# University of Twente

## **Master Thesis**

The interplay of entrepreneurial identity, HR-enhancing practices and organizational identity

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## **Abstract**

The activities entrepreneurs undertake are infused with meaning of a result of the expression on an individual's identity and can therefore serve as powerful elements that drive entrepreneurial actions (Leitch & Harrison, 2016). By using the social identity theory as a lens to understand entrepreneurial actions, new perspectives are gathered regarding entrepreneurial identities and its relationship with organizational identity. In addition, HR-enhancing practices has been added into the relation of the entrepreneurial identity and organizational identity. No study has assessed this combination of entrepreneurial identity, HR-enhancing practices and organizational identity before and it is therefore able to deliver new insights into understanding entrepreneurial behaviour. The results of the analysis reveal that it is important to be aware of the type of HR-enhancing practices used in an organization as some have more effects than other. Moreover, organizations should be aware of the different types of entrepreneurial identities and organizational identities and which effects these identities have on each other. Overall, the findings reveal that the alignment of entrepreneurial identities, organizational identities and HR-enhancing practices is important before any benefits can arise.

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#### 1. INTRODUCTION

Individuals interact with social others and these interactions are a key element of the development of the individual's sense of self (Hogg & Abrams, 1988). It contributes to the sense of belonging to other individuals who hold a common social identification or view themselves as members of the same social category (Hogg & Abrams, 1988). Furthermore, social identity is that part of an individual's self-concept which derives from his or her knowledge of the membership of a social group (or groups) together with the value and social significance attached to that membership (Tajfel, 1978). The meanings of the self are learned from responses of others to one's own actions and these actions over time, call up in the person the same responses that are called up in others (Burke & Reitzes, 1981). Social identity theory is a theoretical perspective and relations can be seen with entrepreneurship. Using the theoretical perspective of social identity theory as the lens to understand entrepreneurial identities provides insights into entrepreneurship and entrepreneurial behaviour. This is because the theory allows for rich assessment of an individual's sense of self, since social identity is critical to beliefs, feelings, values and actions in all social contexts, including new firm creation (Hogg & Terry, 2000). Moreover, it can contribute to understanding founders' behaviour and how they set up their own firms and the identity an organization can have. This is important because founders can have an influence in organizational outcomes based upon their background characteristics (Hambrick & Mason, 1984). Whetten and Mackey (2002) adds that firm creation is an inherently social activity and organizations themselves are social constructions. The basic social motivations that shape the behaviours and actions of individuals when they are engaging with others are therefore likely to be of importance for entrepreneurship (Whetten & Mackey, 2002). Besides the entrepreneurial identity and the organizational identity is another aspect that influences an organization, which is the use of HR-enhancing practices. These can contribute to creating a strong competitive position in the market. Skill-enhancing, motivationenhancing and empowerment-enhancing practices can contribute to the value of an organization, which is positively associated with its performance. This is especially true for small and medium sized firms (SME's) because they often do not have the resources to compete with larger firms and can therefore make use of HR-enhancing practices to improve their position in the market (Rauch & Hatak, 2016).

The focus of previous research was to explain the theory of social identity, the different aspects and characteristics of these identities and to some extent, the relation with entrepreneurship, but it has not adequately described the relation with the organizational identity. In addition, the literature has not taken account of what the combined effect of HR-enhancing practices and entrepreneurial identity is on organizational identity. This can therefore be defined as the research gap. Consequently, this paper analyses the interplay of entrepreneurial identity, HR-enhancing practices and organizational identity. The main goal of this study is providing new and relevant knowledge about the relation between the entrepreneurial identity and the organizational identity, taking account of the moderating role of HR-enhancing practices. To be able to address the research gap and to provide a clear direction for the thesis,

the research question is formulated as follows; What is the relation between social identity, organizational identity and HR-enhancing practices for entrepreneurship?

The method of a literature review is chosen as a method to increase the awareness and understanding of the current work and perspectives in the research field and allows for the creation of additional relevant knowledge by addressing the research gap. Several main concepts are used as the basis for the literature review, such as social identity, entrepreneurial identity, organizational identity and HR-enhancing practices. A quantitative approach for the collection of data has been chosen as this allows for the collection of relevant data of a large group of respondents. Additionally, this method allows for the collection of opinions and attitudes for the required number of respondents that are useful for further understanding of the core concepts of this paper. A total amount of 120 respondents varying from entrepreneurs to managers of small and medium sized firms have filled in the survey, where closed questions based on previously established scales were presented. The focus of the questions lies on the three identities of the entrepreneur (darwinian, communitarian and missionary (Fauchart & Gruber, 2011)), the two main organizational identities of the Ricardian and Schumpeterian perspective (Lim et al., 2013; Brown, Davidson and Wiklund, 2001) and on the HR-enhancing practices focussed on empowerment, motivation and skill (Rauch & Hatak, 2016). The collected data allows for a comprehensive but also a rather extensive analysis of the data with the use of statistics. Moderated regression analysis has been conducted for the interpretation of the collected data from the respondents that have filled in the survey.

This paper contributes to theory and practice by introducing the following findings. First, by analysing the link between individual-level identities and organizational identities in entrepreneurship and showing that not all types of entrepreneurial identities are related to both organizational identities, or that these are related to all types of HR-enhancing practices. These findings provide new and relevant knowledge about the distinctiveness of the entrepreneurial identities and their relation to organizational identities and HR-enhancing practices and therefore add to literature on strategic management. Second, by analysing the influence of HR-enhancing practices on the relation between the entrepreneurial identity and organizational identity, it provides novel insights into the importance of matching HRenhancing practices against the type of entrepreneurial identities before it can have any effect. Little to no effects of HR-enhancing practices will arise when this does not happen accordingly. Furthermore, the analysis has shown that HR-enhancing practices as a moderator does not result in improved relations between the entrepreneurial and organizational identities. It contributes to the HRM literature as these findings reveal new aspects of the relation between the entrepreneurial and organizational identities and HR-enhancing practices. Additional findings have revealed that the different types of entrepreneurial identities are more or less related to a certain organizational identity, and more or less to certain HRenhancing practise. As these findings have shown that different types of entrepreneurial identities are more or less related to a certain organizational identity, and more or less to certain HR-enhancing practise, it therefore provides practical contributions by suggesting that entrepreneurs should be aware of the existing types of entrepreneurial and organizational identity and be thoughtful of the HR-enhancing practices used in the organization. Finally, the findings provide arguments for the use of the 'upper echelons theory' for understanding the relation between entrepreneurial identity and organizational identity, and that not only HR-enhancing practices can contribute to the understanding of this relation.

#### 2. THEORETICAL BACKGROUND

#### 2.1 Social identity theory

Social identity theory suggests that individuals seek to achieve or maintain positive self-esteem by positively differentiating their in-group from a comparison out-group on some valued dimension when they were categorized in terms of a group membership (Tajfel & Turner, 1979). Tajfel and Turner (1986) add that due to different group memberships and therefore different social contexts, an individual may respond to the level of social identification in a unique form which is shown in the process of how an individual feel, thinks and acts to the specific context. In addition, social identity allows for intergroup behaviour to take place because social identity is the cognitive mechanism that makes group behaviour possible (Tajfel & Turner, 1986). This is because when people perceive themselves to share a group, they not only agree on issues relevant to their shared identity, but are also motivated to reach agreement and coordinate their behaviour in relation to those issues. The individuals therefore do not have one single personal self but rather multiple selves that correspond to the different members of the group (Turner, 1982).

Drawing on the theoretical perspectives of social identity theory towards entrepreneurship provides different and new aspects of understanding entrepreneurial identities. By describing social identity in a similar manner for the entrepreneurial context, Sieger et al. (2016) argue that the social identification with a group provides individuals with social orientation, a feeling of psychological connectedness to the fate of the group, and a frame of reference for establishing self-worth. Furthermore, individuals strive to behave in ways that are consistent with their social identity (Sieger et al., 2016). The identity of an individual is not only related to their personal context, but it is also shown in their work environment (Sieger et al., 2016). Especially new firms become important reflections of the meanings that founders associate with entrepreneurship (Sieger et al., 2016). Entrepreneurship can be regarded as an important manifestation of the human self which is because founders can put a lot of 'themselves' into enterprising activities (Sieger et al., 2016). This is in line with Powell and Baker (2014) who argue that founder identities shape firms' strategic responses. The founder identity provides a concept that reflects individual's agentic efforts to build and confirm a sense of who they are as they interact with and participate in building the social structures within which they work and live their lives (Powell & Baker, 2014). Individuals act to fulfil a psychological need to be different and unique and this need represents a fundamental human motive and is central to well-being (Brewer, 1991). It provides the 'self' a sense of differentiation from others which is important in the creation and maintenance of one's identity (Markus & Kitayama, 1991). Furthermore, being unique as an individual is also of importance for entrepreneurial identities because the entrepreneur needs to be distinct due to the required distinctiveness of the venture given a competitive market. Hence, it is of importance that the identity of the entrepreneur and his or her venture are intertwined (Shepherd & Haynie, 2009).

#### 2.2. Entrepreneurial identities

The identities of individuals are also related to entrepreneurship and entrepreneurial behaviour. The identity of entrepreneurs can show that they have preference for certain roles because it links to their own personality and can provide entrepreneurs the freedom to pursue their own goals, dreams and desires in the process of new firm creation (Cardon et al., 2009; Fauchart & Gruber, 2011). A single role identity does not exist because entrepreneurs can assume and navigate many role identities and use these different roles for interpreting opportunities and making different decisions regarding them (Alsos, Clausen, Hytti, & Solvoll, 2016). Within the theory of identities, a relation can be found between wanting to become a certain identity and actually being a certain identity. Burke and Reitzes (1981) argue that individuals must act towards a certain identity in order to become one. This is even more the case for entrepreneurs as entrepreneurs use a particular frame of reference related to his or her identity for the entrepreneurial decision-making processes that is related to entrepreneurial behaviour (Alsos et al., 2016). Previous research on entrepreneurial identities have provided several conceptualizations of the identities entrepreneurs can embrace. These perspectives allow for a better understanding how entrepreneurial identity relates to the entrepreneurial process and consequently affects entrepreneur's behaviour. Cardon et al., (2009) for example have researched the relation of entrepreneurial passion with entrepreneurial identities and argue that three types of role identities exist. The first type is an inventor identity where the entrepreneur's passion is for activities involved in identifying, inventing and exploring new opportunities. Secondly comes the founder identity where the entrepreneur's passion is for activities involved in establishing a venture for commercializing and exploiting opportunities. And the last type of identity is a developer identity where the entrepreneur's passion is for activities related to nurturing, growing and expanding the venture once is has been created. Entrepreneurial passion is those consciously accessible, intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur (Cardon et al., 2009). This is similar to the study of Yitshaki and Kropp (2016) who argue that passion and identity are interlinked and motivate entrepreneurs to identify opportunities and start new ventures. Furthermore, they argue that passion and identity are reinforcing each other and are synergistic with passion nourishing the construction of an identity (Yitshaki & Kropp, 2016). Murnieks, Mosakowski and Cardon (2014) add that the centrality of entrepreneurial identity increased entrepreneurial passion and therefore the amount of time entrepreneurs devoted to founding and operating a new venture.

Another perspective on entrepreneurial identities is the one of Alsos et al., (2016) who argue that an entrepreneur's identity will have direct implications for his or her behavioural approaches to business start-up processes, and that the role of this identity and its importance to the individual will influence his or her behaviour. This is similar to Leitch and Harrison (2016) who argue that entrepreneurial activities are infused with meaning of a result of the expression of an individual's identity. Identities

can therefore potentially serve as powerful elements that drive entrepreneurial actions (Leitch & Harrison, 2016). The use of social identity theory as the lens to understand entrepreneurial behaviour provides the recognition of different types of entrepreneurial identities as they relate to differences in basic social motivation, the basis of self-evaluation and in the frame of reference as an entrepreneur (Alsos et al., 2016). Moreover, Burke and Reitzes (1981) have argued that the connection between identity and behaviour occurs through a common underlying frame of reference, which one uses to assess its own identity in a particular context and consequently asses if the frame of reference one's used is in the same context as its behaviour. It is therefore assumed that this sense of self – i.e. entrepreneurial identity – strongly affects entrepreneurial behaviour (Alsos et al., 2016). Leitch and Harrison (2016) adds that identity can have an important impact not only on the way we feel, think and behave, but also on what we aim to achieve in the future. The definition of three types of entrepreneurial identity provided by Fauchart and Gruber (2011) will be used for this research as it contains a broad perspective on the relation of entrepreneurial identity, entrepreneurial behaviour and its social motives. The typology of Fauchart and Gruber (2011) is developed based on three dimensions: basic social motivations, basis of self-evaluation and frame of reference/relevant others. The three identities cover the logical spectrum of pure founder identities, reflecting their social relationships in terms of interaction with others and in terms of level of social inclusiveness (Alsos et al., 2016). Because the identity of an individual creates a frame of reference for the interpretation of experiences and behavioural actions, identity provides explanations for entrepreneurial behaviours (Fauchart & Gruber, 2011). In addition, Fauchart and Gruber (2011) have also taken the personality of the individual into account, which adds an extra layer of depth to the research and understanding of the beliefs, personalities and actions of the entrepreneurs. Moreover, the paper of Fauchart and Gruber (2011) is focussed on the creation of new firms, whereby the entrepreneurs are "imprinting" the start-ups with their personalities. This is in line with the goal of this research; to understand the relation between the entrepreneurial identity and the organizational identity, taking account of the moderating role of HR-enhancing practices.

Founders with different entrepreneurial identities create their new firms in ways that are congruent with their distinct self-conceptions. These founders therefore do not only possess different conceptions on what it means to be an entrepreneur, but these self-conceptions strongly influence how they act and behave when setting up their firms (Fauchart & Gruber, 2011). The entrepreneurial identity can be categorised into three different types with their own specific characteristics that influence the strategy of an organization and its daily operations (Fauchart & Gruber, 2011). Founders with a darwinian identity are focused on competition with other firms and are driven by their own economic self-interest. This identity represents the typical type of entrepreneur who has the main goal of establishing a strong and successful business and has a focus on ensuring the success of the firm. Darwinians are using competing firms and other darwinians as a frame of reference for evaluating themselves. In contrast, the industry they are operating in, the markets they serve and the social cause of the business serve no

relatively little meaning (Alsos et al., 2016). Therefore, darwinians might switch and engage in new ventures in other areas of business if it allows for greater profits or a better chance of success (Alsos et al., 2016). Another typical aspect of darwinians is that they are highly self-interested when starting a new firm and self-worth is derived by behaving and acting in ways like a professional 'business-school' approach to management (Sieger et al., 2016).

Founders with communitarian and missionary identities deviate in fundamental ways from that standard. These socially-orientated founders address novel customer needs and focus on the activities with the highest potential for social change with artisanal production methods and best practices to share with others or inspire change in the industry, instead of self-interested founders who focus on increasing profitability through cost-efficiency (Fauchart & Gruber, 2011). Communitarians view their firms as social objects that support and are supported by a community because of mutually beneficial relationships. The communitarian identity can be developed based on those motivated by important personal motives such as a hobby or interest and develop a business according to this hobby or interest to support a group of like-minded individuals (Fauchart & Gruber, 2011). The identity of the founder must be authentic to be able to create a coherent group where intimate knowledge of the community is shared and to be able to serve it from the inside (Alsos et al., 2016). Communitarians can therefore also be seen as social entrepreneurs; entrepreneurs who start, lead, and manage organizations that seek to create social value by addressing societal challenges (Stephan & Drencheva, 2017). Prosocial motives such as helping others, creating a better life for future generations or a passion to give and change lives are reasons for social entrepreneurs to start their ventures (Stephan & Drencheva, 2017). However, these motives are not the only thing that motivates social entrepreneurs. Intrinsic motives such as interest and passion for the work, profession or craft that a social entrepreneur engages in are also reason to start a venture (Stephan & Drencheva, 2017). These prosocial and intrinsic motives are often combined when starting a venture. Extrinsic motives are less important to social entrepreneurs than prosocial motives, yet they still play a role in motivating their actions to both start a business and to continue leading it (Stephan & Drencheva, 2017).

Missionary founders believe that firms can be powerful agents of change in society and engage in new firm creation to establish a platform from which they can pursue their political visions and advance particular causes, generally of social or environmental nature (Fauchart & Gruber, 2011). Responsibility and acting towards this is critical for the missionaries and is therefore closely related to social entrepreneurship (Alsos et al., 2016). Individuals embracing a social entrepreneurial identity need to distinguish themselves of other identities. Therefore, for the missionary identity to be successfully developed, it may be equally important to develop their identity based on the social status of social entrepreneurs (Alsos et al., 2016). They believe that that the purpose of the firm is to show that alternative options are feasible and to demonstrate to society how the status quo can be changed. Hence,

the others to which missionaries are competing with are not individuals or a particular group but society at large (Fauchart & Gruber, 2011). Founders with the missionary identity live by the principle that they can improve the well-being of others with their actions in a positive way and seek to act in a responsible, transparent and empathetic manner to make the world "a better place". Firms are viewed as entities that engage in activities that make sense and are useful in this respect and self-evaluate their behaviours and actions through the way they can contribute to the social world. Missionaries do not only offer products but also see their entire firm and the way in which business is conducted as a role model for society to advance their cause (Fauchart & Gruber, 2011). Founders with different social identities create their new firms in ways that are congruent with their distinct self-conceptions. In other words, founders with different social identities not only possess systematically different conceptions of what it means to be an entrepreneur, but these self-conceptions strongly influence how they act and behave when setting up their firms (Fauchart & Gruber, 2011).

#### 2.3 Organizational identities

Organizational identity is important as it directs the daily operations, provides prospects for interaction with the stakeholders and gives direction for the use of resources (Danneels, 2012). Voss et al. (2006) adds that an organizational identity is not only important for the daily working atmosphere of the individual employee, but also has an influence on the entire organization. A clearly defined and agreed upon organizational identity creates a condition for leaders to take advantage of their informational and task diversity, which should lead to greater overall performance (Voss et al., 2006). Information is more easily spread and adopted throughout the organization and therefore allows for better communication between the leaders of an organization and its employees. Consequently, the diversity of tasks within an organization is clearer and overall performance is improved due to a clear structure of tasks (Voss et al., 2006). Disagreement about something as fundamental as identity creates communication problems, interpersonal conflict, and dislike, which undermine or mask the potentially positive effects of cognitive task-based diversity, and can adversely affect future decision quality (Jehn, Northcraft, & Neale, 1999). Additionally, without basic agreement, different parts of the organization will enact the strategy in different ways that diffuse the strategic intent of the organization (Amason, 1996). Using the social identity theory lens to understand organizational identity yields additional perspectives. Rao, Davis and Ward (2000) argue that organizations acquire organizational identity similarly through membership of specific groups or categories – being defined for example by the industry – or belonging to specific organizational forms. Although organizations want to differentiate themselves, they also have to follow some set of rules and norms and be similar to their peers in order the establish the terms for such a comparison (Snihur, 2016). Organizational identity does not only reflect how companies are unique, but also the ways in which they are similar and can be classified as belonging to specific categories. Moreover, Snihur (2016) argue that organizational identity can trigger several effects that involve building a unique reputation, as well as acquiring legitimacy for the organization by demonstrating its affiliation with an established and respected market that includes other firms. While the uniqueness of an organization might attract a limited audience, the membership of organizational categories will be useful to improve this (Snihur, 2016).

Two strategic aims and thereby mechanisms by which rents can be created can be differentiated at the firm level, which we define as organizational identities as they strongly influence the behaviour of organizations. The Ricardian identity focuses on exploiting the firm's resources and the Schumpeterian identity centres around exploring the firm's capabilities (Lim et al., 2013). These two identities have been proposed for understanding how organizations create economic rents. There is a distinguishable difference between resources and capabilities. Resources are factors that are owned or controlled by the firm and are converted into final products or services by using a wide range of other firm assets and mechanisms such as technology, management information systems and trust between management and

labour (Amit & Schoemaker, 1993). These resources consist of knowhow (e.g., patents), financial or physical assets (e.g., property, plant and equipment), human capital and more (Amit & Schoemaker, 1993). In contrast, capabilities refer to a firm's ability to deploy resources, usually in combination with organizational processes to a desired end. They are information-based, tangible or intangible processes that are firm specific and are developed over time through interaction among the firm's resources (Amit & Schoemaker, 1993). Amit and Schoemaker (1993) additionally argue that managers have the challenge to identify, develop, protect and deploy resources and capabilities in a way that provides the firm a sustainable competitive advantage. Organizations that pronounce a Ricardian identity create economic rents by being more effective than their rivals at exploiting resources. Organizations characterized by a Schumpeterian identity create economic rents by being more effective than their rivals at exploiting capabilities (Lim, Celly, Morse, & Rowe, 2013).

Ricardian rents are mainly achieved by owning valuable and rare resources and resource picking is the main mechanism for the creation of economic rent (Lim et al., 2013). The Ricardian rent creation has an emphasis on the exploitation of the valuable and rare nature of a firm's resource (Lim et al., 2013). Here, it is argued that heterogeneity in firm performance is due to ownership of resources that have differential productivity. This raises the question of how firms acquire such resources that have differential productivity. The 'strategic factor market' theory by Barney (1986) concludes that there is a way for a firm to be in possession of rare resources; to outsmart the resource market by applying superior resource-picking skill and simultaneously develop such rare resources yourself. A superior resource-picking skill is developing a more systematically and more accurate expectation about the future value of resources than other resource market participants have. Firms with superior resourcepicking skills that are significantly higher than other firms, can determine faster and more easily which resources are valuable and rare and thus affecting a firm's economic profit (Makadok, 2001). The Schumpeterian identity highlights another rent-creation mechanism which is capability building. This mechanism focusses on explorative capabilities for the creation of rents (Lim et al., 2013). They can be thought of as intermediate goods generated by the firm to provide enhanced productivity of its resources (Lim et al., 2013). Two main aspects of capabilities can be defined and makes it different from resources; First, a capability is firm-specific since it is deeply embedded into the organization and its processes, while a resource is not. If an organization would completely dissolve, the capabilities would dissolve along with the organization, but the resources can be used by the next owner (Makadok, 2001). Second, a capability's primary purpose is to improve the productivity resources used by a firm. Capabilities are therefore unsuccessful at generating profit when a firm is not able to acquire resources which productivity would be enhanced with the use of capabilities (Makadok, 2001).

The two rent creation mechanisms, that is the Ricardian and Schumpeterian identity, have different implications for how firms behave (Makadok, 2001). Even though the mechanisms are different from each other, it is likely that firms would use some combination of both mechanisms whereby the mechanisms do not act independently from each other and their effect on generating rents for the firm would be a function of internal and external circumstances (Makadok, 2001). Although firms can use the mechanisms simultaneously with a combination of the Ricardian and Schumpeterian perspective, the rent creation mechanisms will be more outstanding when used alone in certain contexts. According to Teece and Pisano (1994), the dynamic capabilities that provide the basis for the Schumpeterian rent creation mechanism enable firms to adapt and are therefore more relevant in fast-changing environments where knowledge, innovation and creativity are highly valued. On the other side, the Ricardian rent creation mechanism is based on property-based competitive advantages and are more useful for stable and predictable environments that firms are operating in because it gives the firms room to control (Miller & Shamsie, 1996). These are different environments for the firm and firms are therefore more likely to use the Ricardian or the Schumpeterian perspective as a rent creation mechanism instead of a combination of both (Miller & Shamsie, 1996). Firms that emphasize exploration and differentiation compete based on innovation and new product development capabilities (i.e., Schumpeterian rent), while firms that emphasize exploitation and cost leadership compete because of scale economy and efficiency in exploitation (i.e., Ricardian rent) (Lim et al., 2013).

A relation can be seen between the people of an organization, organizational identity and organizational behaviour. Schneider (1987) argues that the attributes of people, not the external environment, organizational technology or its organizational structure, are the fundamental determinants of organizational behaviour. The people behaving in organizations make organizations as what they are. Through recruitment and selection procedures organizations end up choosing people who share many common personal attributes although they may not share common competencies (Schneider, 1987). In addition, Schneider (1987) states that the people from an organization are attracted to that environment, selected by it and stayed with it and that different kinds of organizations attract, select and retain different kinds of people. Another consequence of the attraction of matching people is that people who do not fit will leave the organization, leading to a more homogenous group than those who were initially attracted to the organization (Schneider, 1987). This is in line with Tom (1971) who argued that people prefer environments that have the same type of personality as they do. Employees of organizations are therefore most likely to choose to work in an organization that fits their own preferences (Vroom, 1966) and organizations are emerged from the person who initially founded the organization (Schein, 1985). Organizations often have certain goals they want to reach in the future. Goals are derived from the head of the founder and become revealed through their behaviour leading to organizational goals that are becoming operationalized via founders' behaviour (Schneider, 1987). This in turn leads to specific structures and processes for those goals (Schneider, 1987). The theory proposed by Hambrick and

Mason (1984) provides another perspective with the 'upper echelons theory' regarding the relation of the founder with organizational identity. The upper echelons theory states that organizational outcomes – strategic choices and performance levels – are partially predicted by managerial background characteristics. Examples of these characteristics are age, career experiences, education, financial position and socioeconomic roots and are determinants of strategic choices and consequently organizational performance (Hambrick & Mason, 1984).

Schneider (1987) have argued that the role of the people working in an organization is important for its behaviour. This relation can also be seen for the founder and his or her organization, as was argued by Hambrick and Mason (1984) and the 'upper echelons theory'. Alsos et al., (2016) adds that entrepreneur's identity will have direct implications for his or her behavioral approaches to business start-up processes. Stryker and Burke (2000) argues that the more salient and central the identity, the more time we allocate to this specific activity or the more frequently we behave according to this role identity. Fauchart and Gruber (2011) shows with their results that founders behave and act in ways that are consistent with their identities and thereby imprint their self-concepts on key dimensions of their emerging firms. A relation between the different types of entrepreneurial identities and the Ricardian or Schumpeterian organizational identity is therefore proposed. The darwinian identity is characterised by its preferences for using solid business principles to ensure success and darwinians are driven by their own economic self-interest (Fauchart & Gruber, 2011). The primary point of reference is the competition with other firms and its primary motive is to make profits and generate personal wealth by differentiating his or her firm from the competition and by establishing strong and profitable firms. The strategy of cost leadership is therefore an example that darwinians might use in their firms. Hence, given greater profits and a better chance of success, they might switch and engage in ventures in completely new areas of business (Fauchart & Gruber, 2011). These characteristics are similar to the characteristics of the Ricardian organizational identity. The Ricardian organizational identity is focussed on sustaining competitive advantages by being more effective than their rivals at selecting rare, inimitable and valuable resources. Moreover, Ricardian based organizations emphasize exploitation and the cost leadership strategy to compete on the basis of scale economy and efficiency (Lim et al., 2013). This type of organizational identity is based on the rent-creation process, and the role of managers in that process. If resource picking is the primary mechanism of creating rents, then managers make their contribution largely through forming expectation about the value to their company of acquiring particular resources (Makadok, 2001). Managers therefore have a lot of influence and the darwinian entrepreneurial identity can contribute to the rent creation process by aligning the strategy of the entrepreneur and the organization. The following hypothesis merge these assumptions;

H1a: The Darwinian social identity is positively related to the Ricardian business identity.

Communitarians deviate strongly from the darwinian entrepreneurial identity. The communitarian identity is characterised by a strong motivation based on a hobby or leisure interest who then develop a business to support a group of like-minded individuals (Alsos et al., 2016). Being one with the group, sharing knowledge with the community and to be able to serve it from the inside are aspects that typically define the communitarian entrepreneurial identity. Therefore, prosocial motives such as helping others, creating a better life for the future generations or a passion to give and change lives are reasons why these social entrepreneurs start their ventures (Stephan & Drencheva, 2017). Furthermore, their focus lies on activities with the highest potential for social change with artisanal production methods and best practices to share with others or inspire change in the industry (Fauchart & Gruber, 2011). The firms that communitarians start is viewed as social objects that support and are supported by a community because of mutually beneficial relationships whereby authenticity of the founder is necessary to create a coherent group (Alsos et al., 2016). This type of social entrepreneurship and is traits has similarities with the Schumpeterian organizational identity. The Schumpeterian organizational identity highlights the rent-creation mechanism of capability building, which are firm-specific and deeply embedded into the organization and its processes (Teece & Pisano, 1994). It focusses on explorative capabilities for the creation of rents (Lim et al., 2013). Examples are intermediate goods generated by the firm to provide enhanced productivity of its resources (Makadok, 2001; Lim et al., 2013). Capabilities refer to a firm's capacity to deploy resources, usually in combination with organizational processes which are largely determined by the entrepreneur (Hambrick & Mason, 1984). As capabilities are personal to its organization, they also must be built by the organization and not be purchased somewhere else. Founders with the communitarian entrepreneurial identity use their own beliefs and principles to start the organization and consequently use it as the basis for its strategy and processes (Fauchart & Gruber, 2011). The typical prosocial communitarian characteristics such as supporting a community and helping others are used throughout the organization as the main motives for the organization and setting up the daily operations. It is therefore proposed that the communitarian identity is a type of capability in the organization and can enhance the other resources the firms possesses. The following hypothesis merge these assumptions;

H1b: The Communitarian social identity is positively related to the Schumpeterian business identity.

Missionaries are just like communitarians aimed at social entrepreneurship. However, there are some differences between both entrepreneurial identities. The missionary identity is motivated by starting a firm to advance a greater cause and acting responsibly is considered to be critical (Alsos et al., 2016). Hence, their motivation is closely connected to social entrepreneurship. Missionary founders believe that firms can be powerful agents of change in society and create new firms to start a platform from which they can pursue their political vision and advance appropriate causes (Alsos et al., 2016). Their beliefs are the basis for the purpose of the firm to show that alternative options are feasible and to demonstrate how the status quo can be changed (Alsos et al., 2016). Principles that define missionaries are improving the well-being of others with their actions and acting in a responsible, transparent and empathic manner to make the world 'a better place' (Alsos et al., 2016). Engaging in activities of organizations with the missionary entrepreneurial identity must make sense and are useful through the way they can contribute to the social world. Moreover, missionaries do not only offer products but also see their entire firm and the way in which business is conducted as a role model for society to advance their causes (Fauchart & Gruber, 2011). These beliefs and values that comes from the missionaries is reflected throughout the entire organization and are at the centre of its strategy. This can be seen as a capability the organization uses to reach its goals and to enhance other resources the firms contains. Therefore, similar to the communitarian entrepreneurial identity, it is proposed that the missionary entrepreneurial identity is related to the Schumpeterian organizational identity with its focus on building capabilities. Therefore, the following hypothesis is proposed;

H1c: The Missionary social identity is positively related to the Schumpeterian business identity.

## 2.4 HR-enhancing practices

Attention to human resources and adherence to technically superior HR-enhancing practices are believed to result in more productive, motivated, satisfied and committed employees, who in turn promote a more effective firm (Ostroff & Bowen, 2000). HR-enhancing practices have their impact through two primary means; First, HR-enhancing practices shape the skills, attitudes and behaviours of an organization's workforce, and these skills, attitudes, and behaviours in turn influence organizational performance. Second, HR-enhancing practices can have a direct impact on organizational performance by creating structural and operation efficiencies (Ostroff & Bowen, 2000). Huselid (1995) argues that the human capital of a firm can be unique because investments in firm-specific human capital can decrease the probability of imitation by differentiating a firm's employees from employees of other competitors on a qualitative basis. Huselid, Jackson and Schuler (1997) adds that competitive advantage is possible if firms ensures that its human capital add value to the production process and that its pool of human capital is a unique source, both difficult to replicate and difficult to substitute for. Firms should change their perspective of how they think about the workforce and the relationships with employees and should be seen as a source of strategic advantage instead as just another cost (Pfeffer, Hatano, & Santalainen, 1995). Firms that take this different perspective are often able to successfully outmanoeuvre and outperform their rivals (Pfeffer et al., 1995). However, improvements of organizational performance by the use of HR-enhancing practices is not the focus of this research. On the other hand, the focus is on the integration of HR-enhancing practices into the relationship between the entrepreneurial and organizational identity and an improved understanding of this linkage and its effects. It is therefore proposed that the translation of the entrepreneurial identity into the Ricardian or Schumpeterian organizational identity is facilitated by using specific HR-enhancing tools. Nonetheless, implementing such HR-enhancing practices is a difficult task for firms. New and small firms may have more difficulty recruiting new employees and often lack formal policies or systems for the HR department. The newness and smallness of an organization often comes with fewer resources and greater challenges (Rauch & Hatak, 2016). This often leads to a very small number of HR departments or professionals and an increased difficulty in recruiting and retaining employees due to a lack of financial resources (Cardon & Stevens, 2004).

Three HR-enhancing practices are defined by Subramony (2009) which are related to organizational improvements; skill-enhancing, motivation-enhancing and empowerment-enhancing HR practices. These HR-enhancing practices can be combined into bundles and can have thereupon improved effects because they support each other in enhancing workforce characteristics and thereby creating effects that are substantially greater than those individual HR-enhancing practices (Subramony, 2009). Motivation-enhancing bundles are combinations of motivation-enhancing HR practices that helps to direct the efforts of the employees towards the accomplishment of work objectives and provides them with the necessary stimulus to engage in high levels of performance (Kinnie, Hutchinson, Purcell, & Swart,

2006). Rauch and Hatak (2016) states that motivation-enhancing practices improve the behaviour of employees towards reaching the aims and objectives of the organization. Examples of firm efforts to direct and motivate employee behaviour include performance appraisals for assessment of the individual and work group related performance and linking these with incentive compensation systems, the use of internal promotion systems and other forms of incentives that are intended to align the interest of employees with those of shareholders and other relevant stakeholders (Huselid, 1995). Another important aspect of motivation of the employees is that they should have their job task and roles appropriately matched to their own capabilities. If not, there will be employees who do not have the room to use their skills and abilities and motivation will decrease (Huselid, 1995). Firms can use certain job structures such as cross-functional teams, job rotation and quality circles to encourage participation and consequently influence the motivation of employees and therefore firm performance (Huselid, 1995). Another viewpoint towards motivation-enhancing HR practices is that of Subramony (2009) who argues that a combination of performance appraisal, such as goal-setting and feedback mechanisms, and compensation practices can have synergistic effects on firm performance. This is because effective appraisal systems are likely to clearly communicate organizational expectations regarding the behaviours of employees while the compensation systems are likely to reinforce these behaviours (Subramony, 2009). The feedback component within the appraisal process helps employees develop or maintain certain behaviours that are likely to be reinforced (Subramony, 2009).

The proposed relation between the darwinian entrepreneurial identity and the Ricardian organizational identity has been outlined earlier, and the motivation-enhancing HR practices can adhere to this. Typical darwinian traits are its focus on money, performance, the competition and solid business principles (Fauchart & Gruber, 2011). Using motivation-enhancing HR practices have similar traits because of their focus on performance appraisals, incentive compensation systems and goal-setting behaviour (Huselid, 1995). Moreover, as the Ricardian organizational identity is characterised by its focus on sustaining competitive advantage, using motivation HR-enhancing practices can contribute towards the organization's competitive position (Pfeffer et al., 1995). The following hypothesis is therefore proposed;

H2a: The positive relationship between the Darwinian social identity and the Ricardian business identity is moderated by motivation-enhancing HR practices in that the relationship becomes stronger with higher levels of motivation-enhancing HR practices.

Empowerment is increased task motivation resulting from an individual's positive orientation to his or her work role (Spreitzer, 1995). However, Thomas and Velthouse (1990) define empowerment more broadly and argue that it is a multifaceted concept and consists of four cognitions reflecting an individual's orientation to his or her work role: meaning, competence, self-determination and impact. Meaning is the value of a work goal or purpose, judged in relation to an individual's own ideals or standards. It involves a fit between the requirements of a work role and beliefs, values and behaviours (Thomas & Velthouse, 1990). Competence, or self-efficacy, is an individual's belief in his or her capability to perform activities with skill (Gist, 1987). Where competence is a mastery of behaviour, self-determination is an individual's sense of having choice in initiating and regulating actions (Deci, Connell, & Ryan, 1989) Finally, impact is the degree to which an individual can influence strategic, administrative or operating outcomes at work (Ashforth, 1989). In short, empowerment affects motivation and can contribute to improvements of someone's positive orientation to his or her work role and organizations can contribute to this by using empowerment-enhancing HR practices.

Empowerment practices are aimed at increasing the autonomy, decision-making, involvement and responsibility levels of the employees (Subramony, 2009). They include the use of self-managing teams (Mathieu, Gilson, & Ruddy, 2006), participatory decision making and upward-feedback mechanisms (Wood & Wall, 2007). As argued by Kirkman and Rosen (1999), outcomes of empowerment practices is that empowerment practices can affect firm-level outcomes by increasing employees' levels of potency, task meaningfulness, autonomy and task significance or impact. Subramony (2009) adds that increased independence of employees can contribute to the performance-related behaviour, such as demonstrating flexibility in accommodating customer needs (Peccei & Rosenthal, 2001), engaging in process improvements (Kirkman, Rosen, Tesluk, & Gibson, 2004) and solving problems more creatively (Alge, Ballinger, Tangirala, & Oakley, 2006). Empowerment-enhancing practices enhances the individual self-efficacy as well as employee's collective perceptions that lead them to take responsibility for goal-setting and task completion (Subramony, 2009). The commitment of employees is also affected by empowerment-enhancing HR practices. Commitment and participation might affect the self-efficacy of employees in a positive way and increase meaningfulness and task significance (Rauch & Hatak, 2016). In addition, these empowerment practices can enable employees to combine their knowledge towards discovering new opportunities for the firm (Rauch & Hatak, 2016).

Arguments for the proposed relation between the communitarian entrepreneurial identity and the Schumpeterian organizational identity have been provided in the previous section and empowerment-enhancing HR practices can strengthen this relation. Communitarians are focussed on supporting a group of like-minded individuals (Alsos et al., 2016) and prosocial motives such as helping others, creating a better life for the future generations and a passion to give and change lives (Stephan & Drencheva, 2017). All these motives have a similar thing in common and that is that it should mean

something and should be closely related to the entrepreneur's identity and its values and beliefs. Empowerment-enhancing HR practices have the same focus as it calls for meaning, competence and leads to increased motivation of the individual. In turn, it contributes to the positive orientation someone has to his or her work role. Moreover, using empowerment-enhancing practices can lead to improvements of employees' commitment and participation and consequently increase the meaningfulness and task significance. The following hypothesis is therefore proposed;

H2b: The positive relationship between the Communitarian social identity and the Schumpeterian business identity is moderated by empowerment-enhancing HR practices in that the relationship becomes stronger with higher levels of empowerment-enhancing HR practices.

Skill-enhancing bundles are combinations of HR-enhancing practices that are primarily related to staffing and training and focus on increasing the collective knowledge, ability, and skill levels of the workforce (Ostroff & Bowen, 2000). Abilities are mostly genetically determined (Schmitt, 2014) and can be enhanced with strong selection procedures and choosing the most qualified employees for the job (Subramony, 2009). Skill-enhancing practices can provide the employees with access to job related training to further improve their knowledge and skills and making the employees more capable of executing their tasks (Rauch & Hatak, 2016). Providing formal and informal training such as basic skills training, on-the-job experience, coaching, mentoring, and management development can influence the development of the employees (Huselid, 1995). The synergistic combination of strong selection procedures and training practices will result in the creation of a highly skilled and fitting workforce that contributes to the operational performance of the organization (Subramony, 2009). Batt (2002) extends on the notion that the human capital can influence the organizational performance by arguing that the selective hiring of employees with high skills combined with an investment in training can provide the firm with a highly skilled workforce capable of ongoing learning. This capacity of ongoing learning is critical because in the current markets with intense competition, employees should integrate new and developing organizational situations into their existing knowledge to be able to use it in executing their tasks (Batt, 2002).

The proposed relation between the missionary entrepreneurial identity and the Schumpeterian organizational identity has been argued for in the previous section and this relation can be strengthened with the use of skill-enhancing practices. Skill-enhancing HR practices has its focus on increasing the knowledge, ability and skill levels of the employees while simultaneously use strong selection procedures and selecting the most qualified employees. The missionary social identity is related to social entrepreneurship and it is of importance that the people they work with are thinking and acting on the same page. Therefore, skill-enhancing HR practices can assist in selecting and training like-minded (social) entrepreneurs to create a highly skilled and coherent group that have the same goal for the organization. Moreover, this highly skilled and coherent group can be seen as a capability of the

organization, which is the focus of the Schumpeterian organizational identity. Skill-enhancing HR practices can ease the translation of the missionary's entrepreneurial identity into the Schumpeterian organizational identity and simultaneously strengthen this relation. The following hypothesis is therefore proposed;

H2c: The positive relationship between the Missionary social identity and the Schumpeterian business identity is moderated by skill-enhancing HR practices in that the relationship becomes stronger with higher levels of skill-enhancing HR practices.

## 3. METHOD

#### 3.1 Data collection and sample

A quantitative approach with a web-based survey has been developed for this research in collaboration with dr. I.R. Hatak of the University of Twente and with dr. A.J. Rauch from the University of Groningen and is created with the online survey-program Limesurvey. Respondents were able to fill in the survey anonymously. The survey contains 89 questions based on scientific literature aimed at the collection of the view of the entrepreneur towards the topics of firm's intentions, the chosen business strategy, the used HRM practices, the performance of the firm in relation to the competition and whether it competes based on the exploitation of resources or based on the exploration of capabilities.

The nonprobability sampling technique of convenience sampling is used for the collection of data. Using a convenience sampling method can also create unfavourable effects. With this method, the researcher chooses the selection of participants and can therefore influence the validity of the research (Etikan, Musa, & Alkassim, 2016). Even though there is a chance of unfavourable effects, it was the most suitable method for data collection considering the scope of this research. It is used because it was not possible to collect data from the entire national population of entrepreneurs' due to the type of research. In addition, convenience sampling is often used in research where the main objective is to collect information from participants who are easily accessible to the researcher, which is in line with the aim and the setting of this master thesis research (Etikan et al., 2016).

With the use of sorting the ORBIS database on size of employees and websites such as MKB-Nederland and the Chamber of Commerce a list was formulated with a couple of hundred potential organizations that fit the characteristics of SME's. The next step was to contact these organizations by phone and to explain the purpose of the research. During these calls, the organization shared the contact information of the entrepreneurs that are willing to fill out the online questionnaire and consequently an email was send with the link to online survey. Some organizations already declined during the phone call for participation in the online questionnaire due to reasons such as 'not enough time', not interested', 'already receiving a lot of surveys'. If the organization did not fill in the questionnaire within 2 weeks, and additional call was made to remind them to fill out the questionnaire. This has been an effective method in collecting data by seeing an increase in the number of respondents after these reminder calls.

During the data collection, a total amount of 501 organizations that fit the requirement of this research have been contacted via email and phone. From that total, 120 respondents have started to fill in the online survey. Several participants have not filled in the survey completely. The survey-program Limesurvey allowed to see how many respondents have not filled in the survey completely, and these

are therefore eliminated for the statistical analysis. The result is a usable sample size of 55 respondents, which is 45.8% of the initial number of respondents that have started the survey.

**Table 1** Sample characteristics.

	Average sample characteristics
Firm age in years	9
Number of employees in 2016	45
Number of co-founders	2
Firm industry	56.95% high-tech
Start-up capital required	\$25.000 - \$50.000
Founder age	40
Highest educational achievement	Technical college

#### 3.2 Measures

#### Dependent variable organizational identity

Two main organizational identities were differentiated, where the Ricardian organization focuses on exploiting the firm's resources and the Schumpeterian organization focuses on exploring the firm's capabilities. Based on Brown, Davidsson & Wiklund (2001) and Lim et al., (2013), seven items were used in the survey to measure the respondents view towards the Ricardian organization or towards the Schumpeterian organization. The respondents could answer seven statements based on a 5-point Likert scale ranging from 'not at all' to 'very much'. Organizational identity is based on a bipolar scale with 5-point Likert scale items, where the left side of the statements measure the Ricardian identity and the statements on the right side measures the Schumpeterian identity. This type of scale prompts a respondent to balance two opposite attributes, determining the relative proportion of these opposite attributes.

The respondents were asked (1) how the organization competed against competition through the access to superior resources or through their unique capabilities to deploy and exploit resources, (2) if their strategy was based on the exploitation of rare and valuable resources or based on exploring their internally developed and inimitable capabilities, (3) the reason for their firm's success through the controlling of key resources or the focus on creativity, innovation and new product capabilities, (4) the focus on economies of scale, efficiency and cost advantages or focussing on investing in research and development marketing and making more innovative offers than their competitors, (5) the strategy of the firm based on the utilization of the controlling resources or the strategy of the firm driven by the perception of opportunity with no constraining of the resources at hand, (6) the limitation of pursuing opportunities based on their current resources or the fundamental task of the firm is to pursue opportunities they perceive as valuable, (7) if the resources they possess significantly influence their

business strategy or that the opportunities are controlling their business strategies. This scale had a sufficient reliability (Cronbach's  $\alpha = 0.829$ ).

## Independent variable social identity

The independent variable of social identity consists of three pure types of founder identities; the darwinian, the communitarian and the missionary and are based on the theory of Fauchart and Gruber (2011). The scale developed by Sieger et al., (2016) has been used to measure the social identity of entrepreneurs. Six questions for each type of identity were asked in the survey based on a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree', aimed at how the entrepreneur judges his own intentions on the topics of reasons for starting the firm, what is very important to the entrepreneur and how the entrepreneur manages his firm. The scale had sufficient reliability (Cronbach's  $\alpha = 0.808$ ).

#### Moderator variable HR-enhancing practices

Based on the study of Rauch and Hatak (2016), HR-enhancing practices was used in this research as the moderating variable. Each of the three types of HR-enhancing practices proposed by Subramony (2009), skill-enhancing, motivation-enhancing and empowerment-enhancing are measured by a total of 27 items, with self-developed items drawn from the literature, with the use of a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree' to indicate the level of agreement with each statement. Within these questions, a division was made between the questions of selection (5 items) and participation (6 items) of employees, how employees are compensated (5 items) and how the firm uses its team (3 items) and how the training (8 items) of employees is accomplished. Sets of items are aggregated for the three types of HR-enhancing practices. Selection and training became skill-enhancing, participation and team became empowerment-enhancing and the items for compensation became the motivation-enhancing item variable. The different types of HR-enhancing practices also have different Cronbach's levels. Skill-enhancing had a Cronbach's  $\alpha$  of 0.830, motivation-enhancing had a Cronbach's  $\alpha$  of 0.752 and empowerment-enhancing had a Cronbach's  $\alpha$  of 0.784. The combined HR-enhancing practices in this scale had sufficient reliability (Cronbach's  $\alpha$  = 0.867).

## Control variables

Control variables have been selected to control for potential influences that are not in the focus of this study but which might influence the relationship between the variables that are being examined. To control for possible influencing firm factors, questions has been asked regarding the firm size (employees of the firm), the industry of the firm (high-tech/non-high-tech) and the firm age (year of starting the firm).

Table 2 Reliability analysis

Scale	Cronbach's α
Ricardian organizational identity	.829
Schumpeterian organizational identity	.829
Darwinian	.761
Communitarian	.695
Missionary	.834
HR Skill-enhancing	.830
HR Empowerment-enhancing	.784
HR Motivation-enhancing	.752

Further analysis of the Communitarian scale shows that no adjustments can improve the Cronbach's  $\alpha$  of the scale to a higher value (Appendix 1).

#### 3.3 Moderated regression analysis

Regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modelling and analysing several variables, when the focus is on the relationships between a dependent variable and one or more independent variables. More specific, regression analysis helps one understand how the typical value of the dependent variable changes when any of the independent variables is varied, while the other independent variables are held fixed (Hair, Black, Babin, & Anderson, 2010). Saunders (1955) was the first to develop a methodology for testing interactions or moderator effects for continuous variables and referred to this methodology as moderated multiple regression. This is in line with Baron & Kenny (1986) who argue that a moderator is a qualitative (e.g. sex, race, class) or quantitative (e.g. level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable. In simpler terms, moderation implies that the causal relation between two variables changes as a function of the moderator variable. Moderator variables are typically introduced when there is an unexpectedly weak or inconsistent relation between a predictor and a criterion variable. For example, a relation holds in one setting but not in another, or for one subpopulation but not for another (Baron & Kenny, 1986).

A moderator is a third variable that affects the zero-order correlation between the other variables within a correlational analysis framework. A moderator effect within a correlational framework may also be said to occur where the direction of the correlation changes. The moderator effect can also be used in the analysis of variance (ANOVA) method. Within the method of ANOVA, Baron & Kenny (1986) argue that the moderator effect can be described as an interaction between a focal independent variable

and a factor that specifies the appropriate conditions for its operation. In addition to these two considerations, it is desirable that the moderator variable will be uncorrelated with both the predictor and the criterion to provide a clearly interpretable interaction term. Another property of the moderator variable is that unlike the mediator-predictor relation (where the predictor is causally antecedent to the mediator), moderators and predictors are at the same level regarding their role as causal variables antecedent or exogenous to certain criterion effects. That is, moderator variables always function as independent variables, whereas mediating events shift roles from effects to causes, depending on the focus of the analysis (Baron & Kenny, 1986). Moderated multiple regression (MMR) is routinely used to estimate and interpret the effects of both dichotomous and continuous moderators. It is also preferred over other strategies, such as the comparison of subgroup-based correlation coefficients for two or more subgroups. One reason for this preference is that results of an MMR analysis provide researchers with important information that is not provided by tests of the equality of correlation coefficients. More specifically, MMR provides information about slope differences for various subgroups and this information is critical in assessing differential prediction (Aguinis & Stone-Romero, 1997).

The moderated regression is one of the most frequently used and accepted models of analysing relationships between three variables. The model is mostly practiced in behavioural sciences. First, it begins with a causal relationship in which a variable (X) is presumed to cause the variable (Y). A moderator variable (M) changes the causal relationship between the independent variable and the dependent variable. Moderation occurs when the relationship between two variables depends on a third variable and an effect caused by a moderating variable is called an interaction. A significant interaction between a moderator variable and the independent variable means that the effect of the independent variable on the dependent variable adjusts depending on the level of the moderator. Most moderator analysis are done by regression. Applying moderated multiple regression, the slope of the independent variable and the dependent variable changes which depends on the level of the moderator (Hair et al. 2010). Two issues must be considered before regression analysis can be executed (Hair et al. 2010). The first issue is the sample size, which depends on the number of dependent variables in the analysis. For the type of analysis that comes with this research, the sample size of the dataset should be at least 20 for simple regression and multiple regression requires a minimum sample of 50 and preferably more than 100. Secondly, one should check that all variables used are metric variables, and dummy variables should be made if the used variables are not metric. To analyse the results of a moderated regression analysis one should always check the following assumptions to determine if moderated regression is the right measurement method. Evans (1985) and Hair et al. (2010) describe four assumptions to be met to generate datasets which are suitable for testing the sensitivity for both, main and interaction effects. First, the assumption of linearity should be tested. Secondly, the constant variance of the residuals should be checked. Third, the independence of the residual should be checked. Fourth and lastly, the normality of the residuals' distribution should also be checked. The data resulting from the regression

analysis should always be normally distributed, which was the case for the data collected in this research. If all aforementioned issues and assumptions are met, regression is a suitable measurement method. After analysing the data, the researcher should be able to determine which independent factors or variables are influencing other dependent variables. Consequently, the hypothesis can be assessed and validated.

The main aim of this method is to calculate how the correlation in the sample can be generalized to the population by calculating the "statistical power" (Aiken, West, & Reno, 1991). Thus, moderated regression analysis can conclude the likelihood of the moderator effect that occurred in the sample, to occur in the population as well. But since the calculation is based on a sample it cannot conclude that the measured effect will definitely appear in the population as well. It rather focuses on the generalizability of the outcomes. Furthermore, it cannot be concluded that other unexplored moderators, which were not taken into account, do not affect the relationship between the dependent and the independent variable. Hence, it measures just the effect of the variables that are considered in the model that represents the assumptions of the relations in the population (Villa, Howell, Dorfman, & Daniel, 2003). Besides correlation, moderated regressions analysis can also be utilized to calculate how an independent variable predicts a dependent variable. The moderator as a second independent variable in this context affects the relationship between the predictor and the predicted variable in a sample. Since moderated regression analysis is an inferential method, it can be concluded that this prediction can most likely be found in the population as well if all requirement in the dataset are met and the change in R is significant. It cannot conclude that this prediction exists in the population as well (Villa et al. 2003). However, the limitation of this conclusion is that it cannot consider the effect of unpredictable changes in the environment, but it rather shows the effect of the predictor variable in the isolated model and its interaction inside the model (Lumpkin & Dess, 2001).

## 4. RESULTS

This chapter will provide the information regarding the statistical analysis on the collected data from the survey. The statistical program SPSS-22 was used for the analysis. The statistical analysis has been conducted for the Ricardian dependent variable as well as for the Schumpeterian dependent variable. The first step is a correlational analysis to check for relationships between the variables and if these are significant or not. Next is the regression analysis. The regression analysis has been conducted in several steps that are following up to each other. The first step was to do a regression analysis with only the control variables of firm age, firm industry and firm size. After that, the three types of entrepreneurial identities and three types of HR-enhancing practices are added into the regression analysis. For the interpretation of the results from the statistical analysis, the value of the model's predictive value (FChange) has been used. This indicated in how far adding additional variables have increased the predictive value of the full model. For the final step, a moderator has been added into the regression analysis to check for any moderating effects together with an additional check for multicollinearity.

#### 4.1 Correlation analysis

To reveal first possible relationships between the scales, a correlational analysis has been conducted. Positive relationships between the entrepreneurial identities, HR-enhancing practices and the organizational identities can be identified. The control variable 'Age' shows a significant relation with the missionary entrepreneurial identity (r=.292; p < 0.05). The control variables 'Size' and 'Industry' show no significant relations with other variables. Significant relations were found for the entrepreneurial identities of darwinian, communitarian and missionary. The darwinian entrepreneurial identity is significantly related to HR skill-enhancing practices (r=.373; p < 0.01) and HR motivation-enhancing practices (r=.270; p < 0.05). The communitarian entrepreneurial identity is significantly related to HR motivation-enhancing practices (r=.328; p < 0.05) and to the missionary entrepreneurial identity (r=.614; p < 0.01). The organizational identities Schumpeterian and Ricardian only show a significant relation with the darwinian entrepreneurial identity (r= -.335; p < 0.05 and r= .335; p < 0.05). All of the results of the correlational analysis can be found in the table below.

 Table 2 Correlational analysis

	Industry	Age	Size	HR_Skill	HR_Emp	HR_Mot	Communitarian	Missionary	Darwinian	Schumpeterian	Ricardian
Industry	1										
Age	073	1									
Size	088	203	1								
HR Skill-enhancing	.041	062	.078	1							
HR Empowerment-	072	.023	127	.369***	1						
enhancing											
HR Motivation-	.179	065	014	.650***	.076	1					
enhancing											
Communitarian	.148	.241	159	.176	.103	.328**	1				
Missionary	216	.292**	.025	.119	.171	.169	.614***	1			
Darwinian	082	.039	.118	.373***	.156	.270**	.225	038	1		
Schumpeterian	.032	239	229	029	.197	149	033	.215	335**	1	
organizational identity											
Ricardian	.032	239	.229	.029	197	.149	.033	215	335**	-1.000***	1
organizational identity											

<sup>\* -</sup> Correlation is significant at the 0.10 level (two-tailed).

<sup>\*\*-</sup> Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*\* -</sup> Correlation is significant at the 0.01 level (two-tailed)

## 4.2 Regression analysis

The model with only the control variables turned out be of no significant value in predicting the Ricardian organizational identity (F=1.724, p=.174). The model predicting the Schumpeterian organizational identity with only the control variables also turned out also to be of no significant value (F=1.724, p=.174).

 Table 4.1 Regression analysis with control variables

	Ricardian DV	Schumpeterian DV
Firm size	.185	185
Firm age	204	.204
Industry	031	.031
R	.303	.303
R Squared	.092	.092
Adjusted R Squared	.039	.039
F	1.724	1.724
Significance value	.174	.174

Adding the entrepreneurial identities and HR-enhancing practices into the regression analysis results in a significant increase of predictive value of the Ricardian business identity (FChange 2.287, p=.052). Hypothesis 1a is accepted as the regression analysis shows a significant and positive relation between the Darwinian entrepreneurial identity and the Ricardian organizational identity.

**Table 4.2** Regression analysis with control variables, entrepreneurial identities and HR-enhancing practices for the Ricardian organizational identity

	Model 1	Model 2	
Firm size	.185	.189	
Firm age	204	193	
Industry	031	153	
Darwinian		.274*	
Communitarian		.259	
Missionary		309	
Skill-enhancing		133	
Empowerment-enhancing	g	155	
Motivation-enhancing		.158	
R	.303	.555	
R Squared	.092	.309	
Adjusted R Squared	.039	.167	
F	1.708	2.182	
F Change		2.287*	

<sup>\* -</sup> Correlation is significant at the 0.10 level (two-tailed).

<sup>\*\* -</sup> Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*\* -</sup> Correlation is significant at the 0.01 level (two-tailed).

Adding the entrepreneurial identities and HR-enhancing practices into the regression analysis results in a significant increase of predictive value of the Schumpeterian business identity (FChange 2.287, p=.052). The regression analysis reveals a negative relation between the communitarian entrepreneurial identity and the Schumpeterian organizational identity, leading to the rejection of hypothesis 1b. The regression analysis reveals additional results with the missionary entrepreneurial identity not being significantly related to the Schumpeterian organizational identity, which results in the rejection of hypothesis 1c. Furthermore, the regression analysis shows that there is a significant negative relation between the darwinian entrepreneurial identity and the Schumpeterian organizational identity.

**Table 4.3** Regression analysis with control variables, entrepreneurial identities and HR-enhancing practices for the Schumpeterian organizational identity

	Model 1	Model 2
Firm size	185	189
Firm age	.204	.193
Industry	.031	.153
Darwinian		274*
Communitarian		259
Missionary		.309
Skill-enhancing		.133
Empowerment-enhancing		.155
Motivation-enhancing		158
R	.303	.555
R Squared	.092	.309
Adjusted R Squared	.039	.167
F	1.724	2.182
F Change	1.708	2.287*

<sup>\* -</sup> Correlation is significant at the 0.10 level (two-tailed).

<sup>\*\* -</sup> Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*\* -</sup> Correlation is significant at the 0.01 level (two-tailed).

To test the moderating effect of motivation-enhancing practices on the relationship between the darwinian entrepreneurial identity and the Ricardian organizational identity, the interaction term Darwinian\*Motivation has been added. This did not increase the predictive value of the model (FChange = .547, p=.464). Hypothesis 2a is therefore rejected. A check for multicollinearity between the used variables has also been conducted (Appendix 2). This analysis shows no evidence of problematic collinearity between the variables (VIF <3).

Table 4.4 Moderation analysis Darwinian\*Motivation (H2a)

	Model 1	Model 2	Model 3
Firm size	.185	.189	.181
Firm age	204	193	191
Industry	031	153	138
Darwinian		.274*	258
Communitarian		.259	.229
Missionary		309	256
Skill-enhancing		133	149
Empowerment-enhancing	g	155	156
Motivation-enhancing		.158	375
Darwinian*Motivation			.871
R	.303	.555	.563
R Squared	.092	.309	.317
Adjusted R Squared	.039	.167	.158
F	1.708	2.182	1.998
F Change	1.708	2.287*	.547

<sup>\* -</sup> Correlation is significant at the 0.10 level (two-tailed).

<sup>\*\*-</sup> Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*\* -</sup> Correlation is significant at the 0.01 level (two-tailed).

To test the moderating effect of empowerment-enhancing practices on the relationship between the communitarian entrepreneurial identity and the Schumpeterian organizational identity, the interaction term Communitarian\*Empowerment has been added. This did not increase the predictive value of the model (FChange =1.076, p=.305). Hypothesis 2b is therefore rejected. A check for multicollinearity between the used variables has also been conducted (Appendix 2). This analysis shows no evidence of problematic collinearity between the variables (VIF <3).

 Table 4.5 Moderation analysis Communitarian\*Empowerment (H2b)

	Model 1	Model 2	Model 3
Firm size	185	189	221
Firm age	.204	.193	.168
Industry	.031	.153	.131
Darwinian		274*	301*
Communitarian		259	-1.240
Missionary		.309	.306
Skill-enhancing		.133	.219
Empowerment-enhancing		.155	752
Motivation-enhancing		158	265
Communitarian*Empowerm	ent		1.407
R	.303	.555	.570
R Squared	.092	.309	.325
Adjusted R Squared	.039	.167	.169
F	1.724	2.182	2.075
F Change	1.708	2.287*	1.076

<sup>\* -</sup> Correlation is significant at the 0.10 level (two-tailed).

<sup>\*\*-</sup> Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*\* -</sup> Correlation is significant at the 0.01 level (two-tailed).

To test the moderating effect of HR skill-enhancing practices on the relationship between the missionary entrepreneurial identity and the Schumpeterian organizational identity, the interaction term Missionary\*Skill has been added. This did not increase the predictive value of the model (FChange =.247, p=.622). Hypothesis 2c is therefore rejected. A check for multicollinearity between the used variables has also been conducted (Appendix 2). This analysis shows no evidence of problematic collinearity between the variables (VIF <3).

**Table 4.5** Moderation analysis Missionary\*Skill (H2c)

	Model 1	Model 2	Model 3
Firm size	190	189	189
Firm age	.199	.193	.188
Industry	.042	.153	.136
Darwinian		274 <sup>*</sup>	275*
Communitarian		259	-264
Missionary		.309	.010
Skill-enhancing		.133	070
Empowerment-enhancing	ng	.155	.149
Motivation-enhancing		158	153
Missionary*Skill			.381
R	.305	.555	.559
R Squared	.093	.309	.313
Adjusted R Squared	.039	.167	.153
F	1.708	2.182	1.955
F Change	1.708	$2.287^*$	.247

<sup>\* -</sup> Correlation is significant at the 0.10 level (two-tailed).

<sup>\*\*-</sup> Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*\* -</sup> Correlation is significant at the 0.01 level (two-tailed).

 Table 5 Overview hypotheses

Hypothesis	Content	Rejected	Confirmed
1a	Positive relation between		X
	darwinian entrepreneurial		
	identity and Ricardian		
	organizational identity		
1b	Positive relation between	X	
	communitarian		
	entrepreneurial identity and		
	Schumpeterian organizational		
	identity		
1c	Positive relation between	X	
	missionary entrepreneurial		
	identity and Schumpeterian		
	organizational identity		
2a	Moderating effect of	X	
	motivation-enhancing HR		
	practices on the relation		
	between the darwinian		
	entrepreneurial identity and		
	Ricardian organizational		
	identity.		
2b	Moderating effect of	X	
	empowerment-enhancing HR		
	practices on the relation		
	between the communitarian		
	entrepreneurial identity and		
	Schumpeterian organizational		
	identity.		
2c	Moderating effect of skill-	X	
	enhancing HR practices on		
	the relation between the		
	missionary entrepreneurial		
	identity and Schumpeterian		
	organizational identity.		

## 5. DISCUSSION

A research question was formulated to address the research gap and to provide a clear direction for the thesis; What is the relation between social identity, organizational identity and HR-enhancing practices for entrepreneurship?

Previous research has been focussing on describing social identity (Tajfel, 1978; Tajfel & Turner, 1986; Burke & Reitzes, 1991) and to some extent the relation with entrepreneurship (Cardon et al., 2009; Fauchart & Gruber, 2011; Alsos et al., 2016) but it has not adequately described the relation with the organizational identity. In addition, the literature has not taken account what the combined effect of HR-enhancing practices and entrepreneurial identity is on organizational identity. This research gap has been addressed with this research and its analysis of the interplay of entrepreneurial identity, HR-enhancing practices and organizational identity.

The findings of this study showed several relations between the entrepreneurial identities and the organizational identities. However, only the darwinian entrepreneurial identity is positive and significantly related to the Ricardian organizational identity which is focussed on exploiting resources and negative but also significantly related to the Schumpeterian organizational identity with its focus on exploring capabilities. The other types of entrepreneurial identities, the communitarian and the missionary, are shown to not be significantly related to the Ricardian or Schumpeterian organizational identity which was not expected as other arguments were proposed by the literature. Powell and Baker (2014) for example argued that the identity of the founder shape the strategy of firms, which is in line with the argument of Shepherd and Haynie (2009) that the identity of the entrepreneur and his or her venture should be intertwined. In addition, Alsos et al. (2016) state that entrepreneurs use a particular frame of reference related to their identity for the entrepreneurial decision-making process that is related to entrepreneurial behaviour. Fauchart and Gruber (2011) argued that founders create their new firms in ways that are congruent with their distinct self-conceptions and these self-conceptions strongly influence how they act and behave when setting up their firms. Furthermore, Sieger et al., (2016) adds that that founders can put a lot of themselves into their enterprising activities and that new firms become reflections of the meanings that founders associate with entrepreneurship. The findings can therefore to be seen as a surprise as a positive relation between the communitarian entrepreneurial identity and the Schumpeterian organizational identity and the missionary entrepreneurial identity and the Schumpeterian organizational identity was expected. Moreover, it reveals that the entrepreneurial identity does not completely determine which organizational identity is the best match for a certain type of entrepreneurial identity. Other factors besides the entrepreneurial identity could influence which organizational identity is the most suitable for the entrepreneur.

Different from the expected improved positive effect of moderating HR-enhancing practices on the relation between the entrepreneurial identity and the organizational identity, no significant findings with

the use of HR-enhancing practices as moderators are found. The moderated regression analysis with the Ricardian organizational identity shows that the moderator effect of motivation-enhancing HR practices does not have a significant influence in the relation between the darwinian entrepreneurial identity and the Ricardian organizational identity. This result is the same for the Schumpeterian organizational identity. The moderated regression analysis reveals that empowerment-enhancing HR practices is not of significance in the relation between the communitarian entrepreneurial identity and the Schumpeterian organizational identity. Similar results of no significant moderating effects for skillenhancing HR practices are found in the relation between the missionary entrepreneurial identity and the Schumpeterian organizational identity. Based upon these results, it can therefore be argued that the moderating effect of HR-enhancing practices between the entrepreneurial identity and the organizational identity of the firm does not have a positive influence as suggested by several authors in the literature review. It might therefore not be the missing link as suggested by Fauchart and Gruber (2011). However, the 'upper echelons theory' from Hambrick and Mason (1984) might be more suitable in explaining how the entrepreneurial identity is linked to the organizational identity. This theory argues that organizational outcomes are partially predicted by managerial background characteristics, such as age, career experiences, education and socioeconomic roots. The result is that these characteristics can be seen as determinants of strategic choices and consequently organizational performance (Hambrick & Mason, 1984).

Results from the correlational analysis are similar with the arguments derived from the literature review. The correlational analysis shows that the missionary and communitarian social identities are strongly correlated with each other, as expected because these are both identities aimed at social entrepreneurship (Fauchart & Gruber, 2011). Even though the HR-enhancing practices were not significant as a moderator in the relation between the entrepreneurial identity and organizational identity, positive relations were found between entrepreneurial identities and HR-enhancing practices in the correlational analysis. However, not all of these relations are significant. The significant relations were found between the communitarian entrepreneurial identity and the motivation-enhancing HR practices, and the darwinian entrepreneurial identity shows significant relations with skill-enhancing and motivation-enhancing practices. It therefore seems that entrepreneurs with the communitarian type of identity are also attracted to motivation-enhancing HR practices which entails the use of incentives and compensation systems and rewards related to reaching goals and performance. This finding provides novel insights into understanding entrepreneurial identities as the communitarian are related to social entrepreneurship and therefore thought to have less motives to be positively related to the motivation-enhancing HR practices. Similarly, the darwinian type of entrepreneurial identity seems not to only be attracted by motivationenhancing HR practices, but also has a positive relation with skill-enhancing practice. This makes sense as darwinians are concerned with the competitive advantage of the organization and surrounding yourself with similar entrepreneurs via strong selection-procedures and training could contribute to

organizational performance and consequently its competitive position. Moreover, these results show that there is not a clear line between a certain type of entrepreneurial identity and certain HR-enhancing practices. Entrepreneurs with different types of entrepreneurial identities can be attracted to all types of HR-enhancing practices. Organizations should be aware of the HR-enhancing practices they use because not every HR-enhancing practice is positively related to all types of organizational identity or all entrepreneurial identities. A match between the combination of the entrepreneurial identity, HR-enhancing practices and a certain type of organizational identity could deliver the best possible results for the organization, which is similar to Schneider (1987) with his arguments for the importance of the people of an organization and its relation to organizational behaviour.

The research question can be answered based on the results from the statistical analysis. It appears that there is a positive relation between the entrepreneurial identity and organizational identity as shown in the regression analysis, but only significant for the darwinian type of entrepreneurial identity and the Ricardian organizational identity. Furthermore, the results support no argument for the use of a moderating HR-enhancing practice to positively improve the relationship between the darwinian, communitarian and missionary types of entrepreneurial identities and the Ricardian and Schumpeterian types of organizational identity.

## 5.1 Limitations

A couple of limitations comes forward in this type of research. Despite the fact that the usable sample size of 55 respondents is sufficient to conduct a moderated regression analysis, a larger amount of 100 respondents is preferred and allows for more general statements regarding the model (Hair et al., 2010). In addition, using the ORBIS database, MKB-websites and the Chamber of Commerce for the selection of entrepreneurs and organizations on region and the number of employees has the consequence that most of the respondents are from the same region. This has an influence on the research setting and impacts the possibilities to make general statements. Another limitation of this research is the type of data collection. The nonprobability sampling technique of convenience sampling has been used and could influence the validity of the research (Etikan et al., 2016). Entrepreneurs are chosen and contacted via email and phone for the participation on the survey. This had an effect on the number of participating entrepreneurs with some not filling out the survey completely or declining to participate at all. The time period of the research also brings some limitations. If the research was conducted in a larger time period, for example two years, additional data from more respondents could be gathered with possible other results. The potential effect of reverse causality in the model is another limitation. The relation between the entrepreneurial identity and the organizational identity could be the other way around than proposed in this research. With the design of the research comes another limitation as it is designed as crosssectional. The entrepreneurs are contacted for a one-time participation in the survey. This allows for quicker observations but in turn provides a smaller amount of information and made it impossible to

assess variables over time (Moore, McCabe, & Craig, 2006). The final limitation is the potential bias coming from respondents. They could for example answer the survey without even reading the questions and thereupon lead to unrealistic and biased results. With the use of a survey, it not possible to ask indepth follow-up questions regarding a certain answer, which would be possible with other methods, such as interviews. Additional insights in the relation between the entrepreneurial identity, HR-enhancing practices and organizational identities could be gathered by future research based upon for example a longitudinal based study with a larger number of respondents from different regions and more diversified characteristics, or a qualitative type of research. In addition, future research on the possible reverse causality effects between the organizational identity and the entrepreneurial identity could lead to a better understanding of the relation between the identities. Another viewpoint for future research is to study how the relation between entrepreneurial identities and organizational identities affects the financial outcomes of an organization, and if the use of HR-enhancing practices could positively contribute to this.

## 5.2 Contribution to theory

The findings show that there is a relation between the entrepreneurial identities and organizational identities. It reveals that the entrepreneurial identities are related to organizational identities which is similar to the predictions provided by the upper echelons theory which argues that organizational outcomes are partially predicted by managerial background characteristics (Hambrick & Mason, 1984). However, the findings show that not every type of entrepreneurial identity is related to both organizational identities and all types of HR-enhancing practices, but that certain types of entrepreneurial identities turned out be more strongly related to the Schumpeterian or Ricardian organizational identity and more strongly to certain HR-enhancing practices. Fauchart and Gruber (2011) argued that the communitarian and missionary entrepreneurial identity are both aimed at social entrepreneurship, making the expectation that both are related to the same organizational identity. The statistical analysis however reveals different results with the communitarian being related to the Ricardian organizational identity and the missionary to the Schumpeterian organizational identity. This distinction contributes to theory by providing new information regarding the relation between entrepreneurial identities and the organizational identities. The findings of this study also contribute to the HRM field of research in the SME context by showing that certain HR-enhancing practices should be matched against the type of entrepreneurial identities before having any effect. The use of HRenhancing practices for the relation between the entrepreneurial identity and the organizational identity will have little to no effect if not adjusted properly to the entrepreneurial identity. In addition, the study reveals that HR-enhancing practices does not have the expected positive effects when used as a moderator in the relation between the entrepreneurial identity and the organizational identity.

### 5.3 Practical contributions

This study has shown that the different types of entrepreneurial identities are more related to some HR-enhancing practices and less to other HR-enhancing practices, and more and less to one of the two types of organizational identities. An improved understanding of the different HR-enhancing practices and the types of entrepreneurial identities and their relation to the organizational identity provides entrepreneurs and managers with additional knowledge that they can use to set out strategic goals for improvements of organizational performance. In addition, it can guide entrepreneurs in attracting and selecting new personnel that have the same type of entrepreneurial identity to work towards a coherent and improved organizational identity. A larger number of employees with the same type of identity can positively affect the entire organization (Schneider, 1987). Furthermore, entrepreneurs and managers can use the knowledge developed by this study to coordinate the HR-enhancing practices with the entrepreneurial identities and the organizational identity. Employees will then receive improved personalized training aimed at their entrepreneurial identity which should lead to better results and in turn lead to improvements of organizational performance.

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# **Appendices**

## Appendix 1 – Cronbach's $\alpha$ for the Communitarian scale

#### Item-Total Statistics

	Scale Mean if	Scale Variance if	Corrected Item-Total	Cronbach's Alpha if Item
	Item Deleted	Item Deleted	Correlation	Deleted
to solve a specific problem for a group of people that I strongly identify with (e.g. friends, colleagues, club, community).	16.4727	9.846	.335	.688
to play a proactive role in shaping the activities of a group of people that I strongly identify with.	16.5091	9.921	.392	.666
to provide a product/service that is useful to a group of people that I strongly identify with (e.g. friends, colleagues, club, community).	16.1273	9.928	.448	.648
to be able to express to my customers that I fundamentally share their views, interests, and values.	16.4000	10.356	.367	.672
to establish a strong competitive advantage and significantly outperform other firms in my domain.	16.4182	9.322	.509	.627
to support and advance a group of people that I strongly identify with.	16.1636	9.325	.518	.624

## Appendix 2 – Multicollinearity diagnostics.

## Coefficientsa

		Collinearity Statistics		
Model		Tolerance	VIF	
1	skill_enhancing	,447	2,236	
	empowerment_e nhancing	,774	1,292	
	motivation_enhan cing	,477	2,095	
l	Darwinian	,694	1,441	
l	Communitarian	,422	2,368	
l	Missionary	,429	2,329	
	firm_size	,818	1,223	
	firm_industry	,762	1,313	
	firm_age	,831	1,203	

a. Dependent Variable: Ricardian\_business\_identity

## Coefficientsa

		Collinearity Statistics		
Model		Tolerance	VIF	
1	skill_enhancing	,447	2,236	
	empowerment_e nhancing	,774	1,292	
	motivation_enhan cing	,477	2,095	
l	Darwinian	,694	1,441	
l	Communitarian	,422	2,368	
l	Missionary	,429	2,329	
1	firm_size	,818	1,223	
1	firm_industry	,762	1,313	
	firm_age	,831	1,203	

a. Dependent Variable: Schumpeterian\_business\_identity