

Master Thesis

CSR as a factor in the war for talents

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Abstract

This research developed a new instrument to measure CSR perception in the job choice and investigated in-depth which CSR components are most important to students when choosing an employer.

Based on an extensive literature review, the new measurement instrument was developed and tested among students close to entering the job market. An online survey was used to collect data about the perceived importance of 30 CSR components among students. The findings show that students perceive certain CSR components to be more important than others. Especially those components that directly concern the respondents' own working life have been ranked as important, whereas aspects like diversity are less important. Further, it was found that there are differences among students coming from different educational backgrounds in how important they perceive certain CSR components. Engineering students perceive CSR as generally more important in their job choice compared to Business Students. The difference was strongest when it came to the CSR components with regard to the environment. The new measurement of CSR is more comprehensive, outcome oriented and allows companies to have a more detailed knowledge about job seekers' preferences in the field of CSR. Compared to previous measures, the results of the new scale can be directly transformed to actual CSR activities or recruitment measures by companies and therefore provide greater utility.

The study supports the growing evidence that the company's CSR activities are a great and increasingly important way to attract and retain good employees and sheds light on the divergence in how to execute CSR and effectively use it for managing talent. This research contributes to scientific research by providing a new measurement of CSR, allowing more detailed and therefore valuable insights for companies. The findings reveal theoretical and practical implications as well as future research opportunities.

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1. Introduction and Research Objectives

In recent times, the selection and management of a qualified workforce has become an increasingly critical factor for a sustainable success of companies coping with the demographic change and the resulting workforce reduction (Greening & Turban, 2000; Pfeffer, 1994; Snell et al., 1996). The effective management of human resources, which includes the attraction and retention of qualified employees, was shown to provide a competitive advantage to a company (Bhattacharya, Sen & Korschun, 2008; Boswell et al., 2003; Behrend et al., 2009). Understanding the way job choice decisions are made and knowing the job attributes (e.g. salary, working conditions) that have the potential to attract the desired applicant has become a major concern for organizations (Backhaus et al., 2002).

1.1 About Evonik and the War for talents

Evonik is one of the world's leading specialty chemical companies based in Germany. The company is doing business in more than 100 countries globally and operates production plants in 24 (Evonik Annual Report, 2012). Their core specialty chemical business is divided into three reporting segments: Consumer, Health & Nutrition, Resource Efficiency and Specialty Materials (Evonik Annual Report, 2012). Six operating business units that operate as entrepreneurs within the enterprise are assigned to these segments (Evonik Annual Report, 2012). The Corporate Centre supports the Executive Board in the strategic management of the company, while the Evonik Business Services efficiently bundles internal services (Evonik Annual Report, 2012). A new Site Services organization provides the necessary infrastructure services for the chemical business units (Evonik Annual Report, 2012).

Profitable growth and sustained value creation form the heart of Evonik's strategy. To implement this effectively, a constant demand for highly talented and qualified employees exists. This growing demand for high performing and qualified employees combined with the decreasing workforce due to demographic changes leads to an intense competition for the best employees among companies, also called the war for talents (Beechler & Woodward, 2009). Only those companies, which are able to present themselves best to their target group as an attractive and suitable employer will be successful in the future. An organization can only be perceived as a suitable employer, when it has detailed information about its target group and finds an efficient way to communicate their advantages of employment to them. Therefore, it is essential to know how the professional passion of the companies specific target groups can be reached and aroused by the company.

1.2 CSR as a Factor to win the War for Talents

With regard to the job attributes that influence the applicant's attraction to a firm, a shift can be noted in the last decade. While in the past, factors like the salary were most influential in the people's job choice, today a clear development towards more soft factors can be noted (Albinger & Freeman, 2000; Greening & Turban, 2000; Turban, 2001; Backhaus et al., 2002; Montgomery & Ramus, 2003). Therefore it has become more popular for companies to provide messages concerning their company values in recruitment (Behrend et

al., 2009, Rau & Hyland, 2003; Chapman et al., 2005; Bhattacharya et al., 2008; Jones, Willness & Macneil, 2009; Grolleau, Mzoughi & Pekovic, 2011). Due to these developments, companies are increasingly putting attention to the construct of Corporate Social Responsibility (CSR). Communicating their initiatives (e.g. in recruiting brochures or social media) with regard to the community, the environment as well as the work atmosphere, has become more and more common (Behrend et al., 2009, Rau & Hyland, 2003; Chapman et al., 2005; Bhattacharya et al., 2008; Jones et al., 2009). The following theories indicate why this is a smart step for organizations. Signaling theory suggests that a firm's CSR shows prospective employees how it would be like to work for a firm (Spence, 1973; Greening & Turban, 2000; Backhaus et al., 2002; Behrend et al., 2009). Job seekers are increasingly looking for these insights and the concept of issue intensity says that the greater the importance of an issue to the decision maker, the more influential it is in the decision process (Jones, 1991; Backhaus et al., 2002). Due to that, the CSR aspects having the most direct effect on the workers can be expected to be most influential. Aspects that are more distant to the worker will have a smaller effect on the attractiveness of the prospective employer. Another reason to believe that CSR helps to attract talent is given by the social identity theory, suggesting that job applicants have a higher self-image when working for socially responsive firms (Tajfel & Turner, 2004; Backhaus et al., 2002).

"The best professionals in the world want to work in organizations in which they can thrive, and they want to work for companies that exhibit good corporate citizenship."

- Jim Copeland, Jr., former CEO of Deloitte Touche Tohmatsu
(Bhattacharya et al., 2008).

CSR makes the company's values transparent and can therefore be part of the employee value proposition (Bhattacharya et al., 2008). It humanizes the company by presenting it as a contributor to society instead of aiming only for profit maximization (Bhattacharya et al., 2008). Although there is growing evidence that the company's CSR activities are a great and increasingly important way to attract and retain good employees, great divergence exists in how CSR is executed and therefore how effective it can be for managing talent (Bhattacharya et al., 2008)

1.3 Problem Statement and Research Questions

The overall problem is that although more and more companies become aware of the opportunity CSR may offer to talent management, it is still not effectively used to retain and attract talent. This is especially because of two reasons; first, although research is available on the influence of CSR on potential applicants' attraction to a firm (Albinger & Freeman, 2000; Greening & Turban, 2000; Turban, 2001; Backhaus, 2002; Rodrigues & Branco, 2006; Evans & Davis, 2008; Bhattacharya et al., 2008; Behrend et al., 2009, Grolleau et al., 2011) they fail to show whether all aspects of CSR are similarly influential.

Second, although stakeholders' responses to CSR are generally favorable, they are very much dependent upon the perceptions and characteristics of the individual. Existing research

indicates that different groups of people will view and value companies CSR initiatives in very different ways, but hardly any research has actually analyzed this (Turban & Greening, 1997; Albinger & Freeman, 2000; Greening & Turban, 2000; Backhaus et al., 2002). For recruitment measures and activities, knowledge about possible differences between groups of potential new employees coming from different educational backgrounds would be of great value.

This study intends to gather insights to overcome the barriers companies face in using CSR for talent management by developing a new measurement of CSR. This will help companies to (a) identify the most influential CSR components, (b) understand the needs of different prospective employee groups and (c) configure their CSR efforts to address the unique needs of each group. Until now, researchers have come to inconsistent, for companies not sufficiently informative results testing the effect of CSR on employer attractiveness or job choice. The reason for that is the use of narrative scenarios summarizing various CSR components under five rigid dimensions of CSR (employee relations, the natural environment, product quality, treatment of women and minorities and community relations). This approach might give a broad overview on which dimensions of CSR are most important but it is not sufficiently practically oriented and does not allow companies knowledge about the preferences of job seekers. Testing the dimensions as a whole, is not very valuable for companies as knowing that e.g. the dimension employee relations is most influential for future employees does not show which exact measures that a company could initiate in this field of CSR might be a good choice. To create more valuable information for companies, a measurement needs to be developed that does not only look at these five rigid dimensions but at smaller components of CSR that can directly be transferred into actual CSR initiatives by companies. Knowing that for example the dimension Employee relation is important for the job choice of future employees gives no clear indication for companies. Instead, a new measurement could outline which aspects that fall under this broad dimension Employee relation, e.g. work environment, employee training or the employees welfare (e.g. retirement benefits) are most important for prospective employees.

This study will contribute by developing a new measure of CSR that allows companies better insights into which exact CSR components of the five dimensions are important to different groups of prospective employees.

Research Question:

How can the current quality of CSR measurement be improved to give more valuable information for companies?

- To what extent does the perceived importance of CSR in the job choice vary among students from different study fields?

2. Theoretical Background

2.1 The increased Importance of CSR in the Job Decision Process

“Competitive pressures, greater recognition of human resources as a potential source of competitive advantage and changing workforce demographics” have made the attraction of the best talent a significant concern for organizations (Boswell et al., 2003, p. 23). “Critical to an organization’s ability to efficiently and effectively address this concern is an understanding of how job decisions are made as well as which job attributes (e.g., salary, working conditions) are most likely to attract desirable applicants” (Boswell et al., 2003, p. 23). Research has indicated that job seekers prefer an employer with whom they see similarities between their and the company’s primary norms and values (Cable & Judge, 1994; Chatman, 1989, 1991; Judge & Bretz, 1992; Judge & Cable, 1997; Schneider, 1987). According to Barber (1998), the job choice is a decision process that is dynamic as the job seeker moves through various stages. Therefore, an applicant who is in a situation to choose a job has to evaluate the relative importance of job attributes of differing levels and variation (Barber, 1998).

A great body of research investigates organizational characteristics or attributes and their effects on attraction to the organization and with that the job choice of applicants. Structural attributes such as decentralized decision making (Turban & Keon, 1993) or the reward systems (Bretz et al., 1989) are shown to play a role in perceptions of attractiveness (Backhaus et al., 2002). Among others, Gatewood et al. (1993) conducted research about the corporate image as an organizational characteristic. They found that the image the applicant has about the organization is a significant predictor for the decision to work for this organization (Gatewood et al., 1993; Belt & Paolillo, 1982; Rynes, 1991; Fombrun & Shanley, 1990). The company’s image is the collection of knowledge, beliefs, and feelings about an organization (Tom, 1971) and can develop from all kinds of information or direct involvement with the company. Therefore the company’s image can change over time (Backhaus et al., 2002).

The influence of the corporate image as a factor in the job choice of applicants also leads to a rather new organizational characteristic that gets more and more attention. Various researchers have shown the increasing importance of the Corporate Social Responsibility (CSR) performance of a company in attracting applicants (Albinger & Freeman, 2000; Greening & Turban, 2000; Turban, 2001; Backhaus, 2002; Rodrigues & Branco, 2006; Evans & Davis, 2008; Behrend et al., 2009; Bhattacharya et al., 2008; Grolleau et al., 2011). Empirical research has shown that the CSR performance of a company can influence prospective applicants’ perceptions of a company’s image as well as their initial attraction to that firm by displaying certain values and norms (Fombrun & Shanley, 1990; Rynes, 1991; Greening & Turban, 2000). Further research showed that the influence of CSR on the attraction of a firm has the potential to create a competitive advantage for the company by improving their position in the war for talents (Bhattacharya et al., 2008; Boswell et al., 2003; Behrend et al., 2009). This effect could be especially observed for well educated applicants (Montgomery &

Ramus, 2003) who are highly attractive for a company and essentially, are in a conformable situation regarding their job choice (Albinger & Freeman, 2000; Boswell et al., 2003). Boswell et al. (2003) found that a good CSR performance will attract the highest quality applicants who have several job offers, even in tight labor markets. For those applicants who are less interesting for companies and therefore have less job opportunities, CSR was found to play a less significant role, as the intention to actually find any job is the main driver (Albinger & Freeman, 2000; Boswell et al., 2003). Therefore, a firm's CSR may be one of the critical factors influencing a high-quality applicant choosing one firm over another, which may lead to a significant competitive advantage for an organization (Greening & Turban, 2000).

2.2 Corporate Social Responsibility and its Operationalization

Corporate Social Responsibility (CSR) is a construct that refers to the organizational attention and fulfillment of responsibilities to multiple stakeholders including employees and the greater community which exist at different levels: economic, legal, ethical and philanthropic (Carroll, 1979; Albinger & Freeman, 2000; Marrewijk, 2003; Behrend et al., 2009).

In 1979, Carroll was one of the first who took a closer look at the concept of CSR. He presented CSR to consist of four components, namely economic, legal, ethical, and discretionary (or philanthropic). According to Carroll (1979), the economic component represents the fundamental social responsibility of business. "It is the obligation to produce goods and services and sell them at fair prices, which in turn allows the business entity to make a profit and legitimately pursue growth" (Carroll, 1979, p.30). The legal component recognizes the obligation of the organisation to obey laws (Carroll, 1979). The ethical responsibilities "involve behaviors and activities that are not embodied in law but still entail performance expected of business by society's members" (Carroll, 1979, p.30). The fourth category of responsibilities is called discretionary, voluntary or philanthropic. This component of social responsibility lies completely in the authority of the organization as there are no laws or codified expectations guiding the organizations' activities (Carroll, 1979). Some years later Aupperle (1982) brought CSR research a step forward by empirically supporting the weighing of Carroll's CSR dimensions. He arrived at the conclusion that the most important dimension was economic, followed by legal, ethical and discretionary responsibilities (Aupperle, 1982). Various researchers have replicated Aupperle's (1982) method and saw similar results with regard to the weight of the dimensions (for e.g. Burton et al, 2000).

Around the turn of the millennium a shift could be noted that went away from the previously used operationalization introduced by Carroll (1979) to a slightly more practically orientated viewpoint of CSR. As a basis for this new approach, rating systems and databases like the Dow Jones Sustainability Index (DJSI) or the Kinder, Lydenberg, and Domini (KLD) database were used. The DJSI are the oldest global sustainability benchmarks evaluating the sustainability performance of the largest 2.500 companies listed on the Dow Jones Global Stock Market Index. It is based on an analysis of corporate economic, environmental and social performance, looking at issues such as corporate governance, risk management, branding, climate change mitigation, supply chain standards and labor practices (Silvius &

Schipper, 2012). The KLD maintains a large body of research and profiles U.S. companies covering the company's strengths and failings in nine major social areas, including the environment, military contracting, employee relations, community involvement, product safety, quality programs, excessive compensation of executives, diversity and nuclear power (Sharfman, 1996).

The main reason for this shift was the constant criticism that an adequate operationalization of CSR needs to include observable outcomes of the organization's actions so that actual realizations are measured rather than intentions or perceptions (Wood, 1991). Carroll's construct did not measure outcomes but was a measure of corporate orientation toward social responsibility (Wood, 1991). Greening and Turban (2000) took a step in the right direction using a more outcome oriented measurement of CSR perception in job choice in their study. Based on the measurement used for the KLD database, they created a new operationalization by developing five new dimensions of CSR, namely employee relations, the natural environment, product quality, treatment of women and minorities and community relations.

Compared to the economic, legal, ethical and philanthropic dimensions used by Carroll (1979), these new dimensions seemed less broad and more practically oriented, as they could be better transferred into actual company activities in the field of CSR. It was hoped that this operationalization might allow more detailed insights into CSR aspects. In actual research on the influence of CSR on the job choice of people, this new approach showed clear drawbacks. Testing the effect of the five CSR dimensions on the job choice showed that some dimensions have a stronger effect on job choice than others. But variations in the strength of the relationship exist when comparing the results of different authors using this type of operationalization, namely, the five dimensions. In Greening and Turban's (2000) study the CSR dimension that appeared to be most important in explaining the organization's attractiveness was employee relations, followed by treatment of women and minorities, concern for the environment, product quality and community relations. In contrast to that Backhaus et al. (2002) found in their study that the dimensions of environment, community relations, and diversity created the largest change in opinions about a firm. Here Greening and Turban's (2000) most influential dimension; employee relations, had a significantly lower effect. The same was true for product issues. Some researchers indicated that certain dimensions have been rated as considerably less important than others due to the respondents' misunderstanding of the dimension's content. An example Greening and Turban (2000) found in one of their retests was that the respondent could not imagine what was meant with the term community relations and automatically rated it as less important. Obviously, the inconsistent results show that this operationalization is not providing an adequate and aggregate measure of CSR. The literature review outlines that although measures of CSR have been improved over time, various limitations exist and a systematic and reliable methodology for measuring CSR is still missing.

2.3 Redeveloping the Measurement of the Influence of CSR on Job Choice

The purpose of this study is to propose a methodology for developing a systematic, aggregate measure of CSR, adapting information from various authors. According to Ruf, Muralidhar and Paul (1998, p. 122) “a measure of CSR should (a) be responsive to a variety of factors that constitute social responsibility, (b) be independent of the characteristics of the organization, (c) be based on outcome measures rather than perceptions, and (d) reflect the values of the stakeholders being considered.” The aim of this new measurement is to introduce components of CSR that are actual observable outcomes of organization's actions. Knowing about job seekers perception about these components provides greater utility for companies. Instead of using broad and rigid dimensions of CSR, a set of CSR components will be developed that are more comprehensive for respondents and can actually be transferred into company initiatives.

As an advantage, the newly developed measurement will reduce the effect of bias in respondent interpretation. The new measurement improves the transparency of which items belong to which broader field (dimension) of CSR. Further, testing the effect of each CSR component as one item instead of the dimension as a whole provides much more valuable information for companies on the effect of CSR on job choice (Grolleau et al., 2011). What remained unclear in previous research is which components of each dimension are the reason for the strength identified. It might be possible that one decisive component is influencing the effect of the CSR dimension on job choice significantly more than other components. This cannot be shown in Greening and Turban's (2000) operationalization, using combinations of narrative scenarios. Their choice to measure the various components under rigid CSR dimensions has strongly influenced the results and lead to a lack of conclusive insights for companies. The inconsistent findings of earlier research suggest that the specification of each component as a unique aspect of CSR may provide better insight into CSR research. To allow a clearer picture for companies, this research will contribute to previous research by developing a new measurement of CSR that is more comprehensive, outcome oriented and allows companies to have a more detailed knowledge about job seekers' preferences in the field of CSR. What is new is that statements to a large set of specific CSR components will be provided to the respondents. Compared to previous measures, the results of the new scale can be directly transformed to actual CSR activities by companies.

In order to develop the new scale to measure CSR perception in job choice, the already existing operationalization in academic literature on CSR components affecting job choice or attractiveness of a company (Latour & Zahra, 1987; Greening & Turban, 2000; Albinger & Freeman 2000; Montgomery & Ramus, 2003; Lamsa, 2008; Inoue & Lee, 2010; Mishra & Suar, 2010; Wang, 2012) have been reassessed and analyzed. As a summary of the literature review, a table was built, listing all items used by these authors, categorized under the commonly used five dimensions. In numerous steps, these original 70 CSR items (Appendix No 2) adopted from the different studies were reduced to 30. As a first step, 47 items were summarized based on conceptual similarity or dimensions of a general construct. As an

example the items “charitable giving” and “supporting charity and social activities” were combined. As a second step, eight items that have only been mentioned by one of the eight authors were removed as well as items that have been too specific for the purpose of the survey (e.g. use of ozone depleting chemicals). Third, because the target of this study is the individual perceptions, the items formulated had to be easy to understand and appropriate to the conditions of most respondents. Hence, items more suitable for the evaluation of common people’s perceptions were selected and adjusted to a more understandable format so that respondents could comprehend them even without any specific knowledge of CSR. Therefore, using the example from above, the combined items “charitable giving” and “supporting charity and social activities” were renamed “charity work”. As a final step, for some items, explanations were added in brackets “Ethical products, services and marketing (no child labor, violation of human rights, bribery, corruption)”.

The performed literature review, reassessment and reduction of the items is necessary to ensure that the new measurement is extensive and summarizes a great number of CSR components but is still small enough to be used in a survey. Table 1 displays the final 30 components that have been incorporated in the new measurement.

To allow a comparison of the results of this study to previous research, the new inventory of CSR components were categorized under the commonly used five CSR dimensions, namely, Employee relations, Diversity, Environment, Community relations and Product quality (Albinger & Freeman, 2000; Greening & Turban, 2000; Turban, 2001; Backhaus, 2002). This categorization was not shown to the respondents. This procedure enables to generate two sets of results, so to analyze both, the separate CSR components as well as the results regarding the CSR dimension. With this, it will be possible to see the respondent’s perception about the separate CSR components, but also to see whether similarities or differences in the results regarding the ranking of the dimensions exists to the studies of Greening and Turban (2000) and Backhaus (2002).

Table 1 Selection of the final 30 CSR components

Dimension	No.	CSR Component	Authors							
			<i>KLD Database (Inoue & Seoki Lee (2010))</i>	<i>Greening & Turban (2000)</i>	<i>Albinger & Freeman (2000)</i>	<i>Lamsa (2008)</i>	<i>Wang (2012)</i>	<i>Latour & Zahra (1987)</i>	<i>Montgomery & Ramus (2003)</i>	<i>Mishra & Suar (2010)</i>
Employee relations	1	Health and safety issues	X						X	X
	2	Union relations	X	X	X					
	3	Taking care of employee welfare/ Level of benefits (insurance package, retirement, cash profit sharing)	X	X	X	X	X		X	
	4	Employee involvement (encourages worker ownership through gain-sharing plans, employee stock ownership, and extensive participation in management decision making)	X	X	X					
	5	Providing employee training/development/ further education				X		X	X	X
	6	Work environment (non financial benefits (office environment and surrounding amenities like day care, health club, laundry, restaurant) and Work atmosphere (work attitude of boss, colleagues and so on)						X	X	
Product	7	Product and Service quality	X	X		X		X		X
	8	Benefits /providing products to economically disadvantaged consumers	X							X
	9	R&D/Innovation	X	X						X
	10	Marketing/contracting practices	X	X						
	11	Product safety	X	X						X
	12	Customer service/satisfaction including providing product information				X		X		X

Table 1 continued: Selection of the final 30 CSR components

			Authors							
Dimension	No.	CSR Component	KLD Database (Inoue & Seoki Lee (2010))	Greening &Turban (2000)	Albinger & Freeman (2000)	Lamsa (2008)	Wang (2012)	Latour & Zahra (1987)	Montgomery & Ramus (2003)	Mishra & Suar (2010)
Community relations	13	Charitable giving / supporting charity and social activities	X	X	X		X	X		X
	14	Relationship with local communities and external stakeholders, such as governments, public interest groups, industry groups								X
	15	Support for education	X					X		X
	16	Volunteer programs/contribution of skills and time of employees for community services	X	X						X
	17	Active involvement / Investments (creating value) in local communities (promote human development and democracy, fighting poverty)		X	X	X	X	X		X
	18	Ethical products, services and marketing (no child labor, violation of human rights, bribery, corruption)					X			X
Environment	19	Use of clean energy /Energy efficiency	X				X			X
	20	Pollution (air, water and soil) prevention	X	X			X	X		X
	21	Recycling (waste management incl. hazardous waste)	X	X			X			X
	22	Sustainable management systems, products and services (Sustainable use of natural resources)	X				X	X	X	X
	23	Enhance environmental conditions/mitigate impact on climate change	X	X	X	X			X	X
	24	Concern for/reduction of emissions	X	X			X			X
Diversity	25	Employment of the disabled	X							
	26	Promotion of/development for women or minority employees	X	X				X		X
	27	Representation of women or minorities (e.g. as CEO and in the board of directors) / Minority recruitment	X	X	X			X		X
	28	Equal-opportunity employment / fairness of hiring practices	X	X		X				
	29	Non-Discrimination policies (Gay and lesbian, equal treatment of men and women)	X					X		
	30	Family benefits and programs			X					

2.4 Individual Characteristics and the Importance of CSR in Job Choice

Taking a broad body of literature into account, it becomes questionable whether the perceived importance of CSR on the job choice is identical when individual differences of the respondents are taken into account. Based on the person-organization fit theory (Kristof, 1996) we can expect that different people are attracted to different types of organizations. This is supported by Chatman (1989) who suggested that people are attracted to firms they view as having values and behavioral norms important to them. The needs supplies perspective (Kristof, 1996) explains 'fit' as the extent to which the company meets the individual's needs or preferences. Existing research supports the importance of person-organization fit for applicants' job pursuit intentions (Bretz & Judge, 1994; Cable & Judge, 1994, 1996; Judge & Cable, 1997; Turban & Keon, 1993).

Already existing literature on the relationship between CSR and the attractiveness of an employer has only put very little attempts to test whether individual's characteristic differences and values of the respondents' influence the relationship of CSR and job choice (Turban & Greening, 1996; Greening & Turban, 2000; Albinger & Freeman, 2000). This is a clear research gap as it limits the generalizability of the theory. Some researchers therefore asked for future research that takes a closer look at how the individual could influence the initial relationship. Albinger and Freeman (2000) ask for an analysis that determines if different types of individuals, for example of different gender, age, race, or educational background, perceive CSR or specific dimensions of CSR differently. Greening and Turban (2000) took an approach by testing whether gender has a moderating effect on the relationship between the CSR dimension of women and minorities and employer attractiveness, which was positive. This was supported by Backhaus et al. (2002) who replicated this test but also added the moderating effect of belonging to a minority, which was also supported. Further, Greening and Turban (2000) tested whether valuing the environment moderates the relationship between the environmental dimension of CSR and employer attractiveness. This could not be supported in their study.

What would be very valuable for companies recruiting measures is a study that finds out whether individuals from different educational background perceive the importance of CSR in their job choice differently. As this is still missing, the present study tries to gather some first insights about this by comparing the results of the overall importance of CSR components in the job choice among talents with different educational background. Earlier research already indicates that for applicants from different study fields, having different norms and values, having different curricula, teachers, peers, textbooks and so on, it is also quite likely that they will have a different attitude toward CSR.

Albinger and Freeman (2000) indicate that students from different educational fields, exposed to different curricula, different types of media and recruitment literature, especially in their academic pursuits through university placement services, case study analysis and current events reading in the classroom and on-campus interviewing might also show very different perceptions to CSR when it comes to the attractiveness of an employer (Albinger &

Freeman, 2000). Various studies give further indications that educational differences could exist. Wang and Juslin (2012) conducted a study on the effect of personal demographic factors like gender, study major, and study year level on Chinese university students' personal values and individual perceptions of CSR. The results showed that students majoring in different fields also display different values as well as different perceptions to CSR. The authors see the reason for that in the different attention paid to CSR and better knowledge in this field (Wang & Juslin, 2012).

Other studies give further arguments that the study field might influence the effect of CSR on job choice. Lamsa et al. (2007) showed that the course of education shapes the students' perception and Sobczak, Debucquet and Havard (2006) found that academic institutions are in a position to shape the students' perceptions. Their study results clearly show the impact of the different types of academic institutions on the respondents' perception towards the CSR concept and tools. The underlying reasons why the institutions influence their students' attitudes in different ways are the differences in their underlying culture. These studies are supported by Fishbein and Ajzen's (1975) arguing that a central element in an attitude (belief) can be influenced through active participation and persuasive communication. They agree with Sims and Brinkmann (2003) that experiential and critically reflective learning coupled with a dialogical way of teaching can be a very valuable tool when attitudinal changes are targeted. This is a clear indication that the experiences the students have during their study of a certain field of education will shape their perception to CSR due to the influence of teachers, curricula, textbooks etc.. Empirical findings suggest that a student's study field is significantly affected by individual ethical values and attitudes (Chonko & Hunt, 1985; Giacomino & Akers, 1998). Borkowski and Ugras (1998) found that there is a significant difference between study major and ethical behavior. According to Sankaran and Bui (2003), students from non-business majors tend to be more ethical than business majors. Hawkins and Cocanougher (1972) observed that business majors were more tolerant in evaluating the ethics of business practices. Lindeman and Verkasalo (2005) discovered that students from business and technology majors display more individualistic and hard values, such as power, than other students. Amberla et al. (2011) found that engineering and business majors perceive the current state of business ethics and corporate responsibility positively, whereas students from forest ecology and environmental science have more negative perceptions. In another study, the results showed that forest ecology and environmental science students have the most negative perceptions on the forest industry's environmental and social responsibilities, while technology and business students have more positive perceptions on the forest industry's social responsibility in general (Amberla et al. 2011).

Taking all this into account, I argue that study group differences exist in how important the CSR performance of a company is in the student's job choice. Therefore it would be valuable to compare the results of the perceived importance of CSR components among students from different study fields.

3. Methodology

3.1 Research Design

The study combines exploratory and descriptive research as it aims at investigating how the commonly used measurement of CSR can be improved as well as observing the populations perceived importance of CSR in their job choice. The research is based on an extensive literature review. Using a deductive approach a new measurement of CSR's influence on job choice was developed. In order to test the new measurement instrument as well as gathering the desired information about the sample population, a cross-sectional study was performed. To gather the quantitative data, the newly developed measurement instrument was transferred into a self-administered questionnaire. This method is chosen since it allows the collection of a large amount of data within a short period of time. The survey is conducted among students close to entering the job market. The survey is distributed via email and the results analyzed using the statistical software IBM SPSS Statistics.

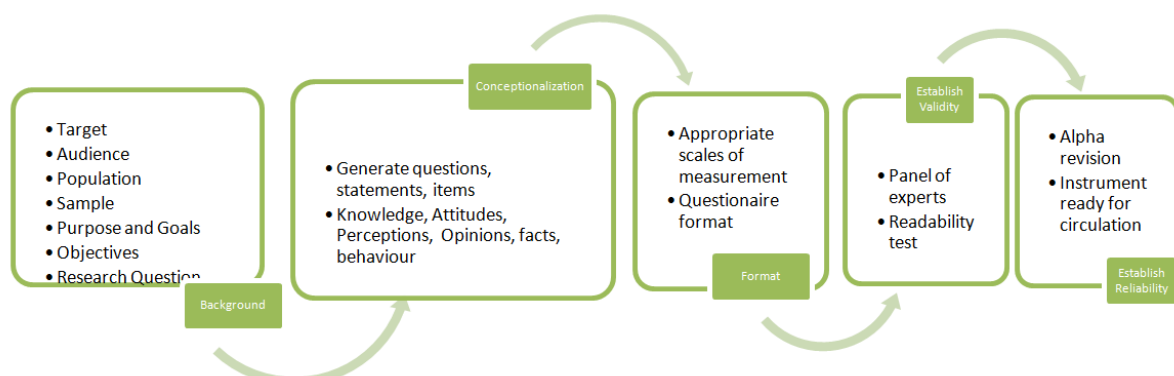
3.2 Sample

The sample consisted of two groups. The first sample population were master level students; students who are close to entering the job market. Data was collected from students enrolled in one of the three master programs, Business Administration, Chemical Engineering and Industrial Engineering & Management of the University of Twente in the Netherlands. The master programs have been purposively selected by an Evonik representative, working in the recruiting department in order to cover the most important target groups for the company. The second study population consisted of the so called 'Evonik perspectives'. This is a group of around 150 interns who have been recommended for the company's internal talent pool, due to their extraordinary performance at Evonik during e.g. internships.

3.3 Instrument and Measures

The development of a valid and reliable questionnaire involves several steps taking considerable time (Radhakrishna, 2007). Figure 1 shows five sequential steps that have been followed for the questionnaire development in order to enhance data quality and utilization of research.

Figure 1 Questionnaire/instrument development process. Modified from Radhakrishna (2007)



Step 1: The aim was to create a new measurement of CSR's influence on job choice that reduces the limitations of the commonly used CSR measurements and therefore is more comprehensive, outcome oriented and allows companies to have a more detailed knowledge about job seekers' preferences in the field of CSR. Compared to previous measures, the results of the new scale can be directly transformed to actual CSR activities by companies. Using a deductive approach a measurement with new items was developed following a thorough review of already existing literature, as explained in Chapter 2.3.

Step 2: Based on the collection of the 30 CSR components resulting from the literature review, statements for the survey were formulated appropriate to collect the CSR perception of the sample population, consisting of students close to entering the job market. Because the target of this study is the individual perceptions, the items formulated had to be easy to understand and appropriate to the conditions of most respondents. Hence, items more suitable for the evaluation of common people's perceptions were selected and adjusted to a more understandable format so that respondents could comprehend them even without any specific knowledge of CSR.

Step 3: The survey therefore included a total of 30 items assessing the student's perceived importance of CSR components. In the survey the students had to indicate their perception on a 5-point Likert scale ranging from 1 (unimportant) to 5 (very important). The questionnaire had two parts. The first part asked for demographic information about gender, nationality, study field, study level as well as whether the respondent is part of the Evonik talent pool. The information about the study field was used to find out about possible differences between different study groups concerning their perceived CSR importance in the job choice. In the second part, the importance of the different components of CSR in the job choice of the students was examined using the new methodology and an improved technique.

Step 4: In order to establish validity, a thorough review of existing literature was done. An analysis was performed of which authors have used which components under the five dimensions. The draft survey was discussed with a team of experts who also tested the readability of the questionnaire.

Step 5: Before the actual circulation of the survey, a Cronbach's Alpha analysis was performed to ensure that all included items contribute to the overall construct reliability and can therefore be left in the data set. The alpha coefficient for all 30 variables was $\alpha = 0.92$. Looking at the dimensions more specific, the alpha values were as followed: Product ($\alpha = 0.708$), Environment ($\alpha = 0.94$), Employee relation ($\alpha = 0.623$), Diversity ($\alpha = 0.85$) and Community relations ($\alpha = 0.863$). The values show an internal consistency that is between acceptable and excellent (Muijs, 2011).

Table 2 illustrates the new measurement instrument, showing how the 30 variables have been conceptualized as well as from which authors the variable was adapted.

Table 2 New measurement instrument

Dimension	Variable	Conceptualization	Authors	Cronbachs Alpha
Employee Relations	Health and safety	The company's concern for the health and safety of its employees	Inoue & Seoki Lee (2010); Montgomery & Ramus (2003); Mishra & Suar (2010)	0,623
	Unions relations	The company's relations with the employee union(s)	Inoue & Seoki Lee (2010); Greening & Turban (2000); Albinger & Freeman (2000)	
	Employee welfare	The company's concern for employee welfare (cash profit sharing, insurance package, retirement benefits)	Lamsa (2008); Inoue & Seoki Lee (2010); Greening & Turban (2000); Albinger & Freeman (2000); Wang (2012); Montgomery & Ramus (2003)	
	Employee involvement	The company's allowance of employee involvement by e.g. employee stock ownership and participation in management decision making	Inoue & Seoki Lee (2010); Greening & Turban (2000); Albinger & Freeman (2000)	
	Employee developement and training	The company's provision of opportunities for developing skills and abilities by training and further education	Lamsa (2008); Montgomery & Ramus (2003); Mishra & Suar (2010); Latour & Zahra (1987)	
	Work environment	The company's work environment with regard to onsite facilities like day care, health club, laundry, restaurant	Montgomery & Ramus (2003); Latour & Zahra (1987)	
Product	Products for disadvantaged consumers	The company's provision of products to economically disadvantaged consumers	Inoue & Seoki Lee (2010); Mishra&Suar (2010)	0,708
	R&D/ Innovation	The company's R&D/Innovation performance	Inoue & Seoki Lee (2010); Greening & Turban (2000); Mishra&Suar (2010)	
	Marketing and contracting practices	The company's marketing and contracting practices	Inoue & Seoki Lee (2010); Greening & Turban (2000)	
	Product safety	The company's degree of product safety	Inoue & Seoki Lee (2010); Greening & Turban (2000); Mishra & Suar (2010)	
	Customer service	The company's customer service (incl. provision of product information)	Mishra&Suar (2010); Latour & Zahra (1987); Lamsa (2008)	
	Product and service quality	The company's product and service quality	Inoue & Seoki Lee (2010); Greening & Turban (2000); Latour & Zahra (1987); Lamsa (2008); Mishra & Suar (2010)	

Table 2 continued: New measurement instrument				
Dimension	Variable	Conceptualization	Authors	Cronbachs Alpha
Community Relations	Charity	The company's charity work and social activities	Inoue & Seoki Lee (2010); Greening & Turban (2000); Albinger & Freeman (2000); Wang (2012); Latour & Zahra (1987); Mishra & Suar (2010)	0,863
	External stakeholder relations	The company's relationship with local communities and outside stakeholders (such as governments, public interest groups, industry groups)	Wang (2012); Mishra & Suar (2010)	
	Education	The company's support for education (e.g. fighting illiteracy)	Inoue & Seoki Lee (2010); Latour & Zahra (1987); Mishra & Suar (2010)	
	Volunteer programmes	The company's volunteer programs (contribution of skills and time of employees for community services)	Inoue & Seoki Lee (2010); Greening & Turban (2000); Mishra & Suar (2010)	
	Local communities	The company's active involvement and investments in local communities (promote human development and democracy, fighting poverty)	Greening & Turban (2000); Albinger & Freeman (2000); Latour & Zahra (1987); Lamsa (2008); Mishra & Suar (2010); Wang (2012)	
	Ethical standard	The company's ethical standard of products, services and marketing practices (regarding child labor, human rights, bribery and corruption)	Mishra & Suar (2010); Wang (2012)	
Environment	Energy efficiency	The company's energy efficiency	Inoue & Seoki Lee (2010); Mishra & Suar (2010); Wang (2012)	0,94
	Pollution	The company's level of pollution (air, water and soil)	Inoue & Seoki Lee (2010); Mishra & Suar (2010); Wang (2012); Greening & Turban (2000); Latour & Zahra (1987)	
	Recycling	The company's recycling standards (waste management incl. hazardous waste)	Inoue & Seoki Lee (2010); Mishra & Suar (2010); Wang (2012); Greening & Turban (2000)	
	Natural resources	The company's standards with regard to the use of natural resources (sustainable management systems, products and services)	Inoue & Seoki Lee (2010); Wang (2012); Montgomery & Ramus (2003); Mishra & Suar (2010); Latour & Zahra (1987)	
	Environmental impact	The company's impact on climate change and environmental conditions	Inoue & Seoki Lee (2010); Greening & Turban (2000); Albinger & Freeman (2000); Lamsa (2008); Mishra & Suar (2010); Montgomery & Ramus (2003)	
	Emission	The company's emission of green house gases	Inoue & Seoki Lee (2010); Greening & Turban (2000); Mishra & Suar (2010); Wang (2012)	

Table 2 continued: New measurement instrument				
Dimension	Variable	Conceptualization	Authors	Cronbachs Alpha
Diversity	Representation of women and minorities	The company's representation of women or minorities (e.g. as CEO and in the board of directors)	Inoue & Seoki Lee (2010); Greening & Turban (2000); Albinger & Freeman (2000); Latour & Zahra (1987); Mishra & Suar (2010)	0,85
	Employment of disabled persons	The company's employment rate of disabled persons	Inoue & Seoki Lee (2010); Latour & Zahra (1987)	
	Development for women and minorities	The company's promotion of development opportunities for women or minority employees	Inoue & Seoki Lee (2010); Greening & Turban (2000); Latour & Zahra (1987); Mishra & Suar (2010)	
	Hiring practices	The company's fairness of hiring practices (equal-opportunity employment)	Inoue & Seoki Lee (2010); Greening & Turban (2000); Lamsa (2008);	
	Non-Discrimination Policy	The company's Non-Discrimination policies (e.g. gay and lesbian)	Inoue & Seoki Lee (2010); Latour & Zahra (1987)	
	Family benefits	The company's provision of family benefits and programs (e.g. programs to combine family and work)	Albinger & Freeman (2000); Mishra & Suar (2010)	
				0,85
All variables have been operationalized with a 5-point Likert Scale (1)= unimportant; (2)= of little importance; (3)= moderately important; (4)= important; (5)= very important				

Gender, nationality, study field, study level as well as whether the respondent is part of the Evonik talent pool was measured functioning as control variables. Earlier research has shown that the type of work, compensation and promotion opportunities are important to applicants (Judge & Bretz, 1992; Chapman et al., 2005). In order to ensure that the ratings of the respondents are not influenced by these factors, they have been described positively in the introduction of the survey.

“Imagine you just finished your studies and currently look for a job. You have several job offers which totally satisfy you with regard to the type of work, career opportunities and its financial package (salary, bonus, paid overtime, and other monetary benefits like stock options). Which of the following options makes the difference for you?”

3.4 Procedure

In order to determine which CSR components students consider important in the selection of their job as well as whether differences among the study groups exist, a questionnaire based on the newly developed set of CSR items served as the primary instrument of data collection. The study made use of an electronic questionnaire of the provider questback. The link to the survey was administered to the students via email, asking for their anonymous participation. The distribution was carried out with the help of several contact persons from the University of Twente and Evonik, which have been asked for support prior to the study. The data was gathered online over a period of five weeks; whereas one reminder was sent after about one week of the first contact to increase the response rate. The questionnaire took the students about seven minutes to fill out. Questionnaires with missing data were rejected to enable a comparison of all of the original statements.

3.5 Analysis

After the conduction of the survey, the statistical software IBM SPSS Statistics was used to process the raw data and analyze the results. Out of the overall group of respondents contacted, 243 students participated in the survey and 191 actually finished it. Only the response rate for the Evonik perspectives could be calculated as it is the only group where the size of the population was known. Here a high response rate of 57% was achieved. Because of missing values, 36 data sets were removed so that in the end 155 valid responses could be obtained.

Table 3 summarizes the demographics of the participants with reference to gender, nationality, study level, study field and whether the respondent is part of the Evonik Perspectives Program. The distribution of gender shows a small tendency towards male respondents.

Table 3 Demographic Information overall sample population

Variable	Frequency	Percentage
<i>Gender</i>		
Female	63	40,6
Male	92	59,4
Total	155	100
<i>Evonik Perspective</i>		
Yes	85	54,8
No	70	45,2
Total	155	100
<i>Nationality</i>		
German	86	55,5
Dutch	58	37,4
Others	11	7,1
Total	155	100
<i>Level of education</i>		
Bachelor	39	25,2
Master	116	74,8
Total	155	100
<i>Study field</i>		
Business Administration	59	38,1
Chemical Engineering	66	42,6
Industrial Engineering	20	12,9
Others	10	6,5
Total	155	100

4. Results

4.1 Overall importance rating of the CSR components

The results of the statistical analysis show that out of the 30 CSR components that have been under study, the students perceive their importance quite differently. The means of the scores for each individual CSR component was calculated (Appendix 4).

What becomes obvious is that those components that directly concern the respondents' own working life have been ranked as most important. Therefore the company's provision of opportunities for developing skills and abilities by training and further education ($m=4,5$), their concern for employee welfare ($m=4,06$) as well as health and safety of its employees ($m=4,05$) show the highest mean scores. Still, the respondents ranked the company's ethical standard of products, services and marketing practices (regarding child labor, human rights, bribery and corruption) ($m=4,04$) as forth most important component. This shows that the respondent's job choice is not only influenced by aspects that directly affect them in their work but also perceive the company's ethical standards as very important. Further, the results show that the respondents want to work for a company providing a high product and service quality ($m=3,98$).

Considerably less important to the respondents are those components that can be categorized under the term diversity. Here the employment of disabled persons ($m=2,59$), representation of women or minorities ($m=2,81$) and the company's promotion of development opportunities for women or minorities ($m=2,99$) belong to the five least important CSR components. Also not very important to the respondents are the companies charity work and social activities ($m=2,94$) and the provision of products to economically disadvantaged consumers ($m=2,85$).

In order to allow a later comparison of the results of the present study with previous researches using the five dimensions of CSR, the ratings from the respondents were averaged to arrive at a single score for each of the commonly used five CSR dimension. By averaging the mean scores of the six components belonging to one dimension, a ranking of the perceived importance of the dimensions could be made. The dimension that is perceived most important by the respondents is Employee relation ($m=3,78$), followed by Product Issue ($m=3,61$), Environment ($m=3,54$), Diversity ($m=3,33$) and Community relations ($m=3,25$).

4.2 Difference in CSR perception between study fields

After a test of homogeneity, an Analysis of Variance (ANOVA) and a Tukey test as post hoc analysis was used to run comparisons between the student groups and their perceived importance of the CSR components. While the ANOVA is used to determine whether groups in the sample differ, the Tukey test can clarify which groups among the sample in specific have significant differences. The significance level used in the analysis was 5% ($p < 0.05$). For the comparison the respondents who did not fall under one of the three study fields Business Administration, Chemical Engineering or Industrial Engineering and specified their study field with “Others” have been removed. This resulted in a remaining sample of 145 respondents.

By conducting the ANOVA it was checked whether a significant variance between the three groups existed in the overall ranking of the 30 CSR components. The results show that there is a significant difference between the three groups for six components out of the 30 that have been under study (Table 4). While the three groups agree on the importance of most components, significant differences exist with regard to the company’s R&D/Innovation performance, degree of product safety and customer service as well as the company’s energy efficiency, level of pollution and recycling standards.

Table 4 Study group comparison – Results of ANOVA where a significant difference was found N:145

Variable		Mean	SD	F- Value	Significance
R&D/Innovation performance	Business Administration	3,53	0,858	15,781	0,00
	Chemical Engineering	4,33	0,687		
	Industrial Engineering	4,1	1,021		
Degree of product safety	Business Administration	3,78	0,911	3,846	0,024
	Chemical Engineering	4,17	0,714		
	Industrial Engineering	3,85	0,745		
Customer service (incl. provision of product information)	Business Administration	3,78	1,068	3,998	0,02
	Chemical Engineering	3,27	0,969		
	Industrial Engineering	3,5	0,889		
Energy efficiency	Business Administration	3,02	1,025	7,767	0,001
	Chemical Engineering	3,61	0,943		
	Industrial Engineering	3,8	0,894		
Level of pollution (air, water and soil)	Business Administration	3,34	1,139	4,027	0,02
	Chemical Engineering	3,86	0,959		
	Industrial Engineering	3,65	0,933		
Recycling standards (waste management incl. hazardous waste)	Business Administration	3,32	1,041	8,388	0,00
	Chemical Engineering	4	0,928		
	Industrial Engineering	3,95	0,826		

A Tukey test was performed to clarify where the exact difference lies that was shown significant by the ANOVA, so which groups of students actually differ in their perceived importance of the CSR components (Table 5).

Table 5 Study group comparison – Tukey Test *The mean difference is significant at the 0.05 level.

Variable			Mean Difference	Significance
R&D/Innovation performance	Business Administration	Chemical Engineering	-,808*	,000
		Industrial Engineering	-,575*	,019
	Chemical Engineering	Business Administration	,808*	,000
		Industrial Engineering	,233	,498
	Industrial Engineering	Business Administration	,575*	,019
		Chemical Engineering	-,233	,498
Degree of product safety	Business Administration	Chemical Engineering	-,387*	,022
		Industrial Engineering	-,070	,939
	Chemical Engineering	Business Administration	,387*	,022
		Industrial Engineering	,317	,274
	Industrial Engineering	Business Administration	,070	,939
		Chemical Engineering	-,317	,274
Customer service (incl. provision of product information)	Business Administration	Chemical Engineering	,507*	,015
		Industrial Engineering	,280	,528
	Chemical Engineering	Business Administration	-,507*	,015
		Industrial Engineering	-,227	,648
	Industrial Engineering	Business Administration	-,280	,528
		Chemical Engineering	,227	,648
Energy efficiency	Business Administration	Chemical Engineering	-,589*	,003
		Industrial Engineering	-,783*	,006
	Chemical Engineering	Business Administration	,589*	,003
		Industrial Engineering	-,194	,714
	Industrial Engineering	Business Administration	,783*	,006
		Chemical Engineering	,194	,714
Level of pollution (air, water and soil)	Business Administration	Chemical Engineering	-,525*	,014
		Industrial Engineering	-,311	,477
	Chemical Engineering	Business Administration	,525*	,014
		Industrial Engineering	,214	,697
	Industrial Engineering	Business Administration	,311	,477
		Chemical Engineering	-,214	,697
Recycling standards (waste management incl. hazardous waste)	Business Administration	Chemical Engineering	-,678*	,000
		Industrial Engineering	-,628*	,034
	Chemical Engineering	Business Administration	,678*	,000
		Industrial Engineering	,050	,977
	Industrial Engineering	Business Administration	,628*	,034
		Chemical Engineering	-,050	,977

What is noticeable is that the group of Business Administration students perceive the CSR components quite differently than the other two groups. For five of the six components indicating a significant difference between education groups, the Business Administration students have smaller mean scores, so perceive this component as less important than the students of the other groups. Especially those components related to the environment are

significantly less important to the Business Administration students. When it comes to the company's R&D/Innovation performance, recycling standards and energy efficiency, Business Administration students perceived these components significantly less important to both other groups of students. Looking at the company's degree of product safety and level of pollution the difference was only significant for the Business Administration and Chemical Engineering students. Only the component concerning the customer service of the company was perceived as more important by the Business Administration students ($m=3,78$) compared to the other groups ($m=3,27$ and $m=3,5$). This difference was only significant between the Business Administration and Chemical Engineering students.

In general, it could be observed that the strongest difference in mean scores exists between the Business Administration and Chemical Engineering students. Here a significant difference in mean scores exists in all of the six components for which a variance was found. No significant difference between the students from the Chemical Engineering and Industrial Engineering major could be observed. This shows, that these students very much agree on the importance of CSR in their job decision process, while the Business Administration students show generally less interest in CSR aspects during their job choice. Generally, of all three groups, the Chemical Engineering students show the highest mean scores throughout the whole ranking, which shows that they perceive CSR in general as more important than the other two groups. Again, in order to allow a comparison with previous research using the five dimensions of CSR, the ratings from the respondents of the three groups were averaged to arrive at a single rating for each of the five CSR dimensions. Looking at the CSR dimensions as a whole with a significance level of 5% no significant difference between the study groups can be found, although the value for the dimension Environment is almost significant. These results show the limitations of the measurement with the five dimensions. The differences that could be found using the new, more detailed measurement cannot be observed. This clearly hides some very valuable information for companies.

Table 6 Study group comparison dimensions – Results of ANOVA N:145

Variable		Mean	SD	F- Value	Significance
Employee Relations	Business Administration	3,71	0,4421	0,710	0,493
	Chemical Engineering	3,81	0,48149		
	Industrial Engineering	3,82	0,54047		
Diversity	Business Administration	3,42	0,92967	0,79	0,455
	Chemical Engineering	3,24	0,89068		
	Industrial Engineering	3,22	0,70317		
Product Issues	Business Administration	3,57	0,61531	0,14	0,873
	Chemical Engineering	3,62	0,55742		
	Industrial Engineering	3,63	0,55567		
Community Relations	Business Administration	3,16	0,8298	0,62	0,539
	Chemical Engineering	3,28	0,82508		
	Industrial Engineering	3,38	0,89651		
Environment	Business Administration	3,34	1,01567	2,9	0,058
	Chemical Engineering	3,67	0,842		
	Industrial Engineering	3,79	0,71712		

4.3 The new measurement instrument of CSR perception in Job Choice

The results of the study with regard to the five CSR dimensions strengthen the criticism that this research is based upon. In order to allow a comparison to previously performed studies, each analysis in this study was also performed for the five dimensions of CSR. Table 7 shows the results of Greening and Turban (2000), Backhaus (2002) and the present study's ranking of the five CSR dimensions.

Seeing that several studies aiming to shed light on the importance of CSR in job choice revealed a different ranking by testing the five CSR dimensions is a clear indication, that the measurement is having drawbacks.

Table 7: Comparison of ranking results – Importance of CSR dimensions. Ranking from 1 to 5 (1: most important)

	Greening & Turban (2000)	Backhaus et al. (2002)	Present research
Employee Relations	1	4	1
Product Issues	4	5	2
Community Relations	5	2	5
Environment	3	1	3
Diversity	2	3	4

Looking at the results, no patterns can be observed besides few similarities between three positions of Greening and Turban's (2000) study and the present one. As presumed earlier, this study makes it even clearer that the final results of CSR studies testing the importance of the five commonly used CSR dimensions depend upon the CSR components collected under the specific dimensions. As each author is using different components not transparent to the respondents, different results are a logical consequence. Looking at the overall perceived importance but also at study field differences has shown that the new measurement using the newly developed set of CSR components gives more detailed insights into the respondent's perception about the importance of CSR. While a significant difference between the groups perception of six components could be found, no significant difference in the perception of the CSR dimensions was found. Using combinations of narrative scenarios of the dimensions has therefore proved to be insufficient way to find out about the perceived importance of CSR and does not allow companies detailed information that can be used for targeted recruitment measures.

The newly developed measurement instrument allows to investigate in-depth which CSR components are most important in the job choice and whether differences among job seekers exist, giving the respondents the opportunity to indicate their perception with regard to a more detailed set of CSR aspects.

5. Discussion

This study is one step forward in CSR research as it has developed a new measurement instrument to explore in-depth which CSR components are most important in the job choice of students. It provides insights into how organizations can use CSR effectively for recruitment purposes.

There are previous studies that investigated what CSR dimensions influence job seekers, but a key difference here is that these studies used the existing five rigid dimensions of CSR (Greening & Turban, 2000; Backhaus et al., 2002). The present study outlines the limitations of earlier operationalization as it reveals more detailed, outcome oriented and therefore practically relevant information. While the commonly used operationalization only allowed insights into which broad dimension of CSR is most important to job seekers, the new measurement adds value by giving the respondents the opportunity to indicate their perception with regard to a more detailed set of CSR aspects. While before, the company could only see that for example the dimension employee relations is important to job seekers now they know that, for example, the provision of opportunities and training or the health and safety of the employees are important topics for job seekers. Companies can easily transfer exactly those components into actual CSR initiatives, communicate them to the target groups and use them for recruitment purposes, which have been rated as most important. The unique contribution of this study is, that a measurement has been developed that allows results that do not only have scientific but also practical and organizational implications.

Another advantage is that the new measurement generally reduces the negative effect of bias in respondent interpretation. In the past, some researchers indicated that certain CSR dimensions have been rated as considerably less important than others due to the respondents' misunderstanding of the dimension's content. The new measurement makes the content transparent to the respondents to avoid this.

With regard to the respondent's ranking of the 30 CSR components, it is noticeable that those components have been ranked as most important that concern the respondents' own working life. This is very much in line with what signaling theory and social identity theory suggest. Job applicants have a higher self-image when working for socially responsive firms (Backhaus et al., 2002) and a firm's CSR shows prospective employees what it would be like to work for a firm (Greening & Turban, 2000; Backhaus et al., 2002; Behrend et al., 2009). The concept of issue intensity says that the greater the importance of an issue to the decision maker, the more influential it is in the decision process (Jones, 1991; Backhaus et al., 2002). Aspects that are more distant to the worker will have a smaller effect on the job choice. Therefore it can be said that the ranking results provide very valuable insights for companies, getting more detailed information about the job seekers' preferences. This knowledge can be used to influence the job seekers decision process by communicating targeted information to them. Companies can put special emphasis on measures concerning those CSR aspects that are directly affecting the employees and use them for recruitment

purposes. As an example, it has been shown to be generally less valuable for companies to talk about diversity and community relations but more important to present their initiatives concerning employee relations to job seekers. Based on the results of this study, it can, for example, be recommended to mention the opportunities for further education and development, promising career opportunities and presenting the work environment in job advertisements.

The results with regard to the differences between the perceptions of the three study groups are in line with what earlier researchers have found, but allow more detailed information to which exact aspects of CSR are perceived differently. Sankaran and Bui (2003), for example, found that students from non-business majors tend to be more ethical than business majors. Hawkins and Cocanougher (1972) found that business majors were more tolerant in evaluating the ethics of business practices. The results of the present study support this, showing that Business Administration students perceive CSR generally as less important in their job choice compared to the other study groups. From the present study we know, that the environmental CSR aspects especially are perceived very differently. Here the engineering students show very similar perceptions towards CSR but the Chemical Engineering students perceive CSR generally as the most important among the groups. Knowing about the target groups' specific preferences, so, for example, that engineering students perceive the CSR performance with regard to the environment significantly as more important than business students, can be used to develop group specific recruitment measures. It is a great advantage of the new measurement that it reveals whether and where differences in the job seekers' preferences exist. These differences among the groups could not be found using the operationalization with the five rigid dimensions of CSR. The new measurement can show the exact components which are rated significantly different by the students and therefore provides companies with valuable information about the job seekers' preferences. This knowledge can be used for group specific recruitment measures. The new measurement allows companies to communicate exactly those company values to the respondents that are especially important to them.

As one example, according to the results of this study, a company seeking chemical students can be recommended to mention their extraordinary environmental engagement in recruitment brochures and on their website. They could put emphasis on the company's environmental awareness by displaying initiatives and projects, e.g. to reduce their climate impact on job fairs or post them in social networks. The other way around, these measures might be unsuccessful to attract business students, who showed generally less interest in the companies concerns for the environmental. Promoting their green image to attract business students might be a waste of time and money, therefore having specific knowledge about the target groups' preferences, helps to develop the most efficient recruitment measures.

5.1 Limitations and Future Research

When it comes to the use of questionnaires, validity issues are always present. A badly designed questionnaire might include bias of the researcher and therefore might not provide an objective basis. As questionnaires involve predetermined statements that cannot be

adapted afterwards, a threat of misunderstanding by participants exists. The careful selection of wording, a logical setup as well as an expert panel control for this. Nevertheless, it can never fully ensure, that all participants understand all terminology and statements equally. The subjective interpretation might weaken the internal validity of the study. A threat to external validity might be that changes to the questionnaire might also lead to different results. Another limitation could be that the study was conducted by one person and therefore the observations and interpretations are made by that person. This is a limitation to the rigor and trustworthiness of the findings. When it comes to the data analysis, a rather smaller thing that could be observed is that many respondents did not answer the question concerning variable number 11, the company's marketing and contracting practices. Probably, a more detailed explanation is necessary here.

Construct validity was ensured by a thorough literature review, a discussion with a team of experts and carrying out a Cronbach's Alpha analysis to determine whether all the CSR items positively contribute to the construct validity. The Cronbach's for all 30 variables was $\alpha = 0.92$. Looking at the dimensions more specific, the alpha values were as followed: Product ($\alpha = 0.708$), Environment ($\alpha = 0.94$), Employee relations ($\alpha = 0.623$), Diversity ($\alpha = 0.85$) and Community relations ($\alpha = 0.863$). The values show an internal consistency that is between acceptable and excellent (Muijs, 2011).

Further, the sample size could be a critical issue as well as the purposive sampling which clearly limits the ability to generalize the results to the overall student population, although the sample population was quite heterogeneous due to the combination of students from three majors of the University of Twente as well as the talent pool of Evonik. In general, focusing on students limits the validity to that specific group, which clearly does not represent the entire population.

Possibilities exist for expanding the scope of the present research, e.g. enlarging the number of study fields, universities, companies and also nationalities that are compared. This would increase the validity and generalizability of the study. Further, the study was quite broad when it comes to the job choice of the students, as it was not specified to certain industries or sectors. Future research might shed light on the question whether job seekers looking for an employment in different industries perceive the importance of the CSR components differently. Also research needs to be conducted to determine whether the newly developed set of CSR components actually influence the job choice of students in an experimental setting. Such findings could give companies even more reason to increase their CSR efforts and use them for recruitment purposes. In future research it might be also interesting to analyze whether the differences observed for the three study fields can be generalized to other types of study fields. Further, it should be assessed why students from different study fields actually perceive CSR differently. What are the reasons behind this? Are they based on the educational program itself including books and lectures or are personal characteristics of the students the underlying reason? One possibility that the Chemical Engineering students perceived the importance of the environment so highly in their job choice could be that they see a great business opportunity in this aspect. But this is just an assumption that needs to

be tested in future research. More qualitative data is needed that finds out why the respondents have responded in the way they did.

This study focused on the recruitment of young job seekers, however an interesting future investigation would be how experienced job seekers perceive CSR in their job choice and how existing employees perceive the CSR performance of the company they work for and which effects this has on employee commitment and performance.

6. Conclusion

This research developed a new instrument to measure CSR perception in the job choice and investigated in-depth which CSR components are most important to students for this choice. Based on an extensive literature review, a new measurement instrument was developed and tested among students close to entering the job market. The research gave insight into differences in the perceived importance of CSR that exist among students from different educational fields, giving the respondents the opportunity to indicate their perception with regard to a more detailed set of CSR aspects. The new measurement of CSR is more comprehensive, outcome oriented and allows companies to have more detailed knowledge about job seekers' preferences in the field of CSR. Compared to previous measures, the results of the new scale can be directly transformed to actual CSR activities or recruitment measures by companies and therefore provide greater utility. The study supports the growing evidence that the company's CSR activities are a great and increasingly important way to attract and retain good employees and sheds light on the divergence in how to execute CSR and effectively use it for managing talent. Taking this into account it can be said that the objectives underlying this research could be met. Still, further research is necessary and some interesting future research opportunities have been indicated.

6.1 Theoretical Implication

According to Ruf, Muralidhar and Paul (1998, p. 122) "a measure of CSR should (a) be responsive to a variety of actors that constitute social responsibility, (b) be independent of the characteristics of the organization, (c) be based on outcome measures, and (d) reflect the values of the stakeholders being considered. The new measurement developed in this study fulfills these requirements and therefore increases the quality of CSR research.

The inconsistent results of earlier studies show that the operationalization is not providing an adequate and aggregate measure of CSR. The literature review outlines that although measures of CSR have been improved over time, various limitations exist and a systematic and reliable methodology for measuring CSR is still missing. As done in this study, indicating the exact CSR components belonging to the broader dimensions is a safer way to ensure that the results actually show the respondents' perception. Further, the negative effect of bias in respondent interpretation can be reduced by this new way of measuring CSR perception. In the past, some researchers indicated that certain dimensions have been rated as considerably less important than others due to the respondents' misunderstanding of the

dimensions content. This is widely ensured by naming the single CSR components themselves.

It could be supported that the specification of each CSR component as a unique aspect of CSR may provide better insights into CSR research. Therefore the first research question underlying this study, namely, *“How can the current CSR measurement be improved to give more valuable information for companies?”* could be answered. The newly developed measurement was successful in assessing the importance of CSR job attributes. It allows to test in a more detailed way in the future which components of each dimensions influence job choice in what strength. The collection of CSR components that was developed has been based on an extensive literature review and summarizes what earlier researches have used under their dimensions. Therefore it is a legitimate and far reaching measurement that allows more valuable and practically useful results. Therefore, in the future researchers should resign from testing the commonly used five dimensions of CSR but use the newly developed set of components. This new measurements provides a better understanding of how important CSR is in the job choice. It can help organizations to gather more detailed information about future employees and use them for recruitment purposes.

6.2 Practical Implications for Evonik

Already there has been growing evidence that a company's CSR activities comprise a legitimate, compelling and increasingly important way to attract and retain good employees. This study adds to earlier research by revealing how influential each component of CSR can be for managing talent. The measurement developed and used in the present study allows more valuable and practically useful results for companies. The results clearly suggest that certain components of CSR are considered differently in a student's job choice. This study helps companies to identify the most influential CSR components and understand the needs of different prospective employee groups. With that they can target their CSR efforts to address the unique needs of each group. Though all CSR dimensions with their various components may yield competitive advantages, the findings suggest that certain components of CSR are more influential to attract employees. What is noticeable is that out of the five most important components, three are from the dimension employee relations. In contrast to that the three least important components are coming from the dimension diversity. For students, the company's provision of opportunities for developing skills and abilities by training and further education as well as the company's concern for employee welfare (cash profit sharing, insurance package, retirement benefits) are the most important CSR components in their job choice. Further, students care about the company's concern for the health and safety of its employees as well as the company's ethical standard of products, services and marketing practices. Also they indicated that they perceive the company's product and service quality as an important factor in their job choice. In contrast to that, the student's job choice is less influenced by the company's diversity initiatives, promoting development opportunities for women or minority employees or their representation as CEO or in the board of directors. They also do not perceive the company's charity work and

social activities and the provision of products to economically disadvantaged consumers as an important factor in their job choice.

Further, this study could show what different authors have already expected. A difference exists between the CSR perceptions of students from different educational fields. Therefore also the second research question of this study, namely, *“To what extent does the perceived importance of CSR in the job choice vary among students from different study fields?”* could be answered. The results showed that there was a significant difference between the three groups for six CSR components out of the 30 that have been under study.

While Business Administration students perceive the company’s customer service (incl. provision of product information) as significantly more important in their job choice, the Chemical Engineering and Industrial Engineering students scored higher in most other CSR components. They perceive the company’s R&D/Innovation performance, its recycling standards (waste management incl. hazardous waste), energy efficiency as well as the company’s level of pollution (air, water and soil) significantly more important.

What is noticeable is the great difference between the perceptions when it comes to CSR components falling under the dimension Environment. In this dimension, the difference between the mean scores of the three groups is the greatest. This is a clear indication that Business Administration students perceive Environment as less important in their job choice compared to the other student groups. The results also go in line with earlier studies from e.g. Sankaran and Bui (2003) who found that students from non-business majors tend to be more ethical than business majors as well as Hawkins and Cocanougher (1972) who found that business majors were more tolerant in evaluating the ethics of business practices. These are essential findings for Evonik that can be used to develop group specific recruitment measures and address graduates in the most effective way.


The insights of this study underline the relevance of CSR for Evonik and with that give reason to intensify current CSR efforts. The insights indicate necessary changes for Evonik’s employer branding strategy, for communication as well as for the recruiting processes, taking more into account the role of CSR in attracting different groups of graduates. The results allow Evonik to make more target group specific employer branding measures and therefore possibly gain a competitive advantage by attracting and winning the most talented applicants.

7. Acknowledgement

I would like to thank Dr. Anna Bos-Nehles and Raja Singaram for their guidance, engagement, suggestions and continuous support as supervisors. My sincere thanks also go to Dr. Kasia Zalewska-Kurek, Dr. Ben Betlem, Dr. Peter Schuur as well as Silvia Pospischil who helped circulating my survey. Finally, I would like to thank my boyfriend and my parents for their good spirits, patience and constant belief in me. I am glad to have you by my side.

8. Appendix

Appendix 1: Online Survey



8%

Dear student,

I invite you to participate in a survey about the importance of factors influencing the job choice of students. Based on this research I hope to finish my master thesis at the University of Twente in cooperation with one of the world's leading specialty chemicals companies, the Evonik Industries AG. I aim to understand what students demand from their future employer, and how companies can use this information in the recruiting process to specify company values and characteristics in a transparent way. You can benefit from this information as it helps you deciding which company offers what you demand from your future job.


Filling out the questionnaire will take about 5 minutes. The survey is confidential and your answers are solely used for the purpose of this study. Your honest, thoughtful and complete responses to this survey will help me a lot finalizing my thesis.

Thank you very much for your participation.

Kind regards,

Lioba Appel

Continue



17%

What is your gender?

☐ Female ☐ Male

Are you an Evonik Perspective?

☐ Yes ☐ No

What is your nationality?

☐ German ☐ Dutch ☐ Others

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33%

What is your level of education?

☐ Bachelor ☐ Master

Under which study field could your study best be categorized?

☐ Business Administration ☐ Chemical Engineering ☐ Industrial Engineering ☐ Others

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50%

Imagine you just finished your studies and currently look for a job. You have several job offers which totally satisfy you with regard to the type of work, career opportunities and its financial package (salary, bonus, paid overtime, and other monetary benefits like stock options). Which of the following options makes the difference for you?

In the following steps, several job attributes are presented to you. Please indicate how important you perceive each attribute for choosing your future employer (from unimportant to very important).

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58%

How important do you consider the following factors when choosing your future employer?

	unimportant	of little importance	moderately important	important	very important
The company's concern for the health and safety of its employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's relations with the employee union(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's concern for employee welfare (cash profit sharing, insurance package, retirement benefits)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's allowance of employee involvement by e.g. employee stock ownership and participation in management decision making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's provision of opportunities for developing skills and abilities by training and further education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's work environment with regard to onsite facilities like day care, health club, laundry, restaurant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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67%

How important do you consider the following factors when choosing your future employer?

	unimportant	of little importance	moderately important	important	very important
The company's product and service quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's provision of products to economically disadvantaged consumers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's R&D / Innovation performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's marketing and contracting practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's degree of product safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's customer service (incl. provision of product information)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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75%

How important do you consider the following factors when choosing your future employer?

	unimportant	of little importance	moderately important	important	very important
The company's charity work and social activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's relationship with local communities and outside stakeholders (such as governments, public interest groups, industry groups)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's support for education (e.g. fighting illiteracy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's volunteer programs (contribution of skills and time of employees for community services)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's active involvement and investments in local communities (promote human development and democracy, fighting poverty)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's ethical standard of products, services and marketing practices (regarding child labor, human rights, bribery and corruption)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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83%

How important do you consider the following factors when choosing your future employer?

	unimportant	of little importance	moderately important	important	very important
The company's energy efficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's level of pollution (air, water and soil)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's recycling standards (waste management incl. hazardous waste)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's standards with regard to the use of natural resources (sustainable management systems, products and services)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's impact on climate change and environmental conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's emission of green house gases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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92%

How important do you consider the following factors when choosing your future employer?

	unimportant	of little importance	moderately important	important	very important
The company's representation of women or minorities (e.g. as CEO and in the board of directors)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's employment rate of disabled persons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's promotion of development opportunities for women or minority employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's fairness of hiring practices (equal-opportunity employment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's Non-Discrimination policies (e.g. gay and lesbian)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's provision of family benefits and programs (e.g. programs to combine family and work)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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100%

Thank you for your participation!!!

Appendix 2: Collection of original 70 CSR components

		Authors								Comments
Dimension	CSR Component	<i>KLD Database (Inoue & Seoki Lee (2010)</i>	<i>Greening& Turban (2000)</i>	<i>Albinger & Freeman (2000)</i>	<i>Lamsa (2008)</i>	<i>Wang (2012)</i>	<i>Latour & Zahra (1987)</i>	<i>Montgomery & Ramus (2003)</i>	<i>Mishra &Suar (2010)</i>	
Employee relations	Health and safety issues	X						X	X	No. 1
	Union relations	X	X							No. 2
	Retirement benefits	X	X							Included in No. 3
	Employee involvement	X	X							Included in No. 4
	Encourage work ownership through gain sharing plans	X	X							Included in No. 4
	Employee stock ownership	X	X							Included in No. 4
	Employee participation in management decision making	X	X							Included in No. 4
	Cash profit sharing	X								Included in No. 3
	HR benefits (insurance package)							X		Included in No. 3
	Work force reductions	X								Removed
	Taking care of employee welfare				X	X				Included in No. 3
	Invest in the growth and well-being of employees				X					Included in No. 3
	Quality of working life						X			Included in No. 6
	Providing employee training/development				X			X		Included in No. 5
	Offering further education						X		X	Included in No. 5
	Work atmosphere (work attitude of boss, colleagues and so on)						X	X		Included in No. 6
	Work environment (non financial benefits)						X			Included in No. 6
	Office environment and surrounding amenities like day care, health club, laundry, restaurant							X		Included in No. 6
Product	Product quality	X	X		X		X		X	Included in No. 7
	Benefits /providing products to economically disadvantaged consumers	X							X	No. 8
	R&D/innovation	X	X						X	No. 9

	Controversial marketing/contracting practices	X	X			No. 10
	Product safety issues	X	X		X	No. 11
	Antitrust	X				Removed
	Satisfy customer needs			X		Included in No. 12
	Produce useful and high-quality goods/services			X		Included in No. 7
	Providing product information			X	X	Included in No. 12
	Customer service/satisfaction			X	X	Included in No. 12
Community relations	Charitable giving	X	X			Included in No. 13
	Supporting charity and social activities			X	X	Included in No. 13
	Relationship with local communities and external stakeholders, such as governments, public interest groups, industry groups				X	No. 14
	Non-US charitable giving	X				Removed as to specific
	Innovative giving	X				Removed
	Support for education	X		X	X	No. 15
	Support for housing	X				Removed as to specific
	Volunteer programs	X	X			Included in No. 16
	Contribution of skills and time of employees for community services				X	Included in No. 16
	Sponsoring social activities			X		Included in No. 13
	Investing in public welfare			X	X	Included in No. 17
	Investing/ Create value for the local community in which it operates			X	X	Included in No. 17
	Responsiveness to public needs					Included in No. 17
	Actively involved in local communities (promote human development and democracy and fighting poverty)		X	X	X	No. 17
	Ethical products, services and marketing (no child labor, violation of human rights, bribery, corruption)				X	No. 18
Environmental issues	Use of clean energy	X		X		Included in No. 19
	Pollution (air and water) prevention	X	X		X	No. 20

	Energy efficiency						X	Included in No. 19
	Recycling (waste)	X	X		X		X	No. 21
	Sustainable management systems	X				X	X	Included in No. 22
	Sustainable products and services	X				X	X	Included in No. 22
	Impact on climate change	X	X					Included in No. 23
	Use of hazardous waste	X	X					Included in No. 21
	Reduction of emissions	X	X		X		X	No. 24
	Regulatory problems	X						Removed
	Use of ozone depleting chemicals	X						Removed (too detailed)
	Use of agricultural chemicals	X						Removed (too detailed)
	Protection of soil				X			Included in No. 20
	Waste management				X			Included in No. 21
	Sustainable use of natural resources				X	X	X	Included in No. 22
	Enhance environmental conditions	X	X	X			X	Included in No. 23
Diversity	Assignment of a woman or minority as CEO	X	X				X	Included in No. 27
	Assignment of women or minority board of directors	X					X	Included in No. 27
	Employment of the disabled	X						No. 25
	Gay and lesbian policies	X						Included in No. 29
	Promotion of/development for women or minority employees	X	X			X	X	No. 26
	Non-representation of women or minorities	X						Included in No. 27
	Discrimination issues	X						Included in No. 29
	Offer equal-opportunity employment	X	X					Included in No. 28
	Fairness of hiring practices				X			Included in No. 28
	Minority recruitment					X		Included in No. 27
	Equal treatment of men and women					X		Included in No. 29

Appendix 3: Variable names and numbers as in the SPSS outputs

1. Employee relations	
v_2	The company's concern for the health and safety of its employees
v_3	The company's relations with the employee union(s)
v_4	The company's concern for employee welfare (cash profit sharing, insurance package, retirement benefits)
v_5	The company's allowance of employee involvement by e.g. employee stock ownership and participation in management decision making
v_6	The company's provision of opportunities for developing skills and abilities by training and further education
v_7	The company's work environment with regard to onsite facilities like day care, health club, laundry, restaurant
2. Product Issues	
v_9	The company's provision of products to economically disadvantaged consumers
v_10	The company's R&D/Innovation performance
v_11	The company's marketing and contracting practices
v_12	The company's degree of product safety
v_13	The company's customer service (incl. provision of product information)
v_14	The company's product and service quality
3. Community relations	
v_16	The company's charity work and social activities
v_17	The company's relationship with local communities and outside stakeholders (such as governments, public interest groups, industry groups)
v_18	The company's support for education (e.g. fighting illiteracy)
v_19	The company's volunteer programs (contribution of skills and time of employees for community services)
v_20	The company's active involvement and investments in local communities (promote human development and democracy, fighting poverty)
v_21	The company's ethical standard of products, services and marketing practices (regarding child labor, human rights, bribery and corruption)
4. Environment	
v_22	The company's energy efficiency
v_23	The company's level of pollution (air, water and soil)
v_24	The company's recycling standards (waste management incl. hazardous waste)
v_25	The company's standards with regard to the use of natural resources (sustainable management systems, products and services)
v_26	The company's impact on climate change and environmental conditions
v_27	The company's emission of green house gases
5. Diversity	
v_28	The company's representation of women or minorities (e.g. as CEO and in the board of directors)
v_29	The company's employment rate of disabled persons
v_30	The company's promotion of development opportunities for women or minority employees
v_31	The company's fairness of hiring practices (equal-opportunity employment)
v_32	The company's Non-Discrimination policies (e.g. gay and lesbian)
v_33	The company's provision of family benefits and programs (e.g. programs to combine family and work)

Appendix 4: Overall ranking-CSR components

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
v_6	155	1	5	4,50	,697
v_4	155	2	5	4,06	,779
v_2	155	1	5	4,05	,870
v_21	155	1	5	4,04	1,080
v_14	155	2	5	3,98	,707
v_10	155	2	5	3,97	,893
v_12	155	1	5	3,95	,809
v_33	155	1	5	3,94	,965
v_31	155	1	5	3,93	1,111
v_32	155	1	5	3,74	1,196
v_25	155	1	5	3,71	1,025
v_24	155	1	5	3,70	1,009
v_23	155	1	5	3,59	1,074
v_26	155	1	5	3,52	1,071
v_13	155	1	5	3,52	1,015
v_7	155	1	5	3,41	1,056
v_5	155	1	5	3,41	,895
v_22	155	1	5	3,39	1,022
v_11	155	1	5	3,36	,925
v_27	155	1	5	3,34	1,072
v_18	155	1	5	3,28	1,125
v_3	155	1	5	3,26	,912
v_17	155	1	5	3,13	,998
v_20	155	1	5	3,06	1,079
v_19	155	1	5	3,06	1,052
v_30	155	1	5	2,99	1,225
v_16	155	1	5	2,94	1,055
v_9	155	1	5	2,85	,966
v_28	155	1	5	2,81	1,285
v_29	155	1	5	2,59	1,036
Valid N	155				

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