was done separately for all three score coders. In a final step, the average of these scores were calculated.

The categories difficulty to express and indicators was also included in the scoring system. Here, however, it was a mere "yes or no" coding in which the scorers allocated a "1" if they would have answered yes to the questions of whether this fragment indicates difficulties in expressing the definition of success or whether the interviewees used any kind of specific indicators or ratios to respond.

These quantified data were then used to run various statistical analyses using SPSS software. Predominately, I focused on descriptive analyses. To determine whether there are differences in the subsample of social and commercial entrepreneurs, I compared their means, standard deviation, and medians for the various success criteria categories. I also used correlations to identify whether or not certain success criteria correlate with each other.

Step 3—Cluster analysis

In a final step, the case scores were used in a cluster analysis. Cluster analyses are one form of multivariate statistical analysis (Fraley, 1998; Kleinbaum et al., 2013; Rencher & Christensen, 2012), but in contrast to other multivariate methods (e.g., regression analysis), cluster analysis is an exploratory method of identifying structures in datasets (Fraley, 1998). Specifically, cluster analysis aims at creating subgroups that are in themselves homogenous but heterogeneous to other subgroups of the sample (Cormack, 1971). Cluster analysis is a well-established tool in marketing research where it is used to identify stereotypical personas (Punj & Stewart, 1983). As one of the objectives of this empirical investigation is to identify types of entrepreneurs, cluster analysis seems appropriate. A cluster analysis usually follows a two-part approach. The first part involves identification of dimensions (step 1 above) and collection of numeric data for each dimension (step 2 above). In the second part, the data analysis process follows a two-step procedure: determination of cluster numbers and identification of cluster centroids (Kleinbaum et al., 2013; Milligan, 1980; Punj & Stewart, 1983). For the first analysis step, this study employed Ward's method, a type of hierarchical clustering that outperforms other hierarchical clustering methods (Punj & Stewart, 1983). Based on the resulting dendrogram, the analysis identified three outliers that were not part of any cluster and were thus excluded from the remainder of the analysis. For reasons of reliability, the dendrogram was cross-checked by another researcher; this researcher arrived at the same number of clusters and identified the same outliers. To determine cluster centers, the k-means method, which is an iterative method (Kleinbaum et al., 2013; Rencher & Christensen, 2012), was utilized. The resulting clusters are part of a specific classification, i.e., variables not part of the cluster variables (e.g., age and size of organization) may vary within each cluster (Woo, Cooper, & Dunkelberg, 1991).

As Figure 1 shows the resulting clusters are only based on ten of the original 11 categories. I excluded *work-life-balance* as its maximum score for all scorers and interview fragments was 1.3 on a scale form 1 to 5. I therefore considered it uninformative to create clusters as it would not serve to distinguish types of entrepreneurs due to its great similarity between all entrepreneurs.

Limitations

The sample studied suffers from three biases. First, the dataset is biased toward companies operating in information and communication technologies (ICT) (see Figure 1). This bias is the result

of choosing award-winning entrepreneurs because the funding structure of such awards is biased toward high-technology innovation. Second, but somewhat relatedly, the analysis is based exclusively on award-winning entrepreneurs, who may have certain unobservable characteristics that make them a less generalizable sample. Third, the sample was comprised entirely of German entrepreneurs, meaning that the results may be influenced by cultural factors.

Another limitation lies in the maximum score approach. This approach does not account for multiple mentions of the same category. For example, imagine that an interviewee said that profits, sales, turnover (each an aspect of *profitability*), and own satisfaction comprised his notion of success. The final score for *profitability* would remain at the maximum of "5" even though this entrepreneur clearly is more focused on *profitability* than on *personal satisfaction*, which was only mentioned once but also receives a "5." Other methods, however, such as weighing responses according to number of repetitions or order would not have yielded a uniform scale, which would potentially have increased noise in the data.

RESULTS AND DISCUSSION

This section proceeds in three steps. Following the three-step methodological approach, it will first present qualitative findings and will then go on to presenting some descriptive statistics. In a final step, this section then provides descriptions of the six clusters. Moreover, the respective findings will be discussed directly following their presentation.

Qualitative Insights

Uncertainty versus Indicators

During the interviews and their qualitative analysis, two insights emerged that were not anticipated in the original research design. Yet, due to their high frequency, it seemed crucial to include them in a discussion on success criteria of entrepreneurs.

First, 18 out of 88 entrepreneurs (ca. 20%) struggled to respond when asked to define their understanding of success. These difficulties played up in various ways. Some explicitly sated their difficulties as in "blimey Defining success is always difficult..." (35). Some responded with statements that were very vague and ambiguous. For instance, interviewee 50 said: "Well, I believe success is always relative. I mean there are small successes that one strives to obtain. However, success just emerges." Another group of entrepreneurs took longer times to respond. This was untypical as all entrepreneurs answered directly to all other questions. These delays ranged from 3 to 12 seconds. In some cases, the interview took a pause started talking and then paused again before finally giving an answer. Take the example: "[4sec pause] I define success... How Do I define success... [3sec pause]. Puh, a really good question. [response starts]" (2).

12 out of 50 (24%) of the commercial entrepreneurs and 6 out of 38 social entrepreneurs (15.8%) fell into this category. The organizations had a median of 5.5 years of age and had a median of 9.5 employees. However, this group of entrepreneurs also contained some of the largest organizations in the sample with over 100 employees. 12 out 67 male (17.9 %) and 6 out of 21 (28.6%) female entrepreneurs showed these difficulties. It further contained 29% of manufacturing entrepreneurs, 26.9% of ICT entrepreneurs, and 21% of the social service entrepreneurs.

Second, 25 out of 88 entrepreneurs (28.4%) responded primarily by referring to specific numerical ratios or indicators. These could be both financial as well as non-financial. This could thus include statements such as "we had one million users over the last 12 months" (4) as well as "our placement rate" (79). In contrast to the *difficulty to express*, more social than commercial entrepreneurs fell into this category (10 (20%) commercial versus 15 (39%) social entrepreneurs). The median of the organizations age was 5 years and their size had a median of 10.5 employees. 21 male (31.3%) and 4 female entrepreneurs (19.1%) referred to indicators when responding. 46.2% of

professional service entrepreneurs as well as 23.1% of ICT and 21.2% of social service entrepreneurs were identified in this group.

Isomorphic pressures and the struggle of knowing where to go

The complexity of potential success criteria i.e. aspects that drive entrepreneurs in their endeavors seems to make it difficult for some entrepreneurs to articulate their individual notions of success. This is puzzling as many studies describe entrepreneurs as decisive and focused individuals who know what they wish to achieve, whether it be profit maximization (e.g., Carland, Hoy, & Carland, 1988; Drucker, 1999) or social change (e.g., Dees, 1998). Taking a closer look at the data reveals that this phenomenon seems to be occurring regardless of the age or size of the organization. While the medians are similar to that of the overall sample (see Table 2), these entrepreneurs cover almost the entire spectrum of age and size. Put differently, both entrepreneurs who head the smallest and youngest organizations within the sample as well as those heading the oldest and biggest organizations seemingly struggle with their notion of success. This leads to a number of open questions for future research. For instance, as organizations become older and larger they usually have a tendency to increase bureaucratization (e.g., Hall, 1968; Mintzberg, 1989). Therefore, the question remains why large and older firm's entrepreneurs struggle with their definition of success. I suggest that one potential answer could be that routine has taken over. For instance, it may be the case that these entrepreneurs had a clear success vision when starting out, however over the course of time and with increasing age and size of their venture their focus was more and more drawn towards everyday duties in running the organization. This in turn might have led to a loss of focus as to where to go next.

Moreover, almost a quarter of all ICT entrepreneurs in the sample struggled to define their notion of success. This might be because of the inherent nature of this industry. Many firms develop software solutions over a long period of time with a great inherent uncertainty of whether they will ever reach marketability. This uncertainty might be a reason for their difficulties. While I conjecture that the social service entrepreneurs who struggle to express their success criteria also do so because of uncertainty, I propose that it is a different kind of uncertainty. Practitioners in both the nonprofit and social entrepreneurship realm struggle with measuring their impact i.e. the actual effect that their endeavor has on society (Bagnoli & Megali, 2009; Nicholls, 2005). In comparison to financial performance measurement, measuring social or environmental performance is much more complex and ambiguous. Particularly, in the case of social performance, the more abstract the desired outcome (increase of human rights versus providing employment opportunities), the harder it becomes to (1) measure the change and (2) know whether and how one's own activities have contributed to this change. Due to this difficulty, some entrepreneurs might face difficulties in clearly expressing when they would consider themselves successful.

Interestingly, while some social service entrepreneurs struggle to express their success, 39% of social entrepreneurs responded in indicators. There are at least two possible explanations for this finding. The first point relates back to the difficulty of measuring impact. If an organization is faced with great uncertainty about their performance, the entrepreneur might respond to it by breaking it down in more achievable bits so as to create a feeling of success. Thus, rather than considering oneself successful if human rights are secured in all domains of live for all people in a specific country, they might break this down to specific new legislation passed or the employment figures of certain ethnic or other minority group. Another explanation might lie in the nature of the social entrepreneurship subsample of this study. The majority of the social entrepreneurs are Ashoka Fellows and therefore go through the same selection, training and coaching process. In their attempt to increase the impact of their fellows, Ashoka strongly encourages social entrepreneurs to professionalize and to use management tools such as metrics or performance indicators (Ashoka,

2013). Due to these procedures, coercive and normative isomorphic pressures may occur (DiMaggio & Powell, 1983). Through receiving the same kind of training Ashoka Fellows may become more similar over time. Moreover, on top of normative isomorphic pressures, I also insinuate that mimetic isomorphic pressures (DiMaggio & Powell, 1983) may be present due to the network effect of Ashoka. Once instated as a Fellow, the new Fellows spend considerable time with "older" Fellows. Thus, by observing that more established Ashoka Fellows use impact metrics, the inclination of newer Fellows increases to follow this approach. While the data potentially supports this notion as 43% of Ashoka Fellows used indicators in comparison to 25% of non-Ashoka Fellows, this requires further investigation in order to substantiate whether the Ashoka membership might indeed lead to certain isomorphic pressures.

Success and its difference between social and commercial entrepreneurs

Table 4 presents the respective maxima, means, and confidence intervals for the 11 dimensions of success criteria separated between social and commercial entrepreneurs.

"Please insert Table 4 about here"

The success criteria that received the highest scores for commercial entrepreneurs were *profitability*, *continuity*, and *satisfied external stakeholders*. In comparison, for social entrepreneurs these were *impact*, *growth*, and *usefulness/utility*.

The greatest difference both in means and confidence intervals are between impact and profitability. While the mean is 3.1 for commercial entrepreneurs in regards to *profitability* it is only 1.51 for social entrepreneurs. In contrast, *impact* scores 1.41 on average for commercial entrepreneurs and 3.22 for social entrepreneurs. This notwithstanding, both social and commercial entrepreneurs show the full range of scores i.e. there are social and commercial entrepreneurs that score 1 and 5 respectively for the success criteria *profitability* and *impact*. Interestingly, almost none of the entrepreneurs referred to work-life balance as part of their success criteria.

These results are partially in line with extant research. Similar to the vast majority of the literature (Gorgievski et al., 2011), the commercial entrepreneurs in this sample also considered profitability as their key success criteria. Similarly, *impact* was the most prominent success criteria for social entrepreneurs as predicted by the literature (Dacin et al., 2010; Short et al., 2009). Moreover, as social entrepreneurs wish to create social change (Dees, 1998), it seems plausible that they would consider growth an important part of their success understanding.

Interestingly, both social and commercial entrepreneurs did hardly any reference to their work-life balance when asked to define their success. This is somewhat in contradiction with extant research as other studies indicate that particularly women entrepreneurs found own ventures to increase their balance between work and (family) life (e.g., Bennett & Dann, 2000). While the only reference to work-life balance in my sample indeed came from a female entrepreneur, this still does not resonate with the findings of other studies. A potential answer for this difference might be that some of the entrepreneurs substitute job satisfaction with a desire for a greater work-life balance. For instance, research shows that employees who enjoy their job are far more likely to do extra hours without considering them as a burden. As my sample did not contain any necessity-driven entrepreneurs but rather all entrepreneurs followed perceived opportunities, they have actively chosen their work and therefore might consider work-life balance of lesser importance.

Contrasting extant literature (Adams & Sykes, 2003; Gorgievski et al., 2011; Paige & Littrell, 2002), *growth* did not receive the second highest score but rather came in fourth after *continuity* and *satisfied external stakeholders*. This might seem puzzling at first glance. However, this difference becomes less puzzling when going back to the actual quotes and justifications of the entrepreneurs.

For instance, as entrepreneur 8 elaborates: "Well, and quite important it must be profitable. [...] that means we have to earn a lot of cash with it. To be clear: I am not saying this because all of us here are so extremely money-grupping but [...] we need the money to fund our R&D and to create secure jobs for our employees that they can use to enhance their skills." This quote illustrates two aspects. One, despite this entrepreneur's desire to seek high profits, this is not rooted in a "Scrooge McDuck mentality" but they consider it necessary to achieve other things that are seemingly of greater importance to them. Second and somewhat related, it insinuates that success criteria might indeed be linked in the perception of the entrepreneur. Therefore, the following subsection now explores how various success dimensions are potentially linked.

The multi-dimensionality of success criteria

This subsection first looks at the single linkage between the various success criteria. It then turns to using these success criteria in a cluster analysis in order to determine types of entrepreneurs.

The link between various success criteria

The category that yielded most correlations was *profitability*. The only exceptions are *public* recognition and *satisfied external stakeholders*. In contrast, *growth* and *innovation* only show correlations with *profitability* but not with other success criteria (see Table 5). For reasons of brevity, the following paragraphs will only highlight and discuss some of the found correlations.

Negative link between profitability and impact: The negative correlation coefficient of -0.35 indicates that the higher one of these two success criteria is valued, the lower the other. This resonates with extant debates in social entrepreneurship research that propose a continuum perspective (Austin et al., 2006; Tan et al., 2005). These papers have conceptually pointed to the idea that profit and impact focus are in a trade-off i.e. one can only increase when the other decreases. However, note the case that 1:1 tradeoff (only 0.35); profit and impact are thus not per se mutually exclusive.

Negative link between profitability and usefulness / utility: The success criteria of utility and profitability are also negatively correlated with a coefficient of -0.27. This relationship might reflect a conflict between design - in a broader sense - and profits. As such some entrepreneurs seem to value the usefulness of their product as a greater success than the highest potential yield on these products. Put differently, some entrepreneurs would consequently be unwilling to sacrifice their products for profits. This finding is interesting as it again disagrees with much of the literature on success criteria (cf. Gorgievski et al., 2011). On the other hand, it links to studies done in the arts & crafts industry. Here, entrepreneurs perceive themselves much more as artists rather than as business people (Paige & Littrell, 2002). For instance, the ICT entrepreneurs within the sample may show similar tendencies to those of crafts retailers. Studies on software developer suggest a strong connection to the product and its functionality – i.e. utility – and define success in these terms rather than in keeping to time schedules or cost budgets (Agarwal & Rathod, 2006; Linberg, 1999). This invites the conclusion that the success criteria of an entrepreneur are influenced by the industry they operate it. However, I would push back on this argument. Entrepreneurs choose their industry based on their personal preferences, thus not the industry but the preferences, traits, and personality of the entrepreneur may be the crucial factor here. As such conclusions cannot be drawn from the data presented, it however invites future research into analyzing the link between characteristics of the entrepreneurs and their success criteria. As of today, there is only some research that links success criteria and personal values (see Gorgievski et al., 2011).

Personal satisfaction, satisfied internal and external stakeholders: The analysis also suggests that if entrepreneurs consider their own satisfaction as a success criterion, they are also likely to consider the satisfaction of their stakeholder as success criteria (correlation factor?). A simplified explanation for this may be that an entrepreneur may enjoy their own work much more if they

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receive positive feedback from their staff, customers, and partners. However, as not all people value feedback and good relationships with others, this again relates back to the characteristics of the entrepreneur.

In short, these bivariate correlations indicate that some success criteria have a greater probability of occurring simultaneously than do others. To take this notion even further, the following subsection will now present types of entrepreneurs identified through the means of a cluster analysis.

"Please insert Table 5 about here"

Identified clusters of entrepreneurs based on their success criteria

The analysis revealed six distinct clusters. The separate spider web diagrams of Figure 1 illustrate these clusters. Below are stereotypical descriptions of each type of entrepreneur, along with some exemplary quotes from entrepreneurs of that type.

The Missionary

The missionary is the entrepreneur that links success most with *impact*. They care most deeply about achieving a social or environmental value and thus are more outward-oriented. An interviewee in this cluster stated: "Success ... would be to play a little, medium or maybe even big role in [a big societal change] or by transforming [the industry] in the whole of Europe or even the world towards a more intelligent use of resources. Short, being part of a historical change process" (19).

This outward-orientation is accompanied by a moderate focus on *growth* and *utility* as the following quotes illustrate: "we are successful [...] if we reached all schools in Germany" (84) and "]...] many people tell us that they wished [our product] would have been offered earlier" (88). While they are intent on achieving a mission that benefits individuals outside their organization, they seem to pay almost no attention to their staff, seeing as they have the lowest score among all clusters on this criterion (1.1; see Figure 1).

As the quotes suggest, the numbers mentioned by these entrepreneurs include both those aimed at impact, e.g., number of people reached, and those aimed at internal aspects such as financial stability. They wish to help others and therefore focus on the utility of their service or product and wish to achieve a certain scale.

The Profit-seeker

This cluster scores the highest in *profitability* between all clusters and second highest in *continuity* within the cluster. Profit-seekers focus their attention on their organization's business performance. This type of entrepreneur considers profitability their key success criteria while at the same time also desiring to keep their business or organization running so as to make it last. For instance, interviewee 63 said: "When it comes down to it, it is important to build a sustainable [long-lasting] company and that is only possible if we create sales." Along similar lines, interviewee 2 said: "being successful means to be to be profitable in the market and to be able to live off these profits in the next few years". "We are a corporate venture, so for me that [success] thus first and foremost means making a profit" (37).

All other categories are of seemingly little importance. One slight exception here is innovation.

The lukewarm impassionate

While all the other clusters have at least one success criterion that stands out with a higher score, this entrepreneur stands out by not having any high scores. They only have lower moderate scores for growth and continuity. In other words, they do seem to wish to keep their venture growing and running but have no clear passion for any particular success criterion or any combination of them. This is reflected in the following statements: "well, I guess that of course there will be more and more employees" (13), "our success is that we wrote down our ideas and participate in business plan competitions" (50), or "well, I think it is a success if we survive the first five years or so, at least I think that is the hurdle" (48).

The outward-looker

Entrepreneurs in this cluster focus greatly on public recognition. Indeed, their score in this category (4.5) is also the highest overall score amongst all categories and clusters. "We now have a brand awareness of over 58% that means that every second German knows us" (4) is one exemplary quote. Despite this great focus on public recognition, these entrepreneurs combine this success notion with a moderate emphasis on *satisfied external stakeholders* and *impact*. Interviewee 83 put it this way: "We give a lobby to people that otherwise do not have a lobby. [...] it is great to see that outsiders now hear about us and let us know that they think what we do is worthwhile."

Their very low scores for profitability, utility, and continuity further substantiate the outward orientation of this entrepreneur. Thus, while wishing to receive public recognition and to satisfy external stakeholders and create impact, this type of entrepreneur seems to care less how (with which product or service) this is done.

The bonding self-made person

This cluster is the smallest with only five members. Interestingly, bonding self-made persons score high in four of the ten categories, which is the highest number of high scores between all clusters. Moreover, they reach the highest score for *personal satisfaction*, *satisfied internal stakeholders*, and *satisfied external stakeholder* among all clusters and second highest for *profitability*. The response of interviewee 25 offers a nice description of this type of entrepreneur: "[success is] that we [organization] earn money, that we have really cool innovative products out in the market, that we are considered a competition in the international market, that we are able to say that if our employees have stayed with us for a while that they are among the 20 or so best trained [workers] in their field, and of course, to have fun".

Their two lowest scores are for impact and continuity. While these entrepreneurs seem to care deeply about their customers, employees, and themselves, this focus does not seem to extend to the wider societal context.

The sturdy machine

The final cluster emphasizes both *profitability* and *continuity*. Moreover, it also scores moderately for *growth* and *satisfied integral and external stakeholders*. As interviewee 16 put it: "success is building up one's own business." This entrepreneur seemingly stresses the building of a well-oiled machine that keeps on running. For that reason, they consider it at least to some degree important to meet the needs of their employees and customers as well as to continuously grow. The following quotes indicate this: "secure jobs plus personal development opportunities for everyone who works here" (8), "success means that we make profits so that we can pay proper salaries to our staff members" (32), "[...] if we have built up a business that lasts" (40), and "our customer's feedback is also part of our understanding of success" (69). As a consequence, it seems, they are far less interested in *impact* or *public recognition*.

"Please insert Figure 1 about here"

Same, same, but still different?

Earlier in this paper, the question was asked whether a two-dimensional perspective on entrepreneurs, i.e., "impact versus profit" was sufficient for understanding the diversity of entrepreneurial success criteria and types. The answer found in this paper is "not entirely." For one, analogous to insights from three literature reviews on success criteria (Adams & Sykes, 2003; Gorgievski et al., 2011; Paige & Littrell, 2002), this study was also able to identify multiple success criteria that covered more than profit and impact. Second, my analysis yielded six types of entrepreneurs based on their combination of multiple success criteria of which only one contained only commercial entrepreneurs (bonding self-made person). Despite the fact that two additional clusters only contained one social entrepreneur (profit seeker and sturdy machine), the study nonetheless suggest a greater overlap between social and commercial entrepreneurship than is generally acknowledged in the literature. Note that while researchers have discussed the idea of hybrid organizations that simultaneously pursuit profits and impact, so far research on how similar social and commercial entrepreneurs are is negligible (for an exception see e.g., Dacin et al., 2010).

Moreover, it is noteworthy that 11 out of 37 social entrepreneurs (29.7%) are part of clusters that have low *impact* scores so are 18 out of 48 (33.3%) commercial entrepreneurs in nonprofitability clusters. These findings suggest that the current distinction falls short to cover the wide spectrum of different types of entrepreneurs. Yet, despite this criticism I want to stress that this taxonomy of entrepreneurs only looked at their spontaneously reported success definition. As a consequence, these newly developed types will potentially be of great use to those researchers focusing on motivation, success understandings, and their links to strategic choice or personal values. Here, samples that contain entrepreneurs with similar success criteria combinations might yield more insight than "artificially" separating them into social and commercial entrepreneurs. Moreover, this would also overcome some of the sampling issues in social entrepreneurship research (e.g., Hoogendoorn et al., 2010; Mair, 2010; Short et al., 2009). Put differently, there seems to be much more heterogeneity within allegedly homogenous groups such as "social entrepreneurs" than sometimes assumed. The number of studies on types of commercial entrepreneurs (see literature review) and scattered research on social entrepreneur types further supports this (e.g., Miner, 2000; Vidal & Claver, 2006; Zahra, Gedajlovic, Neubaum, & Shulman, 2009). However, these distinctions and their value for future research only holds true for some areas of research. For instanced, when researching the influence of the outspoken and externally ascribed social mission on the ability to acquire resources, it would sill be more prudent to have a "pure" social entrepreneurship sample.

Moreover, such integrated research projects might find connections and patterns between and among entrepreneurs that have so far been overlooked due to research mostly focusing on only one type of entrepreneur. For example, research will probably gain more insight by investigating the 20 product-adjusting competitors as one group, rather than dividing them into halves. Such an approach may also overcome the small-N problem in social entrepreneurship. By combining social entrepreneurship cases with commercial entrepreneurship cases, much larger samples can be created.

It all depends on the context or does it?

The following subsections briefly and non-exhaustively elaborate on potential contingency factors that correlate with the different types of entrepreneur. In a final step, it provides a rather speculative suggestion on further influencing factors.

Gender

The cluster analysis indicates that the majority of female entrepreneurs were found in the *missionary* or *lukewarm impassionate* clusters. Moreover, *missionaries* seem to be the type of entrepreneur that seems more likely to represent female entrepreneur's success understanding. This finding is at least partially in accord with gender differences discussed in the literature. In general, women tend to focus more on relationships or so-called soft factors, whereas men generally are described as more rational (Dyke & Murphy, 2006; Harding, 2006; e.g. Kirkwood & Walton, 2010; Walker & Brown, 2004) and more focused on growth or profit (Dyke & Murphy, 2006; Hughes, 2006; Kimmel, 1993). This is further supported by the notion that within the entire sample most of the women (16 versus 3) were social entrepreneurs. While the sample of this paper does not built on a representative sample, the 217 commercial entrepreneurs who found the basis of that subsample were in also male in the vast majority (over 80%). Future research could try to further understand how gender influences the success understanding of entrepreneurs. In particular, it would be interesting to investigate industries that are less male-dominated so as to overcome the bias of this sample towards male-dominated industries such as ICT.

Industry

Interestingly, social service entrepreneurs were found equally frequently in missionary and profit-seekers. At first glance, this may seem counter-intuitive; it may actually reflect the changing dynamics in the social sector. First, due to the continuous decrees in available donations as well a parallel increase in organizations competing for these donations, more and more nonprofit organizations move towards earned-income strategies (cf. Defourney & Nyssens, 2010). As a consequence, their attention shifts towards profits. Specifically, these entrepreneurs require profits in order to sustain their ventures. Moreover, recent studies have shown that many social service organizations are becoming more professionalized i.e. business-like (Lukes & Stephan, 2012). This is partially due to a change in the dominant institutional logics of these organizations (Thornton & Ocasio, 2008). Somewhat in response to criticisms in regards to their inefficiencies, nonprofit organizations have embarked on becoming more business-like. To this end, they either hired business managers or copied approaches done by businesses in their performance management. As a consequence, institutional isomorphism occurs as hired managers introduce their training i.e. normative isomorphic pressures (DiMaggio & Powell, 1983) to the organization and with that a different institutional logic. In light of these contextual and institutional changes, a social service entrepreneur might, in turn, place more emphasis on profit. However, as some of the quotes indicate, while the relative importance of profitability increases, this does not necessarily mean that the entrepreneur only considers success to be profits but rather acknowledges its necessity for other aspects also considered to be success.

Nevertheless, this difference in emphasis by social service entrepreneurs will potentially lead to different resource allocations. Even if those entrepreneurs that emphasize profitability as success criterion wish to safeguard their employs' salary or ensure the option of continuous provision of their products or services to beneficiaries are more likely to make decisions that favor profitability over those with lower profitability. This will potentially be even more so in situations of crisis.

However, this study cannot explain why some social service organization entrepreneurs are rational missionaries while others are product-adjusting competitors. Put in simple terms, the data do not allow for discovering whether it is the industry that shapes the entrepreneur, or whether, instead, a certain type of entrepreneur seeks a certain industry. Thus, future research could include other factors, such as type of product, external environmental factors, or entrepreneur background, to discover the direction of causality. Such work would benefit support organizations wishing to further

a certain industry, as they would better understand the entrepreneurs and could tailor their programs based on industry

Future research could also investigate the influence of other factors often discussed in entrepreneurship literature such as educational background and work experience of the entrepreneur. Other factors with potential influence include age of the entrepreneur (cf. Gorgievski et al., 2011) and his or her "membership" in a specific generation such as generation Y (Martin, 2005), economic situation, ethnicity (Edelman, Brush, Manolova, & Greene, 2010), and the venture's geographical placement (see Reijonen & Komppula, 2007). Moreover, it would be very beneficial to analyze the corresponding value systems (Schwartz & Bardi, 2001) to the respective entrepreneurial types. Such analysis was unsuitable due to the too small cluster sizes. The identification and testing of contingency factors will benefit both entrepreneurship scholars and practitioners in fine-tuning their research or support efforts

Delineation from extant typologies

In the entrepreneurship literature, there are numerous typologies and taxonomies that try to clarify distinct subgroups of entrepreneurs (Jayawarna et al., 2011), as did I in this paper. In order to clarify the contribution of this paper's taxonomy, I will briefly delineate it from other typologies. For reasons of brevity and consistency, I will only look at some of those typologies that cover success-related themes. Thus, typologies on firm strategies for instance are neglected.

The probably best known typology is that of the opportunity-versus-necessity driven entrepreneur (Meyskens et al., 2010). As none of the entrepreneurs in this sample needed to found a venture, none of them fall into the necessity category (Carsrud & Brännback, 2011). Thus, my taxonomy may serve to enhance nuanced analyses of the opportunity entrepreneur.

In their recent work, Fauchart and Gruber (2011) identified three types of entrepreneurs based on their social identity: the Darwinian, the Communitarian, and the Missionary. A key difference between both taxonomies is the focus (success criteria versus social identity). Yet, at the same time both constructs find their roots in the underlying values of the individual. Moreover, despite the similarity in name with the last category, the two missionaries differ in their configurations. Fauchart and Gruber's (2011) type looks at a broad objective (achieving cause) and then simultaneously look at behavior patterns (behave responsible) and frame of reference (society). Due to their social identity theory focus, the authors are much more focused on social interactions. In comparison, my taxonomy offers more detailed descriptions or characteristics of the objective (success) but does not refer to how entrepreneurs use these to construct identity. I thus believe that both taxonomies complement each other by offering different layers.

The motivation typology by Jayawarna et al. (2011) suggests distinguishing between the reluctant, the convenience, economically-driven, the social, the learning and earning as well as the control and prestige entrepreneur. There is some overlap e.g. between the profit-seeker and the economically driven entrepreneur. However, analogous to most of the literature on success criteria, these types evolve around one dominant success criteria. In comparison, two out of the six types in my taxonomy have more than one highly relevant criteria and one has none.

In short, the taxonomy developed in this paper adds to the current research in entrepreneurship and typologies as it offers an entrepreneur-focused and fine-grained perspective on the success criteria of entrepreneurs. Thus, it complements other existing typologies.

CONCLUSION

Inspired by the ongoing debate on how to delineate social from commercial entrepreneurship, this paper engaged with the growing number of success scholars in the field of entrepreneurship. To this end this paper raised three research questions. First, if entrepreneurs can follow multiple success criteria at the same time, then what are the empirically held success criteria and how do they differ

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among social and commercial entrepreneurs? Second, how are these different criteria associated to each other empirically? Third, if real-life entrepreneurs are actually characterized by a bundle of several success criteria, then are there typical bundles that allow distinguishing different types of entrepreneurs, thus refining or partially transcending the social versus commercial dichotomy?

Based on the data collected during 88 interviews with social and commercial entrepreneurs as well as extant literature, I identified eleven success criteria: profitability, growth, survival, personal satisfaction, impact, satisfied internal, satisfied external, public recognition, innovation and worklive balance. The initial qualitative analysis found that work-life balance is of least and almost no importance to the entrepreneurs when referring to their understanding of success. Moreover, the qualitative analysis also yielded that 20 percent of entrepreneurs struggle to express their definition whereas others directly refer to numerical indicators.

The descriptive statistical amylases produced multiple significant correlations that support he notion of link between success criteria rather than these construct being stand-alone. Finally, the cluster analysis yielded six tapes of entrepreneur based on their success criteria: missionary, profit-seeker, lukewarm impassionate, sturdy machine, outward looker, and bonding self-made person.

This paper thus contributed to the literature by providing empirically derived success criteria, deriving six types of entrepreneurs, suggesting that social and commercial entrepreneurs might overlap in specific characteristics. The paper describes six types of entrepreneurs, a taxonomy that will aid future research in better understanding the entrepreneur. Finally, this paper is one of the few on social entrepreneurs that goes beyond a single or low-number-case perspective and uses a larger-N sample. In conclusion, this paper contributes to the understanding of social and commercial entrepreneurs as well as to entrepreneurship research in general.

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TABLE 1

Overview of Award-Granting Organizations

Name	Criteria	Prize	Funding sources
Ashoka	Social entrepreneurs with innovative and scalable ideas	Stipend for three years and coaching/consulting	Primarily companies; no government funding
EXIST	Innovativeness, potential market performance of idea	Monthly scholarship, support for material expenses, coaching	German Federal Ministry of Economics and Energy, European Social Fund
GruenderChampion	Successful in the market, profitability, creation and maintenance of jobs and apprenticeship, interplay of profitability and ethical responsibility, achieving a work-life balance	Certificate, possibility to present the company at the conference for German founders and entrepreneurs (deGUT), support from a PR agency, prize money of 6,000 €	Kreditanstaltu für Wiederaufbau (KfW) – Promotional Bank for Re- Financing and Development Finance
IKT innovativ	Innovation, market potential/competitiveness, feasibility, qualification/experience of participant	Prize money between 6,000 and 30,000 €, coaching, written feedback	German Federal Ministry of Economics and Energy
startsocial	Innovation, potential for societal impact, engagement of the entrepreneur	Prize money of 35.000€ plus 3-months coaching, network access	Various corporate funders; under the auspices of the German Chancellor

Source: Ashoka (2013), Drayton (2006), EXIST (2014), Fuer Grunder (2014),

GruenderChampion (2013), Startsocial (2014)

TABLE 2
Overview of Sample (as Included in the Cluster Analysis)

		Type	Total	
		Commercial	Social	
	Total	48	37	85
Industry Categories*	Professional Services	6	19	25
	Social Services	2	11	13
	Production	14	2	16
	Services	2	3	5
	Information and Communication	24	2	26
Gender	Male	45	21	66
	Female	3	16	19
Org. Age	Median**	3	7	5
Org. Size	Median**	6	11	8

^{*} All organizations were first assigned to an industry according to the International Standard Industry Classification (ISIC) as issued by the United Nations Department of Economic and Social Affairs (ISIC, 2008). Certain industries were combined into an industry group as some industries contained only one entrepreneur. For example, we combined M - Professional, scientific and technical activities, K - Financial and insurance activities, N- Administrative and support services, and L - Real estate activities into "Professional services."

^{**} Medians were chosen to avoid noise in the data due to outliers.

FIGURE 1 Spider web diagrams of identified clusters **Sturdy Machine** Missionary Profitability Profitability Utility Utility Growth Growth Public Recognition Public Recognition Innovation Innovation 0 Satisfied External Continuity Satisfied External Continuity Satisfied Internal Satisfied Internal Ímpact **Impact** Personal Personal Satisfaction Satisfaction **Outward-looker Profit-Seeker** Profitability Profitability Utility Utility Growth Growth 4 Public Recognition Innovation Public Recognition Innovation 0 Satisfied External Continuity Satisfied External Continuity Satisfied Internal Satisfied Internal Impact Impact Personal Personal Satisfaction Satisfaction **Bonding Self-Made Person Lukewarm Impassionate** Profitability Profitability Utility Growth Growth 3 Public Recognition Public Recognition Innovation Innovation Satisfied External Continuity Satisfied External Continuity Satisfied Internal Satisfied Internal Impact Personal Personal Satisfaction Satisfaction

Table 3
Code Categories, Their Meaning, and Exemplary Quotes

Code Categories, Their Meaning, and Exemplary Quotes									
Name of	Description of Category	Exemplary Quotes							
Category									
Profitability	 "High yields, good profit margin" High turnover, sales	"indicators like sales and profit" (47)							
Growth	- "Growth in the number of employees, sales, market share and/or distribution"	""that I manage to offer [] our services across the entire country" (7)							
Innovation	- "Introduction of new products or production method"	"to be able to develop our skills further" (E8) "that we make something completely new where people say: hey we never had that before"							
Continuity / Survival	 "Enables generational transfer or can be sold with a profit" Organization is able to run into the future	"that we will still be there in the market despite the competition" (54)							
Impact	 Positive externalities for society that cannot (or only partially) be captured by organization Both social and environmental issues 	"the biggest success would be our own redundancy i.e. [our services] are no longer needed" (55)							
Personal satisfaction	 "Through attaining important things in life, such as autonomy, challenge, security, power, creativity, etc." Fun, self-fulfillment 	"I want to have fun" (5)							
Satisfied Internal Stakeholders	- Satisfied employees in terms of job satisfaction (fun, challenge, etc.) as well as salary and job security	"the other things is that my employees enjoy themselves and feel some form of fulfillment" (66)							
Satisfied External Stakeholders	 Predominately customers satisfaction with price and quality of product / service Other stakeholders such as partners 	"[Success] is customer satisfaction, if they return, how often they return" (51							
Work-Life- Balance	- "positive mutual influence between work and private life, allows time for yourself, family, and friends"	No quote available							
Public recognition	- "Good reputation, prizewinner"	"if the public things we are successful" (72)							
Utility / usefulness of product / service	 "It provides an important service or product" Product or service fulfill a need of customer	"that we create a useful contribution for our clients" (26)							

All entries in the column "description of category" that are placed in quotation marks are taken from Gorgievski, Ascalon, & Stephan (2011,). The remaining descriptions are built on the inductive part of the qualitative analysis

Table 4
Success Criteria Differences between Social and Commercial Entrepreneurship

					95% confidence interval mean			
	Maximum		Mean		Lower Round		Upper Round	
	commercial	social	commercial	social	commercial	social	commercial	social
Profitability	5	5	3.15	1.51	2.67	1.16	3.62	1.87
Growth	5	5	1.84	2.42	1.51	1.95	2.17	2.89
Innovation	5	5	1.76	1.31	1.45	1.05	2.07	1.58
Continuity	5	5	2.16	1.6	1.81	1.26	2.49	1.95
Impact	5	5	1.44	3.21	1.18	2.75	1.70	3.67
Personal Satisfaction	5	4.5	1.64	1.17	1.30	1	1.98	1.47
Work-Life-Balance	1	2	1	1.02		1		1.08
Satisfied Internal	5	5	1.84	1.43	1.46	1.12	2.22	1.74
Satisfied External	5	5	1.98	1.99	1.65	1.53	2.31	2.29
Public Recognition	4	5	1.45	2	1.21	1.53	1.69	2.47
Usefulness	3.5	5	1.58	2.13	1.36	1.75	1.80	2.52

Table 5
Correlations between Success Criteria

Profitability Growth Innovation Continuity Impact Personal Satisfaction Satisfied Internal Satisfied External Public Recognition Usefulness Profitability Pearson Correlation Sig. (2-tailed) Growth Pearson Correlation -.292** Sig. (2-tailed) .006 .233* .017 Innovation Pearson Correlation .872 Sig. (2-tailed) .029 .347** -.056 .087 Continuity Pearson Correlation Sig. (2-tailed) .001 .603 .418 Pearson Correlation -.350* .179 -.191 -.258* Impact Sig. (2-tailed) .001 .096 .074 .015 Personal Satisfaction Pearson Correlation .317** -.187 .123 -.004 -.137 Sig. (2-tailed) .003 .081 .253 .967 .204 .422** Satisfied Internal Pearson Correlation .233* -.127 .070 .085 -.110 .429 -.117 .000 .300** Sig. (2-tailed) .029 .239 .516 .308 .537** Satisfied External Pearson Correlation .070 .034 .013 .020 .515 .755 .904 .277 .853 .005 .000 Sig. (2-tailed) **Public Recognition** Pearson Correlation .084 .088 -.089 .080 -.033 .168 -.205 .057 Sig. (2-tailed) .055 .435 .413 .410 .459 .595 .760 .118 Usefulness Pearson Correlation -.270* .143 -.028 -.191 .398** -.236* -.183 -.149 Sig. (2-tailed) .011 .185 .799 .074 .000 .027 .088 .167 .437

^{**} Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

TABLE 6 **Identified Clusters and Their Potential Contingencies Cluster**

		Cluster					
		lukwarm bonding self-					
			Profit	impassionat	outward	made	sturdy
		Missionary	Seeker	e	looker	person	Machine
	Frequency	24	19	21	8	5	8
eneur	social entrepreneu rs	20	1	9	6	0	1
.ebr	% of total	54%	3%	24%	16%	0%	3%
type of entrepreneur	commercial entrepreneu rs % of total	4 8%	18 38%	12 25%	2 4%	5 10%	7 15%
Venture demogr.*	Age of the organization Size of organization (no. of employees)	9	3 5.5	8	4.5	7	2 7%
	male	17	18	15	5	4	7
Gender of	% of total men	26%	27%	23%	8%	6%	11%
ien.	female	7	1	6	3	1	1
G	% of total						
	women	37%	5%	32%	16%	5%	5%
	Professional Services % of total Professional	11	4	3	4	1	2
	Services Social	44%	16%	12%	16%	4%	8%
	Services % of total Social	7	7	4	2	0	0
>	Services	35%	35%	20%	10%	0%	0%
Industry	Production % of total	1	0	5	0	1	2
lhc	Production	11%	0%	56%	0%	11%	22%
	Services	2	1	2	0	0	0
	% of total						
	Services	40%	20%	40%	0%	0%	0%
	Information and Communica						
	tion	3	7	7	2	3	4
	% of total ICT	13%	30%	30%	9%	13%	17%
orm**	Nonprofit legal form For-profit	15	0	6	4	0	1
Legal form**	legal form Mix of legal	3	0	3	1	0	0%
	forms	3	1	0	1	0	0

^{*}Medians were chosen to avoid noise in the data due to outliers.

**Only for social entrepreneurs; according to German law.