Research Handbook of International Talent Management

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Part III International talent management, public management and policy

Chapter 1: Talents for key positions in organizations: the sustainability manager as a profession

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1 Introduction

Businesses, whose activities highly influence our present and future, contribute to the sustainable development of economics and society (Kiefhaber, 2018; Schaltegger, Bennett & Burrit, 2006). Sustainability issues within companies are complex and "wicked" (Allen, Beaudoin, Lloyd-Pool, & Sherman, 2014; Blok, Gremmen, Wesselink, & Painter-Morland, 2016; Dentoni, Blok, Lans, & Wesselink, 2012; Heiskanen, Thidell, & Rodhe, 2016; Lans, Blok, & Wesselink, 2014; Nölting & Pape, 2015). Dealing with sustainability in a company context requires **specially trained professionals**, which is mirrored in the increasing demand of companies for **sustainability managers** (Atwood et al., 2016; Hesselbarth, 2016; Hesselbarth & Schaltegger, 2014).

Even if sustainability management could be considered a key function in an organization, sustainability managers themselves are not in agreement as to whether sustainability management is just a trend, a bundle of tasks outsourced onto one department or a standalone profession. As researchers have not yet brought together the research streams of sustainability management and professions, we address **a first research question**: Can sustainability management be considered a key profession in an organization?

Furthermore, as "the job profile of a sustainability manager is as complex as sustainability management itself" (Leitschuh-Fecht, 2006), their tasks (Leitschuh-Fecht, 2006, Loew & Braun, 2009, Lotter & Braun 2010, Loew & Rohde, 2013, Hesselbarth, 2016) and consequently their competencies (Bootsma & Vermeulen, 2011; De Haan et al., 2008; Dentoni et al., 2012; Heiskanen et al., 2016; Hesselbarth, 2016; Lozano et al., 2017; Osagie, Wesselink, Blok, Lans, & Mulder, 2016; Rieckmann, 2012; Roorda, 2010; Sharma, 2017; Thomas & Day, 2014; Wiek, Withycombe, & Redman, 2011) could hardly be more diverse and therefore more versatile. In light of this complexity, we aim to elaborate the role that talent management can play, **addressing a second research question**: How can talent management identify talents for the position of a sustainability manager?

In order to answer the outlined questions, we focus on the following aspects. Initially, we give a theoretical introduction on talent management, sustainability management, tasks and competencies of a sustainability manager, and professions research (chapter 2). We then introduce the procedure of our empirical study (chapter 3). The seven interviews with sustainability managers from German companies reveal important insights regarding the actual state of the profession development steps, shed light on the importance of several competencies and allow a closer look on the communication competencies of sustainability managers (chapter 4). We finally draw implications for talent management (chapter 5) and give plenty of implications for future research (chapter 6).

2 The Sustainability Manager in the Focus of Professions and Talent Management Research

2.1 Talent Management and the Meaning of Talent

Human Resource Management (HRM) is a key success factor to the organizations' sustainability strategy. The department ensures that all employees are aware of the organization's sustainability strategy and goals (Rimanoczy & Pearson, 2010). One important tool to the HRM department is talent management, which is significant for the organization's competitive advantages (Collings & Mellahi, 2009). Due to this significance for organizations, talent management is a widely researched topic (Collings, Scullion, & Vaiman, 2015; Tansley, 2011). However, what the concept of talent management and its underlying term of talent really mean is still vague and lacks a clear definition (Adamsen, 2014; Gallardo-Gallardo, Dries, & González-Cruz, 2013; Lewis & Heckman, 2006; Meyers, van Woerkom, & Dries, 2013; Ritz & Sinelli, 2018; Tansley, 2011).

Collings et al. (2015) note that there is a pluralistic understanding of the concept talent management. In their literature review, Collings and Mellahi (2009) add a fourth key stream to those three identified by

Lewis and Heckman (2006). Referring to Lewis and Heckman (2006), the first is the definition of talent management as typical function of the HRM department. The second stream focusses on the definition as processes to guarantee a suitable talent pool for the organizations' positions. The third stream concentrates more on the individual level and dissociates from specific positions. The fourth and complete contrary stream, added by Collings and Mellahi (2009), "emphasizes the identification of key positions which have the potential to differentially impact the competitive advantage of the firm" (p. 305). So, it is crucial to identify those positions that contribute to success and competitive advantage of the organization in the first place (Huselid, Beatty, and Becker (2005), as a talent can only exploit its full potential if occupying the right position (Nijs, Gallardo-Gallardo, Dries, & Sels, 2014).
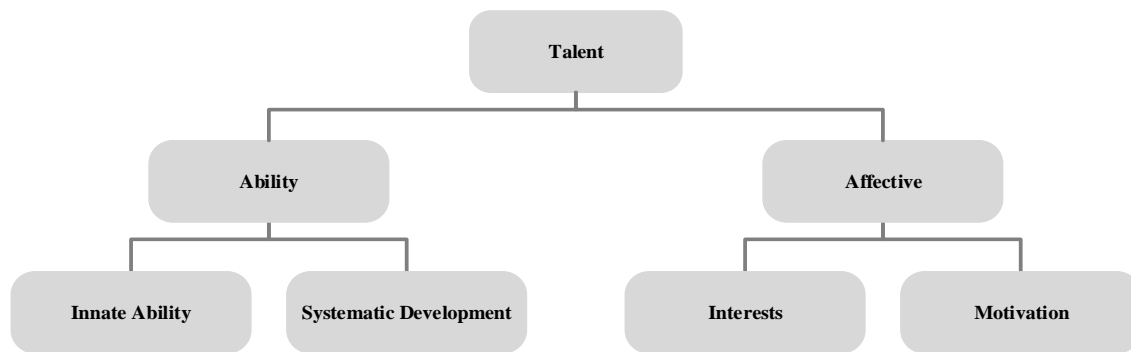
Ritz and Sinelli (2013) conduct a similar distinction and talk about the qualification-oriented talent management as equivalent to the fourth stream mentioned by Collings and Mellahi (2009). The qualification-oriented talent management approach also addresses the identification of key positions in the organization, which contribute to an appreciable amount of the organization's performance. It additionally encompasses the special competencies which are required to fulfil the key positions, i.e., the competencies of the talent itself (Ritz & Sinelli, 2013). Hence, this approach defines talent management as a double-stage concept: First, the key positions in the organization have to be detected and second, these positions have to be filled with those people who have the necessary skills.

In line with the previous remarks and within the scope of this chapter, we define talent management as „activities and processes that involve the systematic identification of key positions which differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organisation"(Collings & Mellahi, 2009, p. 304).

After the definition of the overall concept of talent management, there is still one open question, namely what is meant by the term *talent* itself. As brought up earlier, this term also lacks a clear definition and so far, several authors posed the question: "What is a talent?" (e.g. Adamsen, 2014; Gallardo-Gallardo et al., 2013; Tansley, 2011; Ulrich & Smallwood, 2012).

For example, Gallardo-Gallardo et al. (2013) searched the literature for definitions of the term *talent* and conclude that everyone seems to have his own idea about the meaning. Also Tansley (2011) states that "some definitions of talent are so vague that one is forced to ask what the point is of using the term 'talent' at all" and why not simply use other terms such as skills or competences (p. 267). Adopting a competency based approach might supersede the problem of defining *talent* since the identification of a talent connotes the identification of competencies (Ross, 2013). However, a talent is more than just a cluster of different competencies, even though they are a crucial aspect of talents.

Besides the competence or ability component which can be divided into an innate and a systematically developed part, talents are also composed of an affective component (Nijs et al., 2014). The affective component reveals that if you need a person who delivers an extraordinary performance, you not only have to know about what they are able to do in the sense of competencies. You also have to know what a person is interested in and therefore willing to invest time in. Thus, also the affective component of a talent is composed of two aspects: motivation and interests (Nijs et al., 2014). Figure 2.1 illustrates this bilateral character of a talent.

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                          ┌──────────┐
                          │  Talent  │
                          └──────────┘

          ┌──────────┐                    ┌──────────┐
          │ Ability  │                    │ Affective│
          └──────────┘                    └──────────┘

   ┌──────────────┐ ┌──────────────────┐  ┌──────────┐ ┌──────────┐
   │Innate Ability│ │Systematic Develop│  │ Interests│ │Motivation│
   └──────────────┘ └──────────────────┘  └──────────┘ └──────────┘
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Figure 2.1   Conceptual framework for talent definition
(Based on Nijs et al., 2014, p. 182)

Ulrich and Smallwood (2012) propose a very similar approach to Nijs et al. (2014) to define talent and formulate the equation "talent = competence × commitment × contribution" (p. 60). Whereas competence means to have the ability to do something, commitment aims at the willingness to do a specific job or task. When persons also find purpose in their work, they can actively contribute and unfold as a talent. So, for the aim of this chapter we stipulate that the meaning of talent "refers to systematically developed innate abilities of individuals that are deployed in activities they like, find important, and in which they want to invest energy" (Nijs et al., 2014, p. 182).

After having defined talent management and the term talent itself, the following sections address the question if sustainability management can be considered as a key function or position in an organization and how talent management can identify talents for the position as sustainability manager. To this end, we want to create a deeper understanding of why sustainability is important for an organization, how to define the sustainability manager, what their specific tasks are, and what competencies they need to have.

2.2 Sustainability Management as a Key Function (and Profession?)

2.2.1 Motivation for and Potential Benefits of Sustainability Management

Sustainable development can be conceptualized as a development that "…meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 41). Businesses, whose activities highly influence our present and future, contribute to the sustainable development of economics and society (Kiefhaber, 2018; Schaltegger, Bennett & Burrit, 2006). While most consider sustainability to be environmental, it actually covers three different dimensions: environmental, social and economic (Mathieu, 2002), which is also mirrored in the Europeans Commissions' definition of Corporate Social Responsibility (CSR): "the responsibility of enterprises for their impacts on society [and that enterprises need] to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy" (European Commission, 2011, p. 6).

In general, there is no doubt that organizations and especially companies play a major role in the promotion of a sustainable development (Baumgartner, R. J. & Rauter, 2017; Rimanoczy, 2014; Windolph, Harms, & Schaltegger, 2014).

Theoretically and empirically, there are several reasons for engaging in sustainability as an organization (see Figure 2.2). First of all, legislation can force an organization to do so, for example in form of regulatory limits of carbon dioxide emissions. Not only governments have the power to force organizations to engage in sustainability issues but also stakeholders can build up an enormous pressure on organizations which is also a type of coercion (Baumgartner, R. J. & Rauter, 2017; Blomfield, Troth, & Jordan, 2016; Lozano, 2015; Windolph et al., 2014). These two cases constitute external motivations for the organization's obligation to sustainability. But there are also some internal motivational factors (Lozano,

2015). These internal factors are in complete contrast to the external factors and are based on voluntariness. On the one hand, an organization can simply be intrinsically motivated to act in a sustainable manner, for example due to the organizational culture or the personal beliefs and values of the owner. On the other hand, an organization could in anticipate economic benefits and value creation in form of optimized processes or reduced costs coercion (Baumgartner, R. J. & Rauter, 2017; Blomfield et al., 2016; Lozano, 2015; Windolph et al., 2014).

A study by Windolph et al. (2014) on the relevance of the mentioned motivational factors shows that "legitimacy is a dominating motivation for sustainability management" whereas the internal motivations are less important (p. 282).
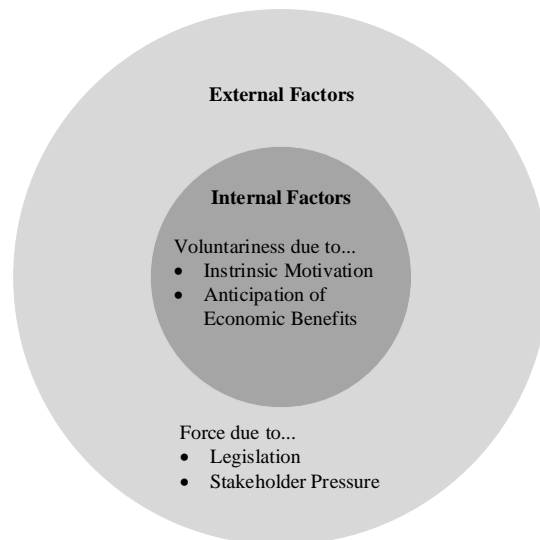
Figure 2.2:   Motivations for an organization's engagement in sustainability
(Own illustration, based on Baumgartner, R. J. & Rauter, 2017; Blomfield et al., 2016; Lozano, 2015; Windolph et al., 2014)

The view that integrating sustainability into business operations is affiliated with high costs is predominant (Schaltegger, 2017). Nevertheless, the engagement can also lead to different benefits. For example, Wright and Nyberg (2012) state that organizations concerned with environmental issues can have some advantages such as reduced costs or improved efficiency. Also Schulz (2017) notes that there are reliable

research results which suggest that sustainability management does not entail financial disadvantages, but rather causes different positive financial effects. In general, four types of business case value creation can be differentiated (Kurucz, Colbert, & Wheeler, 2008):

- Cost and risk reduction

- Competitive advantage

- Reputation and legitimacy

- Synergistic value creation

Cost and risk reduction as well as competitive advantage refer to the economic dimension. The reduction of costs can result from declines in the energy consumption of an organization, while reduced risks in procurement result for example from the independence of non-renewable energy. A competitive advantage can emerge due to the development of new technologies. An enhancement of reputation and legitimacy can be achieved if the organizations' stakeholders can better identify themselves with the organization due to the organizations' sustainability activities. Synergistic value creation originates from the integration of stakeholder interests into the business strategy.

Due to the potential benefits and the enormous risks resulting from the disregard of stakeholder demands in terms of sustainability issues, sustainability management can definitely be considered as a key function in organizations and is therefore relevant to talent management.

By that time, many organizations are aware of this fact and already began to integrate sustainability in their business strategy (Hatipoglu, 2014). Some authors state that sustainability management is going to be more and more professionalized (Schaltegger, 2015). Others claim that Corporate Responsibility turned into a profession (Lenzen, 2007). Anyhow, the demand for suitably trained specialists, sustainability managers in particular, is increasing (Atwood, Coperine, & Hart, 2016; Hesselbarth, 2016; Hesselbarth & Schaltegger, 2014). This implies that sustainability management is not only a key function in an

organization but also a key profession. Albeit, sustainability managers themselves are not in agreement as to whether sustainability management is a stand-alone profession or just a trend (Hatipoglu, 2014).

Up to now, research has not yet investigated whether the sustainability manager can be considered as a profession. We are addressing this gap in the following section by examining the sustainability manager within the background of the professions research: is sustainability management a stand-alone profession or just a bundle of tasks that have been outsourced to a department?

2.2.2 Professions and Professionalization

In general, "the concept of profession is much disputed" and there is no clear definition of what professions really are (Evetts, 2014, p. 31). Due to the difficulty of defining the term profession, many researches began to list examples of professions instead of defining the term (Evetts, 2003). Nevertheless, there are some definitions. Kalkowski (2010) for example defines professions as "functional organized actors who are autonomous regarding the type and content of education, the control over market access, the definition, the organization and the evaluation of performance [translation by the authors]" (p. 2). Mieg (2015) understands professions as privileged professional groups, which are characterized by power, reputation and autonomy against other professional groups.

Since there is no default definition of the term profession, researchers try to explain professions by using different theories. Especially the concepts of attribute theory and power theory are used to elucidate professions (Berndt, 2011; Röttger, 2010). The attribute theory tries to define professions by developing characterizations whereas the power theory considers professions as an upgrade of normal occupation by the collective marketing of expertise. So, the power theory is particularly about authority, strength, reputation and the best position in the market (Röttger, 2010). In the course of this chapter, we will focus on the attribute theory because it also covers the main aspects of the power theory.

Mieg (2015) is one of the researchers who focuses on the attribute theory and suggests a characterization of professions based on four attributes: autonomy, abstractness, altruism and authority. Autonomy means that a professional group is given jurisdictional monopoly in a specific area which is managed in self-organization. The abstractness of a profession denotes that it is knowledge-based (Abbott, 1988). This attribute can be further intensified by speaking of academic knowledge, because scientific literature defines a profession often as academic jobs (Kalkowski, 2010). Altruism refers to the public welfare orientation of a profession. Finally, on the one hand, professions have some kind of authority towards other occupational groups and on the other hand, they have also subject-specific authority in their field of activity (Mieg, 2015; Rueschemeyer, 1986).

Dealing with the topic of professions, two further and closely related concepts inevitably emerge: professionalization and professionalism. Professionalism is based on specified functional criteria and standards and a specific knowledge base. In general, only persons with appropriate education dispose of this knowledge and are able to act in this professional way (Kalkowski, 2010). Professionalization by contrast refers to the development process of a profession (Kalkowski, 2010; Mieg, 2015; Neal & Morgan, 2000) and can be regarded as the bridge between professions and professionalism (Mieg, 2018). Moreover, "from a historical point of view, we have to distinguish two forms of professionalization: on the one hand professionalization 'from within', with the occupation being the driver and owner of the process of professionalization. On the other hand professionalization 'from above' with the occupation being subject to governmental regulation" (Mieg, 2009, p. 502). This differentiation gains importance regarding geographical aspects. In the US and England, professions mainly developed 'from within' whereas in Germany, professions mainly developed 'from above'.

In the context of professions and especially of professionalization, it is also necessary to adduce the individual and the institutional perspective illustrated in Table 1 (Evetts, 2003; Mieg, 2015, 2018). Professionalization can be related to the professional development of an individual in the sense of competence development (individual perspective) as well as to the career of occupational groups or the transformation of fields of activity (institutional perspective) (Mieg, 2015).

Table 1:   Profession, professionalization and professionalism
(Based on Mieg, 2015, p. 30, 2018, p. 15)

	profession	**professionalization**	**professionalism**
institutional perspective	privileged occupational group	transition of an occupational group to a profession	profession as organizational type of knowledge-based work
individual perspective	depending on the definition: autonomous, expert, altruistic and authoritative	performance and standard-based occupational work	professional behaviour in the sense of competence application

As part of the institutional perspective of professionalization, researchers like Wilensky (1964) tried to identify different development steps of a profession (see Figure 2.3). Even though Neal and Morgan (2000) have been able to show differences regarding the development steps of professions between the UK (representing the Anglo-American region) and Germany (representing continental Europe), the main sequence is in line with Wilensky's, which has been the basis for many researchers examining professions (Abbott, 1991; Larson, 1979; Mieg, 2015; Neal & Morgan, 2000). Although there might not be the one sequence of profession development, we also follow Wilensky's (1964) model as the basis for our empirical study.

Originally, every profession started as a part time occupation. According to importance and demand within an organization or society the practiced task increases and an occupation becomes a full-time job. Due to the increasing number of tasks and the importance of those, the requirement of trainings rises. First, these trainings can be managed with specific courses and classes, but budding professionals will

seek for academic graduation. As universities accept the rising need for education within a specific on-going profession, the development of study courses will start culminating in reaching an academic degree. These training institutions promote useful professional associations. These are local associations followed by national associations that represent the interests of the professionals. The next important development step for a profession is the so-called state-approved status. This recognition ensures the exclusiveness of the title. For some professions the non-qualified act is declared as crime, for example, in medical practices. At last, a formal code of ethics is written out. This expresses the values a profession underlies, decreases internal competition, explains behavioural rules and contains even more rules (Wilensky, 1964).

The institutionalization of professions offers various benefits for organizations. An institutionalized profession contains an autonomous department within an organization. This organizational integration illustrates also that the profession is supposed to be part of the competitive advantage and the corporate success. Tasks affecting different specialties need to be dealt with in the most professional way. The proper organization and delegation of different tasks and problems within one profession explains the necessity of management staff. These positions are mostly held by professionals just as most of the employments of different departments (Lotter & Braun, 2010).
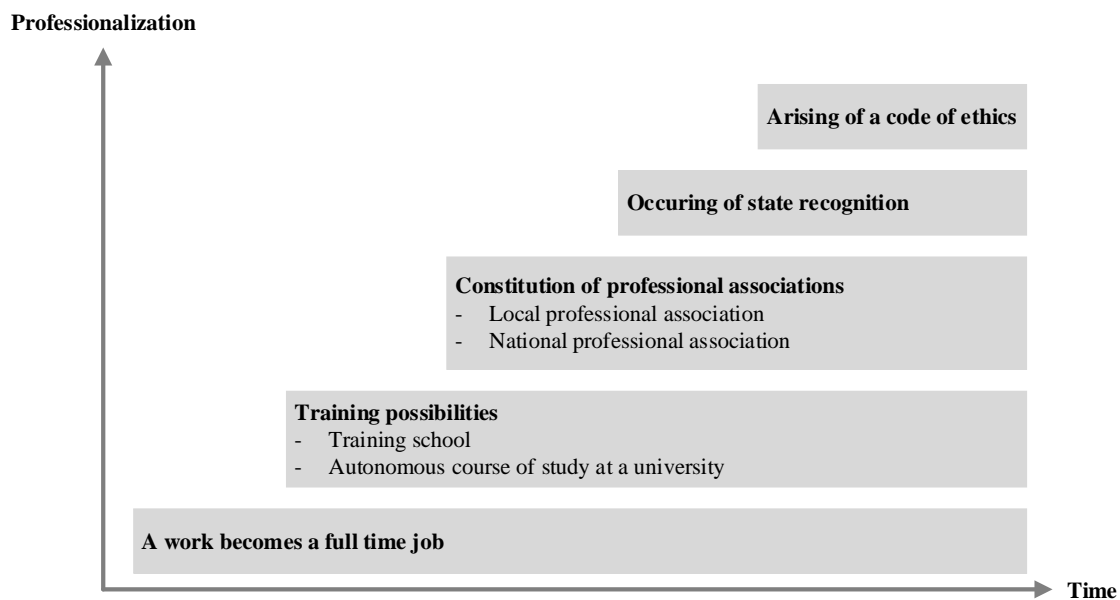
Professionalization

Arising of a code of ethics

Occuring of state recognition

Constitution of professional associations
- Local professional association
- National professional association

Training possibilities
- Training school
- Autonomous course of study at a university

A work becomes a full time job

Time

Figure 2.3:   The five steps of professionalization
(Own illustration, based on Mieg, 2015; Wilensky, 1964)

2.3   The Sustainability Manager as a Talent

Implementing sustainable development policies within an organization requires specially trained professionals due to the complexity of sustainability issues (Heiskanen, Thidell, & Rodhe, 2016; Nölting & Pape, 2015), so called 'wicked problems' (Allen, Beaudoin, Lloyd-Pool, & Sherman, 2014; Blok, Gremmen, Wesselink, & Painter-Morland, 2016; Dentoni, Blok, Lans, & Wesselink, 2012; Lans, Blok, & Wesselink, 2014). The need for such specially trained professionals is clearly reflected in the increased demand from organizations for sustainability managers (Hesselbarth, 2016; Hesselbarth & Schaltegger, 2014). A study from the International Society of Sustainability Professionals for example shows that 39% of the questioned organizations plan to hire a sustainability manager within the next six months and 26% within the next year (Atwood et al., 2016).

Nevertheless, the sustainability manager as head of his own department is only employed by big organizations. In small organizations, sustainability issues are still part of each individual employee's daily

business (te Heesen, 2013). This aspect manifests in the distinction between implicit and explicit sustainability manager shown in Figure 2.4 (Schaltegger, 2015). Explicit sustainability managers are those people in an organization having the concrete job title as sustainability manager (or other synonymously used terms) and work in their own department, but not necessarily full-time. Implicit sustainability managers, on the other hand, are people who promote sustainability issues within the organization, regardless of their specific job title. This means that basically every employee of an organization could be a sustainability manager. However, the focus within this book chapter lies on the explicit sustainability managers, i.e. the people who are specifically employed for managing sustainability in the organization even if not as their full-time.

But what exactly is meant by the term sustainability manager? "Sustainability managers can be characterized as personalities who analyse, operate and promote sustainability in organizations - thus implementing them entrepreneurially" and "develop convincing design offers and solutions for the sustainability challenges of the respective organization on the basis of identified deficits [translation by the authors]" (Hesselbarth, 2016, p. 156).
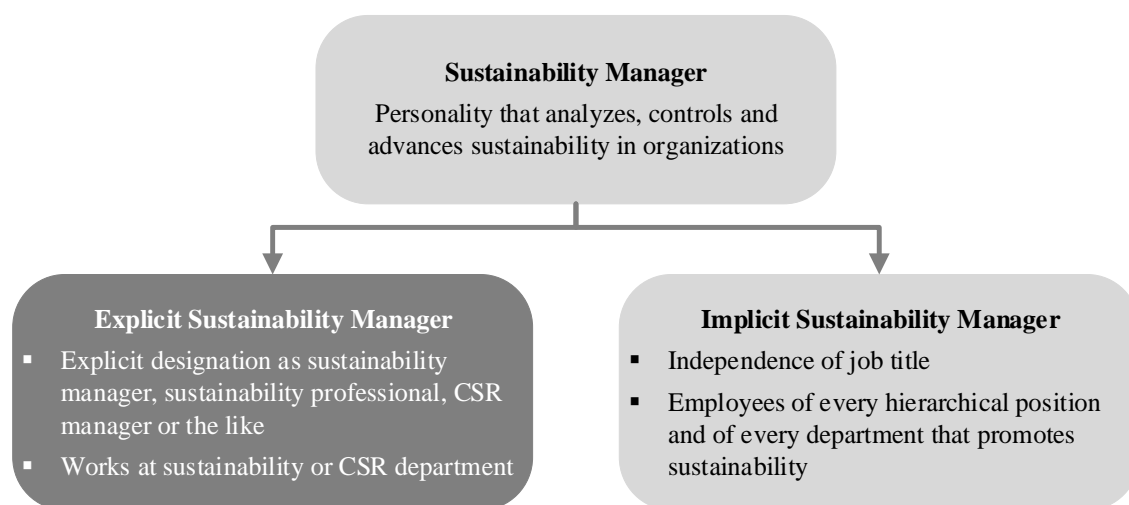

Sustainability Manager
Personality that analyzes, controls and advances sustainability in organizations

Explicit Sustainability Manager
- Explicit designation as sustainability manager, sustainability professional, CSR manager or the like
- Works at sustainability or CSR department

Implicit Sustainability Manager
- Independence of job title
- Employees of every hierarchical position and of every department that promotes sustainability

Figure 2.4:   Two types of sustainability managers
(Based on Hesselbarth, 2016, p. 157)

So, sustainability managers need to implement the thought of sustainability within the organization, its employees, strategies and processes. Their core task, as defined, is to identify deficits and provide innovative design offerings to eliminate the deficits or even further, to prevent the occurrence of further deficits. This implies that sustainability managers also have to deal with the unknown future (Blok et al., 2016) and their gaze has to go beyond the organization's boundaries (Leadbitter, 2010). They need to ask themselves what will happen in 10, 20 or 50 years (Waite, 2017).

Research on the concrete tasks of a sustainability manager is limited. On the one hand, books like Schneider and Schmidtpeter (2012) explain how CSR can be implemented and how sustainability managers can act to realize this interaction successfully. On the other hand, books like Lotter and Braun (2010) or Riess (2010) are practical handbooks explaining necessary qualities and problems a CSR manager might face and how to react. Also te Heesen (2013) provides insight in the work of a sustainability manager from the practical side of view. Nevertheless, generally spoken, the literature merely specifically addresses the sustainability manager, but rather explains the concept of CSR and sustainability and shows strategies how to implement it into the business strategy (Aldama, Amar, & Trostianki, 2009; Baumgartner, R. & Winter, 2014).

As mentioned before, the variety of opportunities to integrate sustainability into a business strategy is numerous. If the concept of sustainability is beyond enhancing an organization's reputation and image, it is important to turn these possibilities into effective strategies (Gabriel, 2007).

The field of activity the sustainability manager operates in is multifaceted and diversified. Leitschuh-Fecht (2006), Loew and Braun (2009), Lotter and Braun (2010), Loew and Rohde (2013) or Hesselbarth (2016) are some of the few authors who addressed the concrete job profile of a sustainability manager and listed some tasks they have to perform. Taking sustainability management theories as a starting point, Hesselbarth (2016) derives core tasks of a sustainability manager, as shown in Table 2.

Table 2:   A sustainability manager's job profile
          (Based on Hesselbarth, 2016, p. 163)

Core tasks of a sustainability manager:

(1)   Contribution to the development of a strategic vision and sustainability strategies

(2)   Identification of potentials for cost reduction, risk reduction, profit increase, employee motivation etc. (Business Cases for Sustainability)

(3)   Convincement of the top management of sustainability strategies, innovations, actions and projects

(4)   Measurement & evaluation of sustainability performance

(5)   Implementation, maintenance and continuous improvement of a sustainability management system (environmental and social management) and adjustment with other management systems

(6)   Initiation and promotion of sustainability innovations (products, processes, behaviours, etc.) and offering sustainable solutions in the core business (business model innovation)

(7)   Integration of sustainability aspects in the management of the entire value chain (Sustainable Supply Chain Management)

(8)   Support and advising of leaders, teams and implicit sustainability managers (broadening the knowledge base in the organization, implementing sustainability-related projects, value discourse, etc.); organization of cooperation

(9)   Collaboration with stakeholders and network management

(10)   Credible and substantial internal and external sustainability communication

The table shows that the tasks could hardly be more diverse and therefore more versatile, so it can be

stated that "the job profile of a sustainability manager is as complex as sustainability itself [translation

by the authors]" (Leitschuh-Fecht, 2006, p. 221). Due to the diversity of the various tasks of a sustaina-

bility manager, it is obvious that their corresponding competence[1] profile is also quite complex. Since

the competences are an essential part for identifying talents as the right persons for extremely important

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[1]   „[Competencies are] integrated performance oriented capabilities, which consist of clusters of knowledge structures and also cognitive, interactive, affective and where necessary psychomotor capabilities, and attitudes and values, which are conditional for carrying out tasks, solving problems and more generally, effectively functioning in a certain profession, organisation, position or role" (Mulder, 2001, p. 152).

positions in an organization (Hatipoglu, 2014), talent management should be interested in the question which competences a sustainability manager has to possess. In the following, we discuss this question.

In the last few years, the scientific literature was quite concerned with the competences of sustainability managers (Heiskanen et al., 2016; Lozano, Merrill, Sammalisto, Ceulemans, & Lozano, 2017). As a result, many competence profiles were developed (e. g. Bootsma & Vermeulen, 2011; De Haan et al., 2008; Dentoni et al., 2012; Heiskanen et al., 2016; Hesselbarth, 2016; Lozano et al., 2017; Osagie, Wesselink, Blok, Lans, & Mulder, 2016; Rieckmann, 2012; Roorda, 2010; Sharma, 2017; Thomas & Day, 2014; Wiek, Withycombe, & Redman, 2011). Overall, these competence profiles do not really differ in their general aspects, even though some of them are more compressed than others in terms of summarizing several competencies under an umbrella term. Although, the keynote of all these profiles is that a sustainability manager has to be an 'allrounder', covering a wide variety of requirements. Figure 2.5 serves as an example of a relatively new competence profile developed by Osagie et al. (2016). The peculiarity of the profile is the development on the basis of an intensive literature review on the one hand and an empirical study in form of interviews with sixty-eight sustainability managers on the other hand.

But, as we said before, a talent is more than just a cluster of different competencies. Likewise, the affective component matters when identifying talents. Accordingly, sustainability managers can only be considered as a talent if they are motivated to do their job and if they are personally interested in sustainability issues.
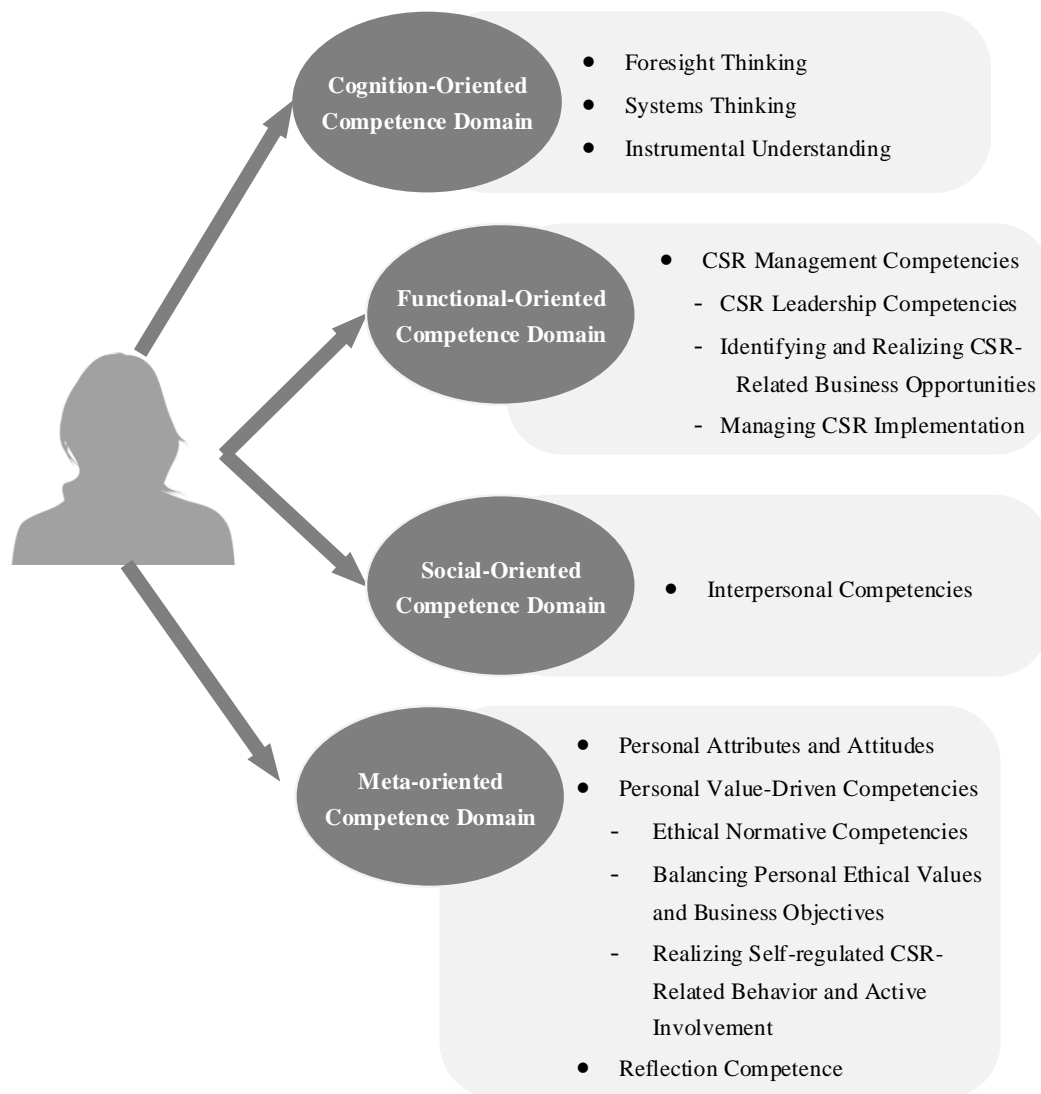
Cognition-Oriented Competence Domain
- Foresight Thinking
- Systems Thinking
- Instrumental Understanding

Functional-Oriented Competence Domain
- CSR Management Competencies
  - CSR Leadership Competencies
  - Identifying and Realizing CSR-Related Business Opportunities
  - Managing CSR Implementation

Social-Oriented Competence Domain
- Interpersonal Competencies

Meta-oriented Competence Domain
- Personal Attributes and Attitudes
- Personal Value-Driven Competencies
  - Ethical Normative Competencies
  - Balancing Personal Ethical Values and Business Objectives
  - Realizing Self-regulated CSR-Related Behavior and Active Involvement
- Reflection Competence

Figure 2.5:   Competence profile of a sustainability manager
             (Own illustration, based on Osagie et al., 2016)

In general, today's sustainability managers are mostly lateral entrants with a personal passion for sustainability (Lenzen, 2007). This is an important aspect, because organizations and sustainability managers need to fully engage themselves to the defined sustainability goals and not reject them if they get to complicated (Shrivastava & Hart, 1995). Moreover, most of them are usually very committed to their function and they represent strong sustainability related values and beliefs in personal life (Blomfield et al., 2016). Working in the field of sustainability gives them the possibility to interlink their personal values and beliefs with 'business as usual' which can be a source of satisfaction for them (Wright

& Nyberg, 2012). So, managers are often concerned with sustainability issues as part of the search for fulfilment in their job (Hoffman, 2010; Wright & Nyberg, 2012).

For example, Williams and Schaefer (2013) found out that the main motivation for engaging in environmental issues seems to be the ability to link personal beliefs and values. Nevertheless, "we still know little about what drives individuals to be sustainability managers, how this affects such individuals, and what they seek to achieve from their actions on a personal level" (Visser & Crane, 2010, p. 2). To address this issue, Visser and Crane (2010) conducted a qualitative study and had in-depth interviews with thirty sustainability manager of different sectors and hierarchy levels. They identified four types of sustainability managers: The Expert, the Facilitator, the Catalyst and the Activist. Figure 2.6 gives an overview of the four types and their associated key terms.

The Expert feels satisfied when they can contribute their technical expertise and solve problems, especially in terms of really tricky and specialised problems. They are proud of their professional knowledge and problem-solving abilities but can also get very frustrated if their opinion is ignored or their advices are held in low esteem. Basically, you could say that Experts are the nerd type of sustainability managers and feel pleased when they can puzzle over problems. *The Facilitator* capitalises more on interpersonal activities which means that facilitators feel satisfied when they can spread their vision into the workforce and convince other people. But they also want to share their knowledge with colleagues for empowering them to engage in sustainability issue. In this context, team spirit and solidarity are particularly important for them which is why they can become frustrated in terms of interpersonal conflicts. *The Catalyst* derives satisfaction from change. Catalysts like to be the steersman and to guide their organization to the right path. They have a vision and want to give strategic direction. The conviction of top management is thereby an essential aspect of their satisfaction. They feel very good in the moment the top management admits to themselves that the catalyst's advice is the right decision and even rational in terms of business.

A frustration factor for them is stagnation because stagnation means that they reached nothing. The main source of satisfaction and motivation of *the Activist* is the improvement of life of others. They feel as part of the community and follow basically the definition of sustainable development because they think about the future and try to achieve improvements. They are conscious of sustainability related problems in all three dimensions as well of their responsibility in solving these problems. Activists are pleased to see that they have achieved something, but on the other hand, they may also be frustrated when faced with their inadequate influence to make certain changes due to the complexity, scale or urgency of specific problems.

Ultimately, these four motivation types of sustainability managers provide important approaches for talent management in respect to the development and support of the affective component of a talent. In order to exhaust the full potential of sustainability managers, talent management not only has to be aware of their required competencies but also of their motivation and interest. Talent management can promote this affective aspect by creating the right framework conditions for each motivation type of sustainability managers. Since, only if they are appointed in the right position and experience support in their work, sustainability managers feel completely fulfilled in their work and deliver the performance expected from them as a talent. In case of non-motivating framework conditions, sustainability managers cannot be considered as talents because an important component of this concept is missing.
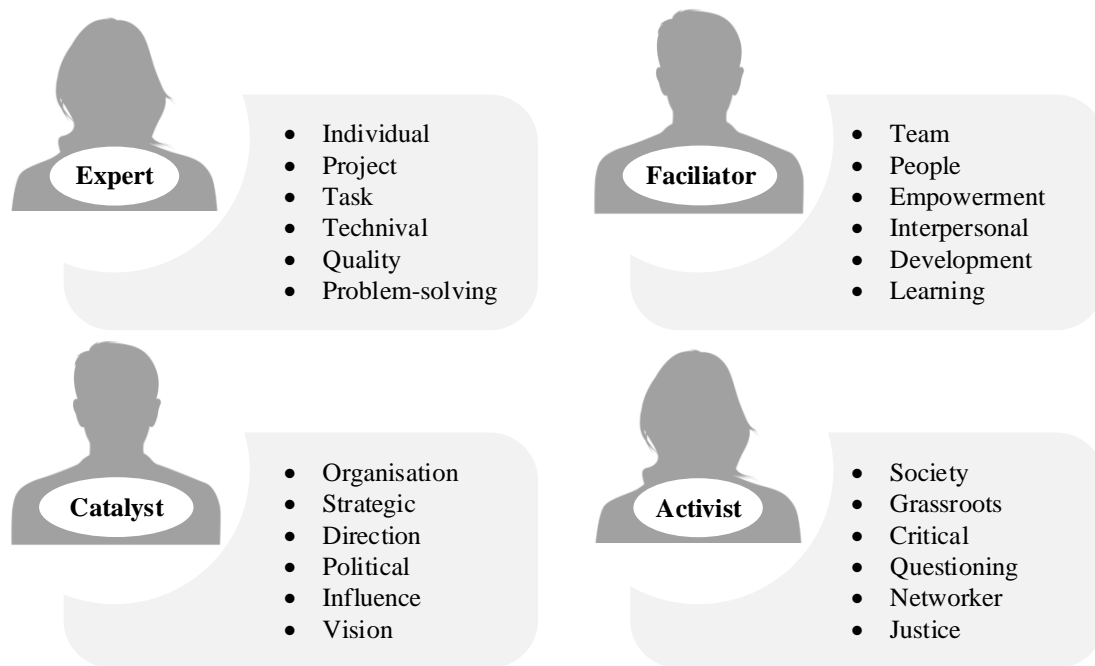
Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

Expert
- Individual
- Project
- Task
- Technival
- Quality
- Problem-solving

Faciliator
- Team
- People
- Empowerment
- Interpersonal
- Development
- Learning

Catalyst
- Organisation
- Strategic
- Direction
- Political
- Influence
- Vision

Activist
- Society
- Grassroots
- Critical
- Questioning
- Networker
- Justice

Figure 2.6:   Four motivation types of sustainability managers
(Own illustration, based on Visser & Crane, 2010)

3   Empirical study: Sustainability Managers in German Companies

In order to answer our two research questions, we chose a qualitative research approach in form of semi-structured interviews. The interview partners were sustainability managers of large-scale enterprises (see Table 3). Their selection followed the purposive sampling approach which compromises the selection of specific interviewees based on certain criteria. The criteria were set in the beginning, so we used the *a priori* method. We looked for companies that already pursue a sustainability strategy, feature a sustainability department and therefore, employ sustainability managers. The selection itself was non-sequential as the number of participants developed throughout our research process (Bryman, 2015). The final sample of interviewees is allowing insights into the German economy since it covers seven different industry branches.

Table 3:   Interview partner oversight
      (Own illustration)

Industry branch	Characteristics of the company	Numeration of the interview partner
Automotive	>250.000 employees - Stock quotation - Internationally established	SM1
Retail and Wholesale	>200.000 employees - Stock quotation - Internationally established	SM2
Chemical	- Apr. 112.000 employees - Stock quotation - Internationally established	SM3
Financial	- Apr. 10.000 employees - No stock quotation - National market	SM4
Retail	- Apr. 15.000 employees - Stock quotation - European Market	SM5
Consulting	>10.000 employees - No Stock quotation - Internationally established	SM6
Energy	- Apr. 60.000 employees - Stock quotation - Mostly National	SM7

The interview questions were based on the research questions and structured into three categories including nine questions overall:

1. Questions about the development of the sustainability manager as a profession (following the concept of Wilensky, 1964).

2. Questions regarding the position (e. g. necessary job requirements).

3. Questions regarding the job-related activities (e. g. job-specific tasks).

The interviews have been conducted in April 2017 and were set up for 20 minutes. We decided to realize all of them by phone caused by the large geographical distances and the resulting travel costs and time. We recorded all interviews and transcribed them word by word. For the qualitative data analysis, we developed a coding structure and clustered the given answers using the software tool MAXQDA (VERBI Software, 2016).

4 The Sustainability Manager: A Reality Check

The interviewees revealed their actions, experiences and future thoughts concerning the position and interpretation of the sustainability manager as well as the sustainability management department. This section evaluates the statements of the interview partners in order to answer our research questions.

Section 4.1 exclusively focusses on research question one:

Can sustainability management be considered as a key profession in an organization?

Section 4.2. to 4.4 try to answer our second research question:

How can talent management identify talents for the position of a sustainability manager?

4.1 Development of the Profession 'Sustainability Manager'

In order to answer the question if sustainability management can be considered as a key profession in organizations, we used the model of Wilensky (1964) as a framework for the first part of our interviews. In concrete, we asked our interview partners to give a statement on every single development step of a profession in view of their occupation as sustainability manager.

As already explained in section 2.2.2, the first development step is the *full-time job* aspect. All interview partners have been consistent that there are full-time sustainability managers or co-workers within their

firm. However, some sustainability managers also stated that not all sustainability workers have a full-time job.

> **SM3**: *"Yes, this is definitely true for me. There are also […] colleagues who don't do this full-time".*

One sustainability manager provided a possible reason for this and mentioned that this aspect depends on different criteria such as industry or the size of the organization.

> **SM6**: *"Yes, that's not always the case and depends on the industry and size [of the organization], etc.".*

In addition, two of them said that there are also employees of other departments who deal with sustainability in their daily work. These are no sustainability managers but they kind of work as a sustainability manager in part-time.

> **SM2**: *"[...]in this context, we have some colleagues who actually do quality management or something similar and deal only half, if not less, with sustainability [...]".*

> **SM5**: *"Yeah, I see the profession itself as an activity and these activities must actually be integrated into the professions. So, in the end, a purchaser has to live these topics".*

These statements reflect and confirm the assumption in literature that there are explicit and implicit sustainability managers.

The next development step towards a profession is *education*. This step is sub-classified into two categories. The first is the existence of *training schools* respectively of possibilities for job specific education and the second are specific *study courses* in terms of higher education. All of the interview partners have agreed to existing education opportunities for the sustainability manager job:

> *SM2: "There are also further training courses, such as …, not an MBA, but several further training courses on the subject of sustainability managers, these already exist".*

But they also agreed that they don't know about an educational institution which offers an apprenticeship as sustainability manager. In this context, one of them said that an apprenticeship wouldn't be sufficient to become a sustainability manager:

> *SM4: "No, teaching, I don't think teaching is enough either".*

On the other hand, all interview partners are familiar with specific study courses or electable study classes at universities. Although all are familiar with study courses, the statements vary.

> *SM1: "[...] I don't know about a 100% focus on sustainability now".*

> *SM7: "There are study courses. Few, but there are".*

One interview partner pointed out that required abilities can be achieved at a later point of one's career in trainings or seminars and that it is not necessary to have studied sustainability management.

> *SM2: "[...] but there is the point that you can still acquire [the abilities] subsequently [...] and you do not necessarily need further education [...]".*

Development steps four and five can be combined as they represent *arising associations*. As explained in section 2.2.2 different regions can be differentiated, e.g. local, national or even international. The answers to the question if there are professional associations have been very different. Some of the interview partners did not know any existing association. Others explained that there are different associations committed to sustainability related questions, but no one was able to name a specific one for sustainability managers only. One interview partner was able to give more detailed information:

> *SM6: "There is a professional association, you might say so, the VNU [Verband für Nachhaltigkeits- und Umweltmanagement e. V.]. And there is the VfU [Verein für Umweltmanagement*

und Nachhaltigkeit in Finanzinstituten e.V.], which is practically the professional association

for sustainability managers in the financial sector - and econsense is the professional associa-

tion for the DAX30 sustainability officers. But these are all not real professional associations in

the sense of a lobby, but rather professional exchange forums".

Development step number six towards the declaration as stand-alone profession is named '*occurring of*

state recognition'. Six of the eight interviewees concur that this development step has not been reached

yet. The interview partner of company two answered, that this only occurs for the educational program.

The last development step is known as the appearance of a specific *code of ethics*. All interview partners

answered, that they have no knowledge about the existence of a special code of ethics for sustainability

managers. Only one interview partner gave a brief reference to general codes:

> **SM1**: *"Well, there are basic principles, but I am not aware of special principles for this profes-*
> *sion".*

Ultimately, the answer to the question if sustainability management can be considered as a key profession

in organizations can only be given partially. With an exclusive reference to our interviews, we have to

state that some development steps of a profession are already made whereas some others are not or are
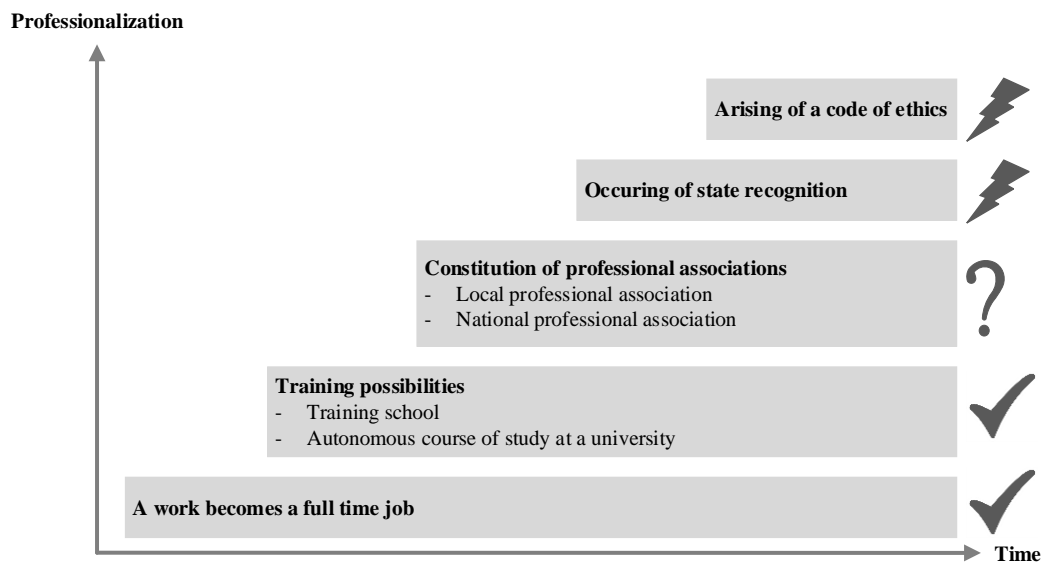
in progress (see Figure 4.1).

Figure 4.1:   Current state of the professionalization
(Own illustration, based on Mieg, 2015; Wilensky, 1964)

All interviewed sustainability managers agreed that there are full-time sustainability workers even if there are also other employees who work as an implicit sustainability manager and therefor part-time. Moreover, there are specific training possibilities for sustainability managers and actually some study courses. The answers regarding the professional associations varied. Some of the interviewed sustainability managers did not know about any associations whereas others stated that some associations exist although they were not able to name any of them. Dissident from our results of the interviews, it should be mentioned that there definitely are some sustainability manager exclusive associations, at least at the international level such as *The International Society of Sustainability Professionals.* Because of this, the question mark on development step three could be replaced by a checkmark. Nevertheless, the last two development steps to professionalization have not yet been made. However, sustainability management is well on the way to becoming a profession.

4.2 Necessary Competencies for Sustainability Management

In order to answer research question two, we investigated the postulated competence profile by Osagie et al. (2016) on the one hand and researched the firm-intern network of sustainability managers on the other hand. This section firstly focusses on the postulated competence profile.

The first competence domain is the cognition-oriented domain composed of the foresight thinking, the system thinking and the instrumental understanding. Foresight thinking refers to the anticipation of future developments in sustainability challenges and their critical reflection. Only two of the interviewed sustainability managers expressed themselves in terms of this competence. They said that a sustainability manager should always think in the long-term, especially in the context of the survivability of the organization:

> *SM2: "Well, there is this long-term thinking".*

> *SM6: "I am someone who contributes topics beyond financial goals and frameworks to the company which are important for the company's identity, its future and its public image. It's about the long-term existence which is secured by sustainability".*

Moreover, one of them considers the intuition for future demands as an important aspect:

> *SM6: "That someone has the right feeling to perceive and judge weak signals of future requirements and to initiate measures. In other words, to perceive and fend off or at least to channel the shitstorm before it even emerges".*

In consideration of the statements we get in our study, foresight thinking seems to be a competence which is only of low importance in the daily work of a sustainability manager because only two of seven mentioned it at all. This is a bit surprising due to the fact that the definition of sustainability involves the consideration of future generations.

System thinking compromises the recognition of systems and their subsystems as well as the understanding of interdependencies. Only one of our interview partners explicitly stated that systems thinking is important because of the different stakeholders and their potentially conflicting interests:

> **SM5**: *"I had to have an analytical, pragmatic thinking [...]. And a sort of systems thinking [because] there are different target groups that also have different interests and this has to be brought together"*.

In such a case, the sustainability manager has the task to bring all the stakeholder interests together in order to understand how they interact.

But there is another reason for systems thinking. If sustainability issues are not widely appreciated in an organization, the sustainability manager has to know which setscrew they have to turn in order to achieve their sustainability goals:

> **SM5**: *"I need to understand what is my goal and who do I need to achieve it"*.

Nevertheless, system thinking seems to have the same subsidiary role just as foresight thinking. This result is contrary to previous empirical study results where system thinking was considered as one the most important competencies (see Atwood et al., 2016; Juretzek, 2015; Willard et al., 2010).

The instrumental understanding as last competence of the cognition-oriented competence domain aims at the awareness, understanding and development of sustainability standards, regulations and rules. This competence was also only mentioned by one of the interview partners in the context of compliance issues and the perpetual modification of regulations:

> **SM5**: *"The issue of legal compliance, one of the biggest factors for anyone involved in CSR. Then, there is of course the topic of CSR reporting which is now obligatory for us from next year or this year. We certainly deal with this on a daily basis, so to speak"*.

Besides compliance issues, also the disparity of regulations in different countries was seen as a promoting fact for the necessity of instrumental understanding:

> *SM5: "And of course, [you have to] be poised to keep learning, because the topic also lives off legal issues and changes that are different for every country, e.g. at European level".*

However, even if the cognition-oriented competence domain has gained approval, it seems not to be of special importance in the daily work of sustainability managers.

The next competence domain is the functional-oriented domain containing CSR management competencies such as CSR leadership competencies, the identification and realization of CSR-related business opportunities and the management of the CSR implementation.

CSR leadership competencies are not to be understood in the sense of employee leadership, but in the sense of a function as a visionary. That means a sustainability manager must be able to develop a sustainability vision for the company and set the direction, even if it carries risks. Four out of seven interviewed sustainability managers stated about the function as an internal driver. Their main point was thereby the convincement of others:

> *SM4: "Because my job is to advise the company and to make certain things sustainable. I have to convince people".*

The identification and realization of CSR-related business opportunities means that a sustainability manager must have a level of entrepreneurial understanding and industry-specific knowledge to be able to identify and exploit sustainability-related business opportunities. Specifically, they have to identify trends without losing his long-term view. According to the interview statements, one important point in this context is also the practicability of sustainability solutions. So, the best idea is worth nothing if it is not feasible for the company's overall business:

> *SM5*: *"I had to have analytical, pragmatic thinking, i.e. be able to provide economic solutions for the company's sake or be able to offer some which can be implemented in the end"*.

Besides that, one interviewee stated that entrepreneurial behaviour will be of high relevance in the future of sustainability managers:

> *SM3*: *"By the time my successor is sought someday, then entrepreneurial behaviour is definitely super important for my position"*.

Collectively, three out of seven interview partners spoke on the identification and realization of CSR-related business as necessary competence of sustainability managers.

Managing CSR implementation involves the concrete implementation of proposals for achieving a sustainable development. Sustainability managers need to translate their vision into concrete goals, milestones and actions while motivating others to participate and reducing resistance to change. This expertise also includes aspects such as meeting timeframes or a prescribed budget. Three out of seven interview partners talked about aspects in the same context, but only one explicitly mentioned this competence as important:

> *SM3*: *"And otherwise, I think the most important quality was communication and organization ability"*.

In consideration of our qualitative study, the functional-oriented competence domain seems to be of moderate importance compared to the cognition-oriented competence domain.

The third competence domain is the social-oriented domain in form of interpersonal competencies which is mainly about communication and networks. Generally, sustainability managers should be able to build networks both inside and outside the organization to facilitate the realization of sustainability

measures through personal relationships. In addition, they should also be able to deal with different cultures, to consider other ideas in discussions and to communicate the interests of the company to the outside world.

This competence was of special interests for us due to the results of previous research which showed that communication is a huge aspect of the daily work of sustainability managers. Indeed, every interview partner has expressed the importance of interpersonal competence in some way or another.

Whereas some focussed on the ability to step up to different stakeholder others explicitly referred to the importance of a wide network inside and outside of the organization:

> **SM5**: *"I have to be able to deal with different target groups and contact persons, from internal to NGO's, suppliers, etc., because there are many different people involved. Communication skills are important [...]".*

> **SM6**: *"I was already part of various networks in the company at that time and this is certainly an important point for the sustainability officer, in the sense of 'being above it all'. You have to be very well connected in the company. Because you often have to get information outside the usual, established communication channels and to ad hoc address people for support beyond the normal agreement ways".*

> **SM6**: *"You should also be well connected to the external scene, because the argument 'look at our competitors now do this and that' is always a good argument".*

But also, diplomacy and the empathy to others were considered as necessary competencies:

> **SM1**: *"Perserverance. assertiveness and diplomacy."*

> **SM7**: *"He must [...] have diplomatic skills".*

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

> **SM5**: *"You have to be able to walk up to people, I have to be able to listen, understand what certain problems are, what drives respective people".*

Within the scope of our interviews, the interpersonal competence and especially the communication aspects were mentioned more than one time by each of the interviews partners. So, it can be stated in line with previous study results that communication is a highly relevant competence of sustainability managers.

The meta-oriented competence domain comprises a total of three different competences. The first is the use of personal qualities and attitudes. In general, a sustainability manager has to deal with many interest groups and wants to cause change. In this attempt, they are also often faced with resistance which has to be overcome, even with the help of his personal qualities and attitudes. These include, for example, patience, resilience, flexibility, a realistic attitude, pragmatism, capacity for innovation, empathy and a positive attitude.

Five out of seven interviews partners stated about different personal attitudes to be important in their daily work such as perseverance, assertiveness, tenacity and diplomacy. Besides these attitudes, the ability to cope with backstrokes and not to be scared of failure are also important. So, a sustainability manager should not be frustrated quickly:

> **SM2**: *"Well, you need a certain perseverance and you also have to deal with setbacks, or even if things just come to a standstill, you just have to be able to deal with it, you shouldn't necessarily let that put you off. Sustainability is a long-term issue and even if it is not implemented overnight, but in a year, I maybe succeed."*
>
> **SM4**: *"The most important characteristic was a certain tolerance for frustration."*

However, regarding the interviewee statements, perseverance can be definitely considered as the most important competence of a sustainability manager within our study results.

The second competence in the meta area is the contribution of personal values, which is divided into three sub-competences. First of all, a sustainability manager should dispose of the ethically normative competence. Specifically, this includes the intrinsic motivation for solving sustainability problems and promoting sustainable development, as well as the use of the resulting personal values and standards.

Above all, the passion for sustainability was an important issue for three of the managers we interviewed. They said that you have to fight for things that you stand for and that the pure ability to discuss is only partially useful if you are not convinced of your statements:

> *SM5: "And I think the most important thing is to burn for this issue; to contribute to responsible behavior."*

> *SM6: "Well, I think we should of course be fundamentally convinced of the idea of sustainability, even if we can discuss what it actually is."*

In addition to the ethical normative competence, balancing personal ethical values and business goals is also part of the contribution of personal values. This competence is about the decision dilemma that arises when trying to consider all three sustainability dimensions simultaneously. Basically, a sustainability manager has to inevitably pursue economic targets, but they should never ignore their personal ethical values or exceed ethical limits.

In our interviews, only one sustainability manager talked about the balance between personal ethical values and business goals. Surprisingly, he has said a bit the opposite of what is said in the literature. One should rather change down a gear in relation to his personal values, because the main thing is to have economic arguments:

> **SM6**: *"But you should not be fanatical under any circumstances. It's important to keep your moral pointing finger at home. One should have conviction competence which is based more on 'that also makes economic sense' or 'that is also an important aspect from the point of view of reputation'"*.

The final sub-competency is the demonstration of self-regulated sustainability-related behaviour and active participation. This competence is also understood as „the congruence between what you stand for, what you say, and what you do" (Osagie et al., 2016, p. 247).

We cannot confirm this competence because none of our interview partners commented on it. Also, the last competence in the meta area, the reflection competence, best described as learning from mistakes, cannot be confirmed for this reason.

All in all, the cognition-oriented competence domain (foresight thinking, systems thinking and instrumental understanding) seems to be of low importance whereas the functional-oriented competence domain (CSR leadership competencies, identification and realization of CSR-related business opportunities and management of the CSR implementation) is a bit more important. Our results on the social-oriented competence domain (interpersonal competence) are consistent with previous research findings and show that communication and networks are essential for the work of a sustainability manager. The importance of the meta-oriented competence domain (personal attributes and attitudes, personal value-driven competencies, reflection competence) is torn. On the one hand, personal attributes and attitudes seem to be highly relevant and the ethical normative competence as well as balancing personal values with business objectives as part of the personal value-driven competencies at least of moderate importance. On the other hand, the realization of self-regulated CSR-related behaviour and active involvement and also the reflection competence seem to be irrelevant.

4.3 The Sustainability Manager's Internal Network

Apart from the competence profile, we also investigated the firm-intern network of sustainability managers in order to answer research question two. Since previous studies on competencies of sustainability managers reveal that communication is an essential aspect in their daily work (e. g. Atwood et al., 2016; Thomas, Barth, & Day, 2013; Willard et al., 2010). Basically, a wide network could be a possible reason for this and would support the importance of communication skills as part of the interpersonal competence.

Well, already the statements from our interviewed sustainability managers to other questions seem to confirm this assumption because they explicitly mentioned the importance of having large networks:

> **SM2**: *"I do a lot of networking to place the topic"*.

> **SM6**: *"I got the position because I had the most knowledge and because I have a very good network in the company, precisely because I have been here for so long"*.

Generally, looking at large-scale organizations shows, numerous departments by different sizes and all these departments need to work together just like a clockwork, because this is the only way an organization can exploit its full potential.

Thereby, the position of a sustainability manager can be considered as cross-sectional position, so the sustainability manager virtually acts like a diplomat between the different departments:

> **SM7**: *"So, [I am] a diplomat […]. This is really a cross-section task, because it is not an autonomous topic"*.

One sustainability manager gave a very interesting answer, to the question with which other department the most exchange takes place: Basically, he is in contact with all departments of the organization and it depends on the current topic to which departments he is mostly in contact with:

> *SM7: "I almost said with everyone. If you look at the sustainability report, it describes the entire company and management approaches and ratios are discussed. That's why there's hardly any area I don't work with, and actually none of them stands out. It depends on the company's focal points regarding sustainability. If an environmental issue takes the centre stage, then the environmental people. But this basically changes with the topics. We are in contact with all areas of the company, from accounting to the operating units. It's really manifold".*

This statement exemplifies the variety of different departments the sustainability manager needs to stay in contact with. And also, the sheer number of concrete departments mentioned by the interview partners show that it is really difficult for them to choose the mostly contacted departments:

> *SM4: "We are on exchange with 30 out of 40 departments. And then, there are those with whom we have more intensive exchange, and now you want to know with whom the most, but you can't just say that".*

Altogether, our interviews partners named thirteen departments of their organizations with which they are in contact the most. Procurement, marketing and corporate communication are just some examples. Figure 4.2 illustrates all departments a sustainability manager stays in connection with, and also the intensity denoted by the shading and the size of the boxes (larger and darker for higher intensity). The numbers in brackets represent how many interview partners mentioned a connection with this department.

One can see that procurement, corporate communication, human resource management, environmental management and quality management are the most important departments in the wide network of a sustainability manager. Procurement is that important due to the fact that many sustainability-related problems already occur right in the beginning of the product life cycle, for example due to the usage of conflict minerals. As sustainability managers are in contact with the procurement departments, they are able to

get down to the root of the trouble. Corporate communication is a vital department because there is more and more stakeholder pressure on the organizations and the customers begin to put emphasis on sustainability issues. So, the communication department is reliant on the information given by the sustainability manager in order to assure the stakeholders that the organization integrates sustainability in their strategy. The human resource management is in general responsible for the social sustainability aspects like working safety or equitable wage policy, so accordingly it is inevitable to be in contact with this department as a sustainability manager.

Conversely, the environmental management department is responsible for the environmental sustainability aspects like water pollution owing to the dumping of chemical substances in rivers or lakes. The quality management department has, like the name says, to secure the quality of the organization's products. Since the quality - for example - influences the durability of products, it is important with regard to the production of waste etc.
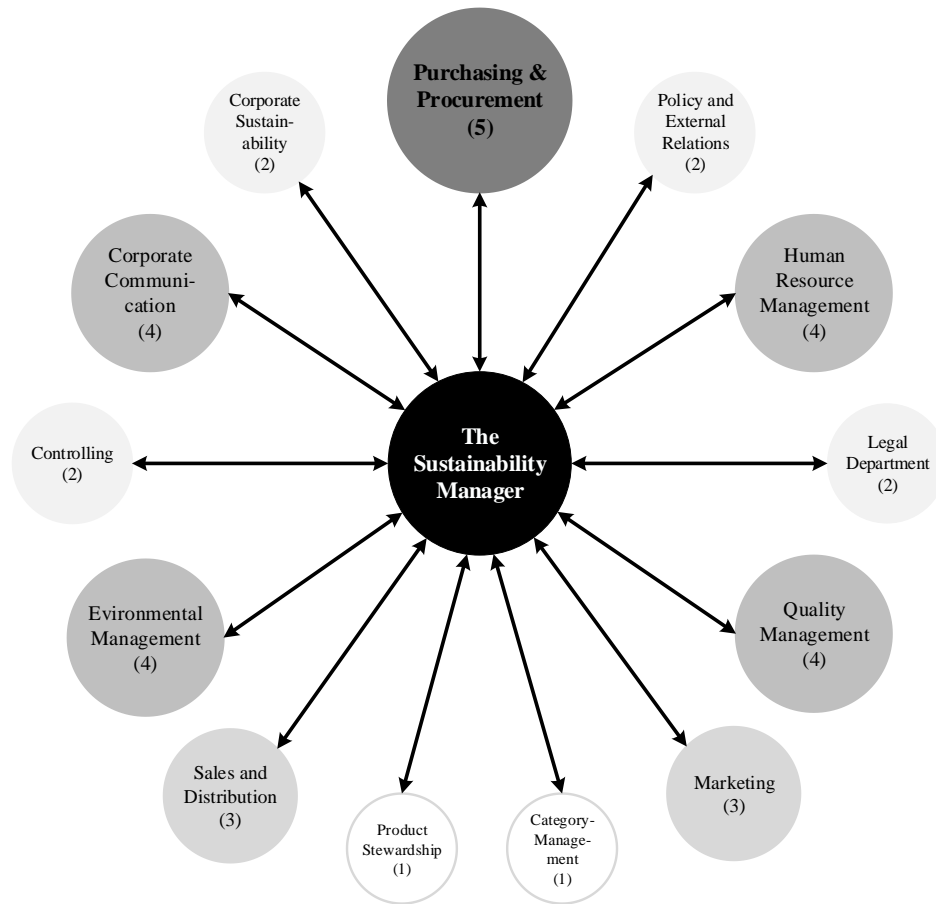
Figure 4.2:   Network of a sustainability manager
                (Own illustration)

To sum up, it can be underlined that a sustainability manager has a wide network inside the organization,

so consequently communication is an essential competence, just like previous research, and also our own

study confirmed.

5   Implications for Talent Management

The connection between talent management and the position of a sustainability manager is a whole new research strand. The search for scientific literature considering this topic yields almost no results although the general connection of human resource management and sustainability respectively CSR is well researched. It is not only for this reason that the results of our study provide some first and important implications for talent management concerning the position of a sustainability manager.

Since recruitment is one part of talent management, employer branding[2] and in line with that, also employer attractiveness are important cues (Maheshwari, Gunesh, Lodorfos, & Konstantopoulou, 2017). However, a study by Ewerlin (2013) showed that talent management does not have per se a positive influence on employer attractiveness but rather it depends on the contents whether talent management has a positive impact or not. In this context, a high extent of literature reveals that an organization's activities regarding CSR and sustainability in general foster employer attractiveness and reputation (e.g. Dögl & Holtbrügge, 2013; Greening & Turban, 2016; Jones, Willness, & Madey, 2014; Klimkiewicz & Oltra, 2017; Tkalac Verčič & Sinčić Ćorić, 2018). One reason for that is the perceived value fit of a person with an organization (Backhaus, Stone, & Heiner, 2016; Jones et al., 2014; Puncheva-Michelotti et al., 2018) which gains more and more importance due to the rising awareness of the society regarding sustainability. Accordingly, an organization employing fulltime sustainability managers implies the significance of sustainability in that organization which in reverse can increase employer attractiveness. Thus, talent management should explicitly communicate the fulltime status of sustainability managers

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[2]   An "employer brand represents the total benefits an employer offers its employees, with the aim to improve employer attractiveness to current and prospective employees" (Puncheva-Michelotti, Hudson, & Jin, 2018, p. 644).

externally in order to attract not only talents for the sustainability department but also for other important positions in the organization.

Besides the engagement in sustainability issues, also the offer of training and development activities is an essential factor of employer attractiveness (App, Merk, & Büttgen, 2012; Grobe, 2003; Terjesen, Vinnicombe, & Freeman, 2007). Since our study showed that training possibilities in the field of sustainability management exist, talent management should offer and advertise training and development opportunities in order to recruit talents. Also in this connection, this could not only attract talents for the sustainability department but also for other areas of the organizations as far as potential employees are interested in sustainability. Moreover, considering the existing training possibilities talent management should pay heed for specially educated persons when hiring employees for the sustainability department to ensure the adequate staffing of these important positions in the organization. The very reason is that a sustainability manager has a more demanding competence profile than a conventional manager (Hesselbarth & Schaltegger, 2014).

Regarding the necessary competencies of sustainability managers, our study revealed the high status of communication skills. Thus, in the recruitment process talent management should pay attention to potential additional qualification of applicants in soft skills such as the qualifications as a moderator for example. In addition, the organization could perform assessments focused on soft skills to ascertain the suitability of an applicant to the position of a sustainability manager. Moreover, talent management should also offer training possibilities for communication skills for existing talents within the organization. Considering the assessment of interpersonal skills, personal traits and attitude assessments could also be helpful in identifying qualified sustainability managers, as our interviews have shown that a positive attitude to sustainability and attributes such as perseverance are essential.

Beyond that, it has also been shown that personal values should not be neglected in case of the search for sustainability talents. This means for talent management that it has to ascertain if candidates for the position of a sustainability manager really have the passion for promoting sustainability within an organization. This could be done by having a look at the engagement on sustainability related topics in private life of applicants. One can assume that someone who is really interested in this subject also commits oneself to sustainability outside the workplace.

In our empirical study, we also investigated the organization's intern network of a sustainability manager and found out that in general, networking is crucial for the position of a sustainability manager and that they are not only in contact with many departments of the organization but also with many external stakeholders and business partners. These connections are that important because sustainability is a wide ranged topic and is influenced by many different factors wherefore sustainable development and innovation is only possible through collaboration (Adams, 2016; Hojnik & Ruzzier, 2016; De Marchi 2012). This results in several implications for talent management. First of all, talent management should not only recruit sustainability talents outside the organization if there is a position to be staffed but also inside the organization. There might be employees who bring along the necessary competences, attributes and attitudes and in addition, have a wide intern network due to their long-time tenure in the organization. In the first instance, external persons cannot fulfil this necessity. Nevertheless, external parties can also have their advantages, which talent management should not underestimate when it comes to the identification of sustainability talents. Talent management should contemplate the recruitment of persons who had a number of particularly diverse jobs because this automatically means a bigger external network. Furthermore, also personal contacts thanks to previous jobs could be beneficial.

6 Summary and Outlook for Future Research

The aim of our work was to explore the role that sustainability managers play within talent management while answering two specific research questions. First of all, we investigated the question whether sustainability management can be considered as a key profession in an organization. Besides, we wanted to build a framework of how talent management can identify talents for the position of a sustainability manager.

In order to answer these questions, we conducted interviews with present sustainability managers in Germany to get insights on two concrete aspects: the sustainability management as a standalone profession and important competencies for the position of a sustainability manager including his network within the organisation. .

The examination of sustainability management as a standalone profession, which was based on the development model of a profession by Wilensky (1964) showed that so far, only the first two steps can be considered as completed in the German context. Regarding the required competencies as one aspect of a talent, the interviews showed that interpersonal competencies in form of communication are highly important for the position of a sustainability manager. Our investigation of a sustainability manager's internal network supported this finding. The statements of our interview partners revealed that they are in permanent contact with many other departments, making communication inevitably important. Not only communication skills are important but also personal attributes and attitudes are highly relevant for sustainability managers. Besides, also the functional-oriented competence domain (CSR leadership competencies, identification and realization of CSR-related business opportunities and management of the CSR implementation) as well as the ethical normative competence and balancing personal values with business objectives as part of the personal value-driven competencies are unneglectable.

Outlook

Discussing the development of the profession 'sustainability manager' leads to the question whether the position of a sustainability manager should be close to the organizational management board or rather be located in an own department. This seems especially relevant regarding the very complex and extensive competence profile of a sustainability manager because one could assume that a board close position cannot cover all required knowledge, making a sustainability department with several experts in different fields necessary. In this context, studies reveal that the existence of a Corporate Sustainability Officer (CSO) as part of an organization's top management team does not necessarily entail an increased sustainability performance but rather has a symbolic character (e.g. Kanashiro & Rivera; Peters, Romi, & Sanchez, 2018). Further research should therefore investigate the optimal localization of sustainability managers in organizations and their potential influencing factors.

Besides, even if sustainability management is well on its way to becoming a profession, the question of whether the development will be completed at some point still remains open – mainly because sustainability managers themselves do not agree on that (Hatipoglu, 2014; Trancripts). Some sustainability managers see their position only as a career stepping stone and not as a long-term job. Future research should investigate how talent management can contribute to making the position of sustainability manager more attractive in order to ensure the long-term filling of such an important position.

Moreover, the consideration of the sustainability manager position as a career stepping stone instead of a long-term job could be associated with the struggle of sustainability managers' recognition and appreciation in their organizations. For example, one interviewee stated that becoming a sustainability manager comes along with the loss of previous acceptance within the organization (SM6). In line with this, a study by Carollo and Guerci (2017) highlights the different rhetorics used by sustainability managers in order

to justify their existence. They conclude that due to the not completely established position of sustainability managers, they have to speak the language of business for being supported by the top management. They even refrain from describing themselves as idealists because this potentially amplifies their status as a misfit. As a result, future research could shed light on ways for HRM and talent management to foster appreciation and recognition for sustainability managers in organizations.

Besides our investigation of the development of the sustainability manager profession, the analysis of the sustainability manager as s talent also provides some indications for further research.

Considering the ability component of a talent it can be declared that despite the amount of literature about a sustainability manager's competencies, researchers still do not agree on which competences are most important (Barth, Godemann, Rieckmann, & Stoltenberg, 2007; Rieckmann, 2012). However, there is a broad consensus that sustainability managers require different skills than conventional managers and that their competence profile is more demanding (Hatipoglu, 2014; Hesselbarth & Schaltegger, 2014). For this reason, further research into the core competences of a sustainability manager is considered necessary. Within the scope of our study, interpersonal competencies seemed to be most important while other competencies such as foresight thinking seemed to be of low importance. A possible reason for the apparent unimportance of some competencies might stem from individual perception. This means that individuals may recall big emotions or exhausting situations more in detail and therefore only mention competencies like perseverance, thereby passing over other important aspects of daily work or basic requirements. Foresight thinking for example could be such a basic requirement. This competence is possibly taken for granted or an ability seen as precondition for choosing the sustainability manager job in the first place and not kept in mind when being asked about important competencies. Whether this is indeed a blind spot in the self-perception of competencies by sustainability managers could be investigated in empirical studies.

The high relevance of communication skills which was revealed by previous research (e. g. Atwood et al., 2016; Thomas et al., 2013; Willard et al., 2010) and also our study led us to the investigation of the sustainability manager's network. However, our study only examined the internal network of a sustainability manager. Future research could take a closer look at the external network of a sustainability manager and identify possible relevant actors. Crane and Glozer (2016) for example highlight the bridge between CSR communication and networks, especially in the context of external stakeholders. Here, the role of professional associations could be further explored.

A further area of research could also explore the collaboration competencies for sustainability-related innovations. We know from previous research that companies benefit from collaborations to a large extend – the role of sustainability managers as agents for sustainability transformations is under-explored (Adams et al., 2016; Ankrah et al., 2013)

While we have investigated only the ability part of a talent (competencies), future research could investigate the second component (interest & motivation). Visser and Crane (2010) already consign a good starting point by illustrating different motivation types. Further research could expand this topic and address the question how talent management could identify or even strengthen the different motivation types. This becomes eminently important when contemplating the possibility of fraud in sustainability, an aspect already determined by Steinmeier (2016). He also leaned on the motivations types by Visser and Crane (2010) and stated that "for some of them (e.g. the catalyst) ethical considerations are not the main driver for working in this field" and that "cases of sustainability fraud are quite likely to happen" (Steinmeier, 2016, p. 480/490).

All in all, we expect to see many fruitful attempts for research on sustainability managers and their role in organizations.

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

References

Abbott, A. (1988). *The system of professions: an essay on the division of expert labor*. Chicago, IL: University of Chicago Press.

Abbott, A. (1991). The order of professionalization: an empirical analysis. *Work and Occupation*, *18*, 355–384. https://doi.org/10.1177/0730888491018004001

Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-Oriented Innovation: A Systematic Review. *International Journal of Management Reviews*, 18(2), 180–205. https://doi.org/10.1111/ijmr.12068

Adamsen, B. (2014). Do we really know what the term "talent" in talent management means? And what could be the consequences of not knowing? *Philosophy of Management*, *13*(3), 3–20. https://doi.org/10.5840/pom201413314

Aldama, L., Amar, P., & Trostianki, D. (2009). Embedding corporate responsibility through effective organizational structures. *Corporate Governance: the International Journal of Business in Society*, *9*, 506–516. https://doi.org/10.1108/14720700910985043

Allen, J. H., Beaudoin, F., Lloyd-Pool, E., & Sherman, J. (2014). Pathways to sustainability careers: building capacity to solve complex problems. *Sustainability: the Journal of Record*, *7*, 47–53. https://doi.org/10.1089/SUS.2014.9817

Ankrah, S. N., Burgess, T. F., Grimshaw, P., & Shaw, N. E. (2013). Asking both university and industry actors about their engagement in knowledge transfer: What single-group studies of motives omit. Technovation, 33(2-3), 50–65. https://doi.org/10.1016/j.technovation.2012.11.001

App, S., Merk, J., & Büttgen, M. (2012). Employer branding: sustainable HRM as a competitive advantage in the market for high-quality employees. *Management Revue*, *23*, 262–278. https://doi.org/10.1688/1861-9908_mrev_2012_03_App

Atwood, D. F., Coperine, K., & Hart, M. (2016). Current trends in hiring sustainability professionals. *Sustainability: the Journal of Record*, *9*, 193–199. https://doi.org/10.1089/SUS.2016.29056.dfa

Backhaus, K. B., Stone, B. A., & Heiner, K. (2016). Exploring the relationship between corporate social performance and employer attractiveness. *Business & Society*, *41*, 292–318. https://doi.org/10.1177/0007650302041003003

Barth, M., Godemann, J., Rieckmann, M., & Stoltenberg, U. (2007). Developing key competencies for sustainable development in higher education. *International Journal of Sustainability in Higher Education*, *8*, 416–430. https://doi.org/10.1108/14676370710823582

Baumgartner, R., & Winter, T. (2014). The sustainability manager: a tool for education and training on sustainability management. *Corporate Social Responsibility and Environmental Management*, *21*, 167–174. https://doi.org/10.1002/csr.1313

Baumgartner, R. J., & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*, *140*, 81–92. https://doi.org/10.1016/j.jclepro.2016.04.146

Berndt, D. (2011). *Professionalisierungsbestrebungen im Coaching: (Re-)Konstruktion von Forschungsansätzen [Professionalization efforts in coaching: (re-)construction of research approaches]*. München, Germany: Rainer Hampp Verlag.

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

Blok, V., Gremmen, B., Wesselink, R., & Painter-Morland, M. (2016). Dealing with the Wicked Problem of Sustainability in Advance: The Role of Individual Virtuous Competence. *Business and Professional Ethics Journal.* Advance online publication. https://doi.org/10.5840/bpej201621737

Blomfield, J. M., Troth, A. C., & Jordan, P. J. (2016). Emotional thresholds and change agent success in corporate sustainability. In N. M. Ashkanasy, C. E. J. Härtel, & W. J. Zerbe (Eds.), *Emotions and organizational governance* (pp. 191–216). Bingley, England: Emerald Group Publishing Limited.

Bootsma, M., & Vermeulen, W. (2011). Experiences of environmental professionals in practice. *International Journal of Sustainability in Higher Education*, *12*, 163–176. https://doi.org/10.1108/14676371111118219

Bryman, A. (2015). *Social research methods* (5th ed.). Oxford: England.

Carollo, L., & Guerci, M. (2017). Between continuity and change: CSR managers' occupational rhetorics. *Journal of Organizational Change Management*, *30*, 632–646. https://doi.org/10.1108/JOCM-05-2016-0073

Collings, D. G., & Mellahi, K. (2009). Strategic talent management: a review and research agenda. *Human Resource Management Review*, *19*, 304–313. https://doi.org/10.1016/j.hrmr.2009.04.001

Collings, D. G., Scullion, H., & Vaiman, V. (2015). Talent management: progress and prospects. *Human Resource Management Review*, *25*, 233–235. https://doi.org/10.1016/j.hrmr.2015.04.005

Crane, A., & Glozer, S. (2016). Researching corporate social responsibility communication: themes, opportunities and challenges. *Journal of Management Studies*, *53*, 1223–1252. https://doi.org/10.1111/joms.12196

De Haan, G., Kamp, G., Lerch, A., Martignon, L., Müller-Christ, G., & Nutzinger, H. G. (2008). *Nachhaltigkeit und Gerechtigkeit: Grundlagen und schulpraktische Konsequenzen [Sustainability and justice: basic principles and practical consequences for schools]*. Berlin, Germany: Springer.

De Marchi, V. (2012). Environmental Innovation and R&D Cooperation: Empirical Evidence from Spanish Manufacturing Firms. *Research Policy*, 41(3), 614–623. https://doi.org/10.1016/j.respol.2011.10.002

Dentoni, D., Blok, V., Lans, T., & Wesselink, R. (2012). Developing human capital for agri-food firms' multi-stakeholder interactions. *International Food and Agribusiness Management Review*, *15*(A), 61–68. Retrieved from https://ifama.org/resources/Documents/v15ia/Dentoni-Blok-Lans-Wesselink.pdf

Dögl, C., & Holtbrügge, D. (2013). Corporate environmental responsibility, employer reputation and employee commitment: An empirical study in developed and emerging economies. *The International Journal of Human Resource Management*, *25*, 1739–1762. https://doi.org/10.1080/09585192.2013.859164

European Commission. (2011). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Commitee and the Commitee of the Regions: A renewed EU strategy 2011-14 for corporate social responsibility. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0681&from=EN

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

Evetts, J. (2003). The sociological analysis of professionalism: occupational change in the modern world. *International Sociology*, *18*, 395–415. https://doi.org/10.1177/0268580903018002005

Evetts, J. (2014). The concept of professionalism: professional work, professional practice and learning. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning* (pp. 29–56). Dordrecht, the Netherlands: Springer.

Ewerlin, D. (2013). The influence of global talent management on employer attractiveness: an experimental study. *German Journal of Human Resource Management*, *27*, 279–304. https://doi.org/10.1177/239700221302700306

Gabriel, S. (2007). Verantwortungsvolle Unternehmensführung heute [Responsible corporate management today]. In E. Lenzen (Ed.), *Berufsbild CSR-Manager [CSR-manager's occupational profile]* (pp. 9–13). Münster, Germany: Macondo.

Gallardo-Gallardo, E., Dries, N., & González-Cruz, T. F. (2013). What is the meaning of 'talent' in the world of work? *Human Resource Management Review*, *23*, 290–300. https://doi.org/10.1016/j.hrmr.2013.05.002

Greening, D. W., & Turban, D. B. (2016). Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & Society*, *39*, 254–280. https://doi.org/10.1177/000765030003900302

Grobe, E. (2003). *Corporate Attractiveness - eine Analyse der Wahrnehmung von Unternehmensmarken aus der Sicht von High Potentials [Corporate attractiveness - an analysis of the perception of corporate brands from the perspective of high potentials]* (HHL-Arbeitspapier Nr. 50). Retrieved from HHL – Leipzig Graduate School of Management website: https://www.hhl.de/fileadmin/texte/publikationen/arbeitspapiere/hhlap0050.pdf

Hatipoglu, B. (2014). Sustainability management: a new career path? In C. Higgins & J. R. Hendry (Eds.), *Proceedings of the 25th Annual Conference of the International Association for Business and Society (IABS): reclaiming the societal dimension* (25th ed., pp. 238–248). Sydney, Australia.

Heiskanen, E., Thidell, Å., & Rodhe, H. (2016). Educating sustainability change agents: the importance of practical skills and experience. *Journal of Cleaner Production*, *123*, 218–226. https://doi.org/10.1016/j.jclepro.2015.11.063

Hesselbarth, C. (2016). Was muss ein Nachhaltigkeitsmanager können? Kompetenzen in der akademischen Aus- und Weiterbildung im Nachhaltigkeitsmanagement [What does a sustainability manager need to be able to do? Competences in academic education and training in sustainability management]. In R. Antes, M. Müller, & B. Siebenhüner (Eds.), *Umweltmanagement im Nachhaltigkeits- und Verhaltenskontext: Festschrift für Hans-Ulrich Zabel [Environmental management in the context of sustainability and behavior: Festschrift for Hans-Ulrich Zabel]* (pp. 155–172). Marburg, Germany: Metropolis-Verlag.

Hesselbarth, C., & Schaltegger, S. (2014). Educating change agents for sustainability – Learnings from the first sustainability management master of business administration. *Journal of Cleaner Production*, *62*, 24–36. https://doi.org/10.1016/j.jclepro.2013.03.042

Hoffman, A. J. (2010). *Reconciling professional and personal value systems: the spiritually motivated manager as organizational entrepreneur* (Working Paper No. 1363). Retrieved from University of Michigan website: https://deepblue.lib.umich.edu/handle/2027.42/136212

Hojnik, J., & Ruzzier, M. (2016). What Drives Eco-Innovation? A Review of an Emerging Literature. *Environmental Innovation and Societal Transitions*. (19), 31–41. https://doi.org/10.1016/j.eist.2015.09.006

Huselid, M. A., Beatty, R. W., & Becker, B. E. (2005). "A players" or "A positions"? The strategic logic of workforce management. *Harvard Business Review*, *83*(12), 110–117. Retrieved from https://hbr.org/2005/12/a-players-or-a-positions-the-strategic-logic-of-workforce-management

Jones, D. A., Willness, C. R., & Madey, S. (2014). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, *57*, 383–404. https://doi.org/10.5465/amj.2011.0848

Juretzek, S. (2015). Die Bewältigung von Corporate Sustainability-Dilemmata im Rahmen der Umsetzung von Corporate Sustainability-Strategien: Eine Delphi-Studie zu Kompetenzen und Rahmenbedingungen zur Dilemma-Bewältigung [Coping with corporate sustainability dilemmas in the context of implementing corporate sustainability strategies: a delphi study on competences and framework conditions for coping with the dilemma] (Doctoral dissertation). Leuphana Universität Lüneburg, Lüneburg. Retrieved from http://opus.uni-lueneburg.de/opus/volltexte/2016/14384/pdf/MASTER_Dissertation_Juretzek.pdf

Kalkowski, P. (2010). *Arbeitspapier zur Klärung der Begriffe „Beruflichkeit und Professionalisierung" [Working paper on clarifying the concepts of „professionalism and professionalisation"]*. Göttingen, Germany. Retrieved from http://www.sofi-goettingen.de/fileadmin/Publikationen/Kalkowski_Begriffsklaerungen_Beruf.pdf

Kanashiro, P., & Rivera, J. Do chief sustainability officers make companies greener? The moderating role of regulatory pressures. *Journal of Business Ethics.* Advance online publication. https://doi.org/10.1007/s10551-017-3461-2

Kiefhaber, E. (2018). *Sustainability in Small and Medium-Sized Enterprises: An Empirical Investigation of Drivers on Individual, Organizational, and Network Level*. *Nachhaltige Entwicklung: Vol. 8*. Baden-Baden: Nomos.

Klimkiewicz, K., & Oltra, V. (2017). Does CSR enhance employer attractiveness? The role of millennial job seekers' attitudes. *Corporate Social Responsibility and Environmental Management*, *24*, 449–463. https://doi.org/10.1002/csr.1419

Kurucz, E. C., Colbert, B. A., & Wheeler, D. (2008). The business case for corporate social responsibility. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 83–112). Oxford, England: Oxford University Press.

Lans, T., Blok, V., & Wesselink, R. (2014). Learning apart and together: towards an integrated competence framework for sustainable entrepreneurship in higher education. *Journal of Cleaner Production*, *62*, 37–47. https://doi.org/10.1016/j.jclepro.2013.03.036

Larson, M. S. (1979). *The rise of professionalism: a sociological analysis*. Berkeley, CA: University of California Press.

Leadbitter, J. (2010). What does a sustainability manager do? In M. Pohl & N. Tolhurst (Eds.), *Responsible business: how to manage a CSR strategy successfully* (pp. 1–15). Chichester, England: Wiley.

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

Leitschuh-Fecht, H. (2006). Emphatische Helikopterpiloten: Das komplexe Kompetenzprofil von Nachhaltigkeitsmanagern [Emphatic helicopter pilots: the complex competence profile of sustainability managers]. In E. Tiemeyer & K. Wilbers (Eds.), *Berufliche Bildung für nachhaltiges Wirtschaften: Konzepte, Curricula, Methoden, Beispiele [Vocational training for sustainable management: concepts, curricula, methods, examples]* (pp. 212–222). Bielefeld, Germany: Bertelsmann.

Lenzen, E. (2007). Verantwortung als Beruf [Responsibility as a profession]. In E. Lenzen (Ed.), *Berufsbild CSR-Manager [CSR-manager's occupational profile]* (pp. 9–16). Münster, Germany: Macondo.

Lewis, R. E., & Heckman, R. J. (2006). Talent management: a critical review. *Human Resource Management Review*, *16*, 139–154. https://doi.org/10.1016/j.hrmr.2006.03.001

Loew, T., & Braun, S. (2009). CSR-Handlungsfelder – Die Vielfalt verstehen. Ein Vergleich aus der Perspektive von Unternehmen, Politik, GRI und ISO 26000 [CSR fields of action - Understanding diversity. A comparison from the perspective of companies, politics, GRI and ISO 26000]. Retrieved from http://www.4sustainability.de/fileadmin/redakteur/Publikationen/Loew-Braun2009_CSR-Handlungsfelder-im-Vergleich.pdf

Loew, T., & Rohde, F. (2013). CSR und Nachhaltigkeitsmanagement: Definitionen, Ansätze und organisatorische Umsetzung im Unternehmen [CSR and sustainability management: definitions, approaches and organisational implementation in the company]. Retrieved from http://www.4sustainability.de/fileadmin/redakteur/bilder/Publikationen/Loew_Rohde_2013_CSR-und-Nachhaltigkeitsmanagement.pdf

Lotter, D., & Braun, J. (2010). *Der CSR-Manager: Unternehmensverantwortung in der Praxis [The CSR manager: corporate responsibility in practice]*. München, Germany: Altop Verlags- und Vertriebsgesellschaft.

Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, *22*, 32–44. https://doi.org/10.1002/csr.1325

Lozano, R., Merrill, M., Sammalisto, K., Ceulemans, K., & Lozano, F. J. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education: a literature review and framework proposal. *Sustainability*, *9*(10). https://doi.org/10.3390/su9101889

Maheshwari, V., Gunesh, P., Lodorfos, G., & Konstantopoulou, A. (2017). Exploring HR practitioners' perspective on employer branding and its role in organisational attractiveness and talent management. *International Journal of Organizational Analysis*, *25*, 742–761. https://doi.org/10.1108/IJOA-03-2017-1136

Mathieu, P. (2002). *Unternehmen auf dem Weg zu einer nachhaltigen Wirtschaftsweise: Theoretische Grundlagen - Praxisbeispiele aus Deutschland - Orientierungshilfe [Companies on the way to a sustainable economic system: theoretical basics - practical examples from Germany - orientation guide]*. Wiesbaden, Germany: Deutscher Universitätsverlag.

Meyers, M. C., van Woerkom, M., & Dries, N. (2013). Talent - Innate or acquired?: Theoretical considerations and their implications for talent management. *Human Resource Management Review*, *23*, 305–321. https://doi.org/10.1016/j.hrmr.2013.05.003

Mieg, H. A. (2009). Professionalisation. In F. Rauner & R. Maclean (Eds.), *Handbook of technical and vocational education and training research* (pp. 502–508). Dordrecht, the Netherlands: Springer.

Mieg, H. A. (2015). Profession: Begriff, Merkmale, gesellschaftliche Bedeutung [Profession: concept, characteristics, social significance]. In M. Dick & W. Marotzki (Eds.), *Handbuch Professionsentwicklung [Handbook of profession development]* (pp. 27–39). Bad Heilbrunn, Germany: Klinkhardt.

Mieg, H. A. (2018). *Professionalisierung: Essays zu Expertentum, Verberuflichung und professionellem Handeln [Professionalization: essays on expertise, professionalization and professional action]*. Potsdam, Germany: Verlag der Fachhochschule Potsdam.

Mulder, M. (2001). Competence development - Some background thoughts. *The Journal of Agricultural Education and Extension*, *7*, 147–158. https://doi.org/10.1080/13892240108438822

Neal, M., & Morgan, J. (2000). The professionalization of everyone? A comparative study of the development of the professions in the United Kingdom and Germany. *European Sociological Review*, *16*, 9–26. https://doi.org/10.1093/esr/16.1.9

Nijs, S., Gallardo-Gallardo, E., Dries, N., & Sels, L. (2014). A multidisciplinary review into the definition, operationalization, and measurement of talent. *Journal of World Business*, *49*, 180–191. https://doi.org/10.1016/j.jwb.2013.11.002

Nölting, B., & Pape, J. (2015). Ein Ideenlabor für Nachhaltigkeit: Forschendes Lernen im berufsbegleitende Masterstudiengang Strategisches Nachhaltigkeitsmanagement [A laboratory of ideas for sustainability: research-based learning in the part-time master's programme Strategic Sustainability Management]. *Umweltwirtschaftsforum*, *23*, 123–128. https://doi.org/10.1007/s00550-015-0358-3

Osagie, E. R., Wesselink, R., Blok, V., Lans, T., & Mulder, M. (2016). Individual competencies for corporate social responsibility: a literature and practice perspective. *Journal of Business Ethics*, *135*, 233–252. https://doi.org/10.1007/s10551-014-2469-0

Peters, G. F., Romi, A. M., & Sanchez, J. M. (2018). The Influence of corporate sustainability officers on performance. *Journal of Business Ethics.* Advance online publication. https://doi.org/10.1007/s10551-018-3818-1

Puncheva-Michelotti, P., Hudson, S., & Jin, G. (2018). Employer branding and CSR communication in online recruitment advertising. *Business Horizons*, *61*, 643–651. https://doi.org/10.1016/j.bushor.2018.04.003

Rieckmann, M. (2012). Future-oriented higher education: which key competencies should be fostered through university teaching and learning? *Futures*, *44*, 127–135. https://doi.org/10.1016/j.futures.2011.09.005

Riess, B. (2010). *Verantwortung für die Gesellschaft-verantwortlich für das Geschäft: Ein Management-Handbuch [Responsibility for society- responsible for business: a management handbook]*. Gütersloh, Germany: Bertelsmann Stiftung.

Rimanoczy, I. (2014). A matter of being: developing sustainability-minded leaders. *Journal of Management for Global Sustainability*, *2*(1), 95–122. https://doi.org/10.13185/1902

Rimanoczy, I., & Pearson, T. (2010). Role of HR in the new world of sustainbility. *Industrial and Commercial Training*, *42*, 11–17. https://doi.org/10.1108/00197851011013661

Ritz, A., & Sinelli, P. (2013). Talent Management und Nachfolgeplanung – zwei Seiten derselben Medaille [Talent management and succession planning - two sides of the same medal]. In M. Zölch, U. Pekruhl, & R. Spaar (Eds.), *Human Resource Management - Jahrbuch 2013 [Human Resource Management - Annual book 2013]* (pp. 177–208). Zürich, Swiss: WEKA.

Ritz, A., & Sinelli, P. (2018). Talent Management – Überblick und konzeptionelle Grundlagen [Talent management - Overview and conceptual basics]. In A. Ritz & N. Thom (Eds.), *Talent Management: Talente identifizieren, Kompetenzen entwickeln, Leistungsträger erhalten [Talent management: identifying talents, developing competencies, retaining top performers]* (3rd ed., pp. 3–31). Wiesbaden, Germany: Springer Gabler.

Roorda, N. (2010). Sailing on the winds of change: the odyssey to sustainability of the Universities of Applied Sciences in the Netherlands (Doctoral dissertation). Maastricht University, Maastricht, the Netherlands. Retrieved from https://cris.maastrichtuniversity.nl/portal/en/publications/sailing-on-the-winds-of-change-the-odyssey-to-sustainability-of-the-universities-of-applied-sciences-in-the-netherlands(69d8171c-2218-445f-a393-c798666cd395).html

Ross, S. (2013). How definitions of talent suppress talent management. *Industrial and Commercial Training*, *45*, 166–170. https://doi.org/10.1108/00197851311320586

Röttger, U. (2010). *Public Relations - Organisation und Profession: Öffentlichkeitsarbeit als Organisationsfunktion. Eine Berufsfeldstudie [Public relations - Organization and profession: public relations as an organizational function. A professional field study]* (2nd ed.). Wiesbaden, Germany: VS-Verlag.

Rueschemeyer, D. (1986). *Power and the division of labour*. Stanford, CA: Stanford University Press.

Schaltegger, S., Bennett, M., & Burritt, R. (2006). Corporate Sustainability- The Basis of Sustainability Accounting and Reporting. In S. Schaltegger, M. Bennett, & R. Burritt (Eds.), *Sustainability Accounting and Reporting: Development, Linkages and Reflection. An Introduction* (pp. 1–33). Heidelberg, Berlin: Springer.

Schaltegger, S. (2015). Kompetenzen impliziter Nachhaltigkeitsmanager stärken [Strengthening the competencies of implicit sustainability managers]. In AmCham Germany & Frankfurt Business Media (Eds.), *Corporate Responsibility 2015: Jubiläumsausgabe - Bestandsaufnahme und Zukunftsperspektiven für Corporate Responsibility [Corporate responsibility 2015: anniversary issue - survey and future prospects for corporate responsibility]* (pp. 20–23). Frankfurt am Main, Germany: ACC Verlag & Services.

Schaltegger, S. (2017). Lohnt sich Nachhaltigkeitsmanagement? Mindsets, „business cases" und Strategie [Is sustainability management worthwhile? Mindsets, "business cases" and strategy]. In T. Wunder (Ed.), *CSR und strategisches Management: Wie man mit Nachhaltigkeit langfristig im Wettbewerb gewinnt [CSR and strategic management: how to win the competition with sustainability in the long term]* (pp. 81–92). Berlin, Germany: Springer Gabler.

Schneider, A., & Schmidtpeter, A. (Eds.). (2012). *Corporate Social Responsibility: Verantwortungsvolle Unternehmensführung in Theorie und Praxis [Corporate social responsibility: responsible corporate governance in theory and practice]*. Berlin, Germany: Springer Gabler.

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

Schulz, T. (2017). Werttreiber Nachhaltigkeit: Einfluss der Corporate Sustainability Performance auf die Corporate Financial Performance [Value driver sustainability: influence of corporate sustainability performance on corporate financial performance]. In T. Wunder (Ed.), *CSR und strategisches Management: Wie man mit Nachhaltigkeit langfristig im Wettbewerb gewinnt [CSR and strategic management: how to win the competition with sustainability in the long term]* (pp. 67–80). Berlin, Germany: Springer Gabler.

Sharma, R. R. (2017). A competency model for management education for sustainability. *Vision: the Journal of Business Perspective*, *21*, x–xv. https://doi.org/10.1177/0972262917700970

Shrivastava, P., & Hart, S. (1995). Creating sustainable corporations. *Business Strategy and the Environment*, *4*, 154–165. https://doi.org/10.1002/bse.3280040307

Steinmeier, M. (2016). Fraud in sustainability departments? An exploratory study. *Journal of Business Ethics*, *138*, 477–492. https://doi.org/10.1007/s10551-015-2615-3

Tansley, C. (2011). What do we mean by the term "talent" in talent management? *Industrial and Commercial Training*, *43*, 266–274. https://doi.org/10.1108/00197851111145853

Te Heesen, S. (2013). Jobmotor Nachhaltigkeit Teil IX: Nachhaltigkeit im Management [Job engine sustainability part IX: sustainability in management]. *Arbeitsmarkt Umweltschutz + Naturwissenschatften*. Retrieved from http://www.wila-arbeitsmarkt.de/files/uws_2013_05_nachhaltigkeit-im-management.pdf

Terjesen, S., Vinnicombe, S., & Freeman, C. (2007). Attracting Generation Y graduates: organisational attributes, likelihood to apply and sex differences. *Career Development International*, *12*, 504–522. https://doi.org/10.1108/13620430710821994

Thomas, I., Barth, M., & Day, T. (2013). Education for sustainability, graduate capabilities, professional employment: how they all connect. *Australian Journal of Environmental Education*, *29*, 33–51. https://doi.org/10.1017/aee.2013.14

Thomas, I., & Day, T. (2014). Sustainability capabilities, graduate capabilities, and Australian universities. *International Journal of Sustainability in Higher Education*, *15*, 208–227. https://doi.org/10.1108/IJSHE-05-2012-0046

Tkalac Verčič, A., & Sinčić Ćorić, D. (2018). The relationship between reputation, employer branding and corporate social responsibility. *Public Relations Review.* Advance online publication. https://doi.org/10.1016/j.pubrev.2018.06.005

Ulrich, D., & Smallwood, N. (2012). What is talent? *Leader to Leader*, *2012*(63), 55–61. https://doi.org/10.1002/ltl.20011

VERBI Software. (2016). MAXQDA Analytics Pro [Computer Programme]. Berlin: Germany: VERBI.

Visser, W., & Crane, A. (2010). Corporate sustainability and the individual: understanding what drives sustainability professionals as change agents. Retrieved from https://ssrn.com/abstract=1559087

Waite, M. (2017). *Sustainability at work: careers that make a difference*. Abingdon, England: Routledge.

Wiek, A., Withycombe, L., & Redman, C. L. (2011). Key competencies in sustainability: a reference framework for academic program development. *Sustainability Science*, *6*, 203–218. https://doi.org/10.1007/s11625-011-0132-6

Spraul, K., Hufnagel, J., Friedrich, C. & Brill, N. (2019). Talents for key positions in organizations: the sustainability manager as a profession. In Y. Liu (Hrsg.), *Research handbook of international talent management*. (S. 274–317). Edward Elgar. https://doi.org/10.4337/9781786437105

Wilensky, H. L. (1964). The professionalization of everyone? *The American Journal of Sociology*, *70*, 137–158. https://doi.org/10.1086/223790

Willard, M., Wiedmeyer, C., Flint, R. W., Weedon, J. S., Woodward, R., Feldman, I., & Edwards, M. (2010). The sustainability professional: 2010 competency survey report. Retrieved from https://www.sustainabilityprofessionals.org/sites/default/files/ISSP%20Special%20Report_3.10_final_0.pdf

Williams, S., & Schaefer, A. (2013). Small and medium-sized enterprises and sustainability: managers' values and engagement with environmental and climate change issues. *Business Strategy and the Environment*, *22*, 173–186. https://doi.org/10.1002/bse.1740

Windolph, S. E., Harms, D., & Schaltegger, S. (2014). Motivations for corporate sustainability management: contrasting survey results and implementation. *Corporate Social Responsibility and Environmental Management*, *21*, 272–285. https://doi.org/10.1002/csr.1337

World Commission on Environment and Development. (1987). Report of the World Commission on Environment and Development: our common future. Retrieved from http://www.un-documents.net/our-common-future.pdf

Wright, C., & Nyberg, D. (2012). Working with passion: emotionology, corporate environmentalism and climate change. *Human Relations*, *65*, 1561–1587. https://doi.org/10.1177/0018726712457698