

On the Road to Corporate Sustainability

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A deeper Look into the Minds of CSR Managers



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A deeper Look into the Minds of CSR Managers

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Personal declaration

I hereby affirm that I have prepared the present Master thesis self-dependently, and without the use of any other tools, than the ones indicated. All parts of the text, having been taken over verbatim or analogously from published or not published scripts, are indicated as such. The Master thesis has not yet been submitted in the same or similar form, or in extracts within the context of another examination.

Bonn/Wageningen, 09.08.2023

A handwritten signature in black ink, appearing to read 'J. Schmeier', written over a horizontal line.

Student's signature

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List of Acronyms

CS	Corporate Sustainability
CSDDD	Corporate Sustainability Due Diligence Directive
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainability Reporting Directive
EU	European Union
FCM	Fuzzy-logic cognitive mapping
LkSG	Lieferkettensorgfaltspflichtengesetz

1. Introduction

Currently, climate change with its dramatic side effects like global warming is a main concern for economies around the world. Society enhances the development of rising temperatures, weather extremes, health risks, pressure on food and water supply, security risks and changes in the ecosystem through greenhouse gas emissions, especially in the last years the effects have been noticeable. The risks that come with ongoing climate change are also hitting private sectors, but climate change does not only carry threats but also opportunities for businesses. While consumers seem more and more willing to pay more for products from environmentally responsible companies, policy actions that put companies in their due diligence to care for actions against pollution and threats towards societies carry challenges for the 'business as usual' proceedings (Henderson et al., 2018). Until recently, most businesses preferred to take part in co-regulatory and self-regulatory agreements, partnering with NGOs and governmental organisations to engage in more sustainable behaviours (Lang and Murphy, 2014). So far, the relationship between businesses and government has been ambidextrous when facing political approaches towards corporate social responsibility (CSR). Especially the shift towards more globalised value chains and thus the migration of business operations into weaker countries is calling for more international political actions to secure ethical and sustainable products (Scherer, 2017).

Looking at the international political landscape, the European Union (EU) is currently introducing changes towards ethical, sustainable and more transparent value chains. Following the intentions of the United Nations' 17 Social Development Goals (SDGs) and the results of the Paris Agreement towards a sustainable future limiting climate change and social misconducts, the European Union (EU) recently introduced laws that put companies into their due diligence. (Bundesministerium für Arbeit und Soziales, n.d.; Herzog, 2023; UN, n.d.; UNFCCC, n.d.).

But some companies have been preparing CSR reports even before the discussion about mandatory reporting by law started. As Kahn et al. (2020) summarise, the rise of negative issues such as environmental matters like climate change and scandals in which companies are entangled like child labour underlined the growing need for and importance of more transparency and accountability for businesses. The growing globalisation played into this development as well as more and more companies are agitating on international markets around the globe which emphasises the questioning of the relationship between businesses and people. Stakeholders who have an interest in information about the company also demand more

detailed reporting about core business actions. The authors also note that with all these facilitators, companies can no longer afford to not take over more responsibilities. Instead, reporting about actions towards responsible business behaviours has a positive impact on their overall reputation.

Fifka (2013) has set up a timeline for reporting development and took the 1970s as starting point at which businesses started reporting about quality, equality, social benefits and their contribution to society. This information was mostly included in the annual reports and soon developed into additional “stand-alone ‘social reports’” (Fifka, 2013, p. 2) due to the growing demand for more enclosurement. In the 1970s and the beginning 1980s, these social reports were mostly focused on social issues but soon also enclosed first information about environmental issues as well. But with the growing interest of the public in environmentally friendly produced products, environmental issue reporting was put into focus and was separated from the social reporting. Only at the beginning of the new millennium, both reports were combined again and merged into a non-financial report.

Nowadays, through the Corporate Sustainability Reporting Directive (CSRD) and the Corporate Sustainability Due Diligence Directive (CSDDD), companies operating within the EU have to follow stricter rules when reporting their corporate social responsibility (CSR) and need to bring more transparency into their value chains (Bundesministerium für Arbeit und Soziales, n.d.; Herzog, 2023). The introduction and announcement of these and more upcoming laws towards corporate sustainability calls for the restructuring of businesses towards a transformative CSR strategy, putting CSR managers into action (Bay, 2023; Książak and Fischbach, 2017).

CSR has been a concept mostly shaped in the 1950s when first statements were made about how organisations should not only take responsibility for maximising profits, but also for the impact they have on their stakeholders and the society (Rodriguez-Gomez et al., 2020). In recent decades, CSR gained momentum in its role of representing the link between success of the organisation and sustainability, thus enabling organisations to balance their triple bottom line of social, environmental and economic performance (Książak and Fischbach, 2017). While in its developing stages CSR has been treated as an external optional element, CSR today is an integrated strategy merged with the organisation’s core of business and its strategy (Carollo and Guerci, 2017; Książak and Fischbach, 2017; Rodriguez-Gomez et al., 2020). Through actions responding to this strategy and integrating CSR, organisations acknowledge rising

social, environmental and ethical issues such as climate change, volatility of financial markets, social inequalities and globalisation. This shifts the focus on how change is achieved on the organisational level and puts the attention on the role of the individual within the organisational context of change, such as the managers (Visser and Crane, 2010).

With the rise of managerial positions in the sustainability area, the profession of the sustainability manager is moving into the focus of research to enable insight into the personality traits and competences a CSR manager inherits to support change within the organisation (Carollo and Guerci, 2017; Venn et al., 2022; Visser and Crane, 2010). As Carollo and Guerci (2017) summarise, CSR managers often face internal conflict, as on the one hand they are faced with the economic outlook on performance of the organisation and on the other hand focused on being responsible for society and environment. While these goals can go hand in hand, there are also potential conflicts between both outlooks.

Managers, including CSR managers, have to make daily decisions regarding performance and need to constantly re-evaluate their view on business and sustainability. In theory, humans make use of mental models to base their decisions on. Mental models are based on internal beliefs and experiences and strengthened by validation in practice, so that they can be mistaken for reflecting reality. Therefore, those models can be resistant as they are not critically questioned by the decision-maker. If internal mental models are contested, feelings of uncomfortableness could potentially arise through cognitive dissonance (Wilson and Rutherford, 1989; Rosner, 1995).

With the growing legislative pressure, the demand for CSR experts in companies is on the rise, growing above the current offer of experienced workforce (Bay, 2023). This puts the focus on universities where future CSR managers are incubated. The education future managers receive there is leading for students understanding of ethical and moral business behaviours. Thus, the call for changes in the curriculum of business studies from being organisation-centred to human-centred is gaining more and more momentum in literature (Alonso-Almeida et al., 2015). Research discovered that CSR aspects are gaining the interest of students who see them as valuable for their future career as they support them in future managerial decision-making process. But still, the growth of academic interest in CSR uncovers the scarcity of empirical studies concentrating on students and their conception of CSR activities in management (Alonso-Almeida et al., 2015).

Spinning the thought further and including the actual aspiration to CSR managers on the job, the focus question arises: Which educational support do CSR-enthusiastic and sustainability-interested management students need to be able to become CSR managers? Answering this question could help to synthesise the most promising approach to train students in a manner that supports them on their way to become future CSR managers. With this as research goal in mind it is for this study of interest to also ask the more detailed question: Do mental models of students differ from those of experienced CSR managers? A comparison of the respective mental models can potentially be a promising first step to find out more about what competences CSR managers need when making decisions, where students are standing with their knowledge in this context and how universities could improve their curriculum to fulfil their responsibilities towards the students.

This research is looking to further understand the role and its difficulties of the CSR manager, by connecting to cognitive mapping and mental models to deepen our understanding of CSR managerial research and how to train future professionals for this. Through the help of the online tool “Mental Modeler” similarities and differences in CSR managers’ and students’ approaches towards corporate sustainability are laid open, with the goal to define further building blocks for academic training at universities.

1. Theoretical Framework

In a time, where the political landscape is shifting more and more to changing the way humankind is interacting with its surroundings and resources, a sustainable way of economic management is more and more in the centre of attention (Bundesministerium für Arbeit und Soziales, n.d.). The path paved by the Paris Agreement and lined by the United Nation's Sustainable Development Goals is leading many guiding figures in politics and economics to a re-thinking of old behavioural patterns (Agarwal et al., 2017; Gomez-Echeverri, 2018). If climate goals and social responsibilities should be fulfilled, the way businesses interact with people, profits and planet (triple bottom line) needs to be shifted (Agarwal et al., 2017; Fallah Shayan et al., 2022).

Until a few years ago, companies' initiatives for more sustainability were a "good to have" and no "must have", but recently the first European countries introduced laws enforcing sustainable standards to companies and whole value chains. One recent example from last year is the German value chain due diligence law (Lieferkettensorgfaltspflichtengesetz, short: LkSG), which puts German companies fulfilling certain criteria into their due diligence to ensure that trade partners within their value chain are respecting human rights and the environment (Altenschmidt and Helling, 2022). Also, the European Union is announcing new laws for economic transformation: the Corporate Sustainability Reporting Directive, short CSRD, and the Corporate Sustainability Due Diligence Directive, short CSDDD. Both laws are directed towards the integration of sustainable actions into the daily business of companies (European Parliament, 2023a; European Union, 2022). While the CSRD is standardizing CSR reporting for companies with certain sizes and integrating materiality analyses into managerial practices, the CSDDD is very close to the German LkSG and directed to introduce more transparency into value chains. For example, it is planned to build upon the Deforestation Regulation, the Paris Agreement and human rights (European Parliament, 2023a; European Parliament, 2023b; European Union, 2022).

Pressure from new policies is underlining the importance of sustainability experts in companies, guiding them for the future. So far, these experts are rare on the market which makes it inevitable, that young minds at universities need to be trained sufficiently to be able to fulfil the role of a CSR expert in their future (Bay, 2023). Thus, this research is directed to understand already existing CSR managers' thinking and decision-making in the context of his internal conflicts in fulfilling the expectations from the triple bottom line (Carollo and Guerci, 2017; Parmar et al., 2010), to see how far master students that want to become CSR managers

in the future are in their way of thinking and decision-making and to draw a conclusion for possible new directions in study programs at universities. With those suggestions, future students can be provided for their future and the high demand for sustainability experts can be met to secure the transformation of businesses for the future. But before diving deeper into this, several terms need to be explained first as well as the theory on which the research design is based on.

2.1 Corporate Social Responsibility and Corporate Sustainability

While the concept of CSR and CS both stem from different places, they evolved over time and are now used synonymously. As the older concept, CSR as a term was developed from the focus on the concerns for social issues impacted by an organisation's actions, whereas CS is a younger concept focusing on environmental issues impacted by organisations (Bansal and Song, 2017, p. 107). Therefore, according to Montiel (2008, p. 259) the CS concept aligns more with the intrinsic value paradigm, that underlines the achievement of value of an entity (in this case organisation) for its own sake. CSR in contrast to that aligns more with the value paradigm, stressing that nature provides benefits for humans through active and passive usage of its resources and that environmental issues are perceived from this benefit-for-people point of view (Montiel, 2008).

Through evolutionary blurring of the borders between the concepts, CSR and CS developed a shared meaning, as CSR acknowledges that social issues also include environmental responsibilities and CS vice versa recognizes the society as an important element within the environmental systems. Here, Bansal and Song (2017, p. 107ff) add, that apart from social environmental aspects, both concepts include the economic responsibility towards for example the shareholders, aligned with Molteni's and Pedrini's (2009, p. 26) proposition, that CSR is based on firms being responsible for the effects they have on stakeholders and society through their actions. Also, CSR and CS both aim at achieving a balance between the main economic perspective of economic prosperity of the organisation, the social integrity of the organisation and the environmental responsibility an organisation has (Bansal and Song, 2017, p. 109). Following, CSR will be used as a synonym for CSR and CS, which will combine social and environmental responsibility to reduce potential confusion.

As recognizable from the previously explained developments, CSR is a relatively novel issue for academics and executives (Molteni and Pedrini, 2009, p. 26). Apart from the explained approach of CSR, academics face more and more towards the implementation issues of the

specialised division. This movement is characterized by the desire to understand more about the mode, tools and individuals engaged in the integration of CSR in corporate strategies (Verschoor, 2006). In general, CSR can be described as renovation process of already existing strategies, processes and activities within organisations that is supported through the direct engagement of the senior management (Molteni and Pedrini, 2009, p.26).

2.2 The role of the CSR Manager

CSR divisions within companies stem from the development of organisations to divide expert labour between specialised work forces for more efficiency, thus creating and characterising corporate hierarchies. Therefore, CSR turned into an area of specialisation for managers representing the occupational group (Armstrong, 1986; Brock et al., 2014; Carollo and Guerci, 2017; Reed 1996). The profession of the CSR manager is still a new form of the managerial profession supported by the growing relevance of CSR in organisations (Molteni and Pedrini, 2009, p. 26). Currently, there are several synonymous terms for describing the job such as sustainability manager, change agent, integrated catalyst and sustainability professional (Venn et al., 2022, p. 1). In general, the term of a CSR manager describes a person who secures its livelihood through working towards and contributing to the sustainability development of companies and who takes responsibility for sustainability by implementing CSR and facilitating a reorientation of organisational culture, values, strategies, systems and tools in conformity with the stakeholders (Venn et al., 2022, p. 2f). This person is also a member of the respective organisation, supporting the senior management and improving the engagement of stakeholders (Molteni and Pedrini, 2009, p. 26). Aguinis and Glavas (2012) therefore call CSR managers the change agents for sustainability, as CSR generally takes place at the organisational level, but the individual such as the CSR manager are those that execute initiatives for CSR.

In general, after Molteni and Pedrini (2009, p. 27) the CSR manager must fulfil three roles within the profession, namely:

- 1) Being the sensor of social and environmental changes and offering a critical synthesis of current and future social and environmental trends to be considered in the organisations' strategy
- 2) Being the integrator of those who are engaged in the CSR implementation team, thus assuring that the members' actions contribute to the goals

- 3) Being an expert in CSR issues and practices who supports the executives of the respective organisation in implementing the CSR practices

To fulfil those roles, the CSR manager needs to be creative to cater unique actions fitting to the specific strategy of the organisation as well as to the stakeholders' nexus. These tasks can be classified into eight categories (Molteni and Pedrini, 2009, p. 27):

- 1) Integration of the approaches of CSR into strategy and decisions of the organisation
- 2) Extension of the corporate governance
- 3) Managing supply chains responsible
- 4) Supporting the social accountability of the organisation
- 5) Investing socially responsible
- 6) Caring for philanthropy and business in the community in which the organisation is embedded
- 7) Including environmental management
- 8) Supporting corporate welfare

But what should not be neglected when looking further into the profession of a CSR manager is also the internal conflict that this profession brings with it, as already shortly mentioned in the introduction. The job of the CSR manager is to connect the economic outlook of the company with responsible sustainable actions that benefit society, environment and the organisation. But often the managerial actions undertaken to improve economic performance are not possible to align with social and environmental responsible actions (Carollo and Guerri, 2017). A CSR manager also has the task to maximise the value for stakeholders. As companies have a multitude of different stakeholders, it can be rather complex and difficult to meet all stakeholder expectations. Through compromising this can sometimes be achieved, but sometimes it is also possible that some of the expectations do not align with the ethical outlook of the CSR manager (Parmar et al., 2010). Adding to this multidimensionality of challenges is the ever-changing nature of problems arising from environmental issues. CSR managers need to stay flexible and keep up with the quick changes in their decision making (Borglund et al., 2023 p. 70; Settembre-Blundo, 2021).

2.3 Mental Models in behavioural Research

The hypothetical construct of mental models itself is widely used within the social sciences research to analyse and understand decision-making behaviour by individuals and groups

(Halbrendt et al., 2014, p. 51 ff). The terminology of mental models can be defined as internal constructs of the mind subjectively representing external realities. With these constructs individuals and groups can handle complex matters which enables an understanding of multidimensional problems, thus helping in decision-making processes (ibid.; Richardson et al., 1994; Rosner, 1995; Wilson and Rutherford, 1989).

As Halbrendt et al. (2014), Richardson et al. (1994) and Wilson and Rutherford (1989) underline, these internal constructs of mental models are heavily influenced by the culture individuals and groups are embedded in as well as the direct environment and acquired through learning from experiences and current observations of the context situation. Connected to this, similarities can be drawn between the building of mental models and systems thinking (Rosner, 1995): complex problems such as environmental problems are mostly impossible to understand by individuals and groups in full detail, therefore analytical thinking cannot be applied to full extent. Instead, users are forced to look at the broader picture. With mental models, it can be made use of the conception of these broader pictures that include the knowledge of interrelationships of different properties within a sub-system and between sub-systems. A good example by Rosner (1995) is, that managers faced with daily complex decision processes use economic market models and business theories as abstract broad representation of realities. With the help of the broader pictures as mental models, managers are enabled to anticipate future developments and thus make decisions based on these anticipations, seeking to maximise favourable and decrease unfavourable changes (Richardson et al., 1994).

Cycling back to the significance of mental models for understanding decision making, it should be stressed that shared mental models within communities are essential to an organised society. The shared perception of complex environments shapes community expectations, norms and laws, which then in turn influence decision making of individuals and groups embedded in the society (Halbrendt et al., 2014; Richardson et al., 1994). While the shared mental models within societies develop through the influence of a continuing revision and re-construction of beliefs over time, they also have the power to re-shape the environment they are supposed to interpret (Richardson et al., 1994). Thus, it can be assumed, that individuals from different cultural societies with different experiences may differentiate in the interpretation of the surrounding environment, thus coming to different decisions (Halbrendt et al., 2014).

Another important characteristic of usage of mental models is, that individuals and groups make use of them daily when making decisions. This creates the potential that they can be

perceived as granted reality and not as “subjective representation of external realities” (Wilson and Rutherford, 1989, p. 619), which makes mental models persistent to change. Individuals and groups are more obviated to challenge them, first evidence against the models cause cognitive dissonance, leading pain and questioning of the evidence (Rosner, 1995). The theory of cognitive dissonance states, that humans respond to the feeling of discomfort by adapting either their behaviour, their perception or remain in the discomfort stage (Hinojosa et al., 2017). For managers dealing with environmental challenges, who are (just like any other individual) influenced by their own mental models in every decision process, this implicates, that old models need to be unlearned and new ones need to be created continuously. In theory, acquired models are reinforced by successful experiences and vice versa unsuccessful experiences will weaken the models until they are unlearned. Especially CSR managers seem to be involved in the continuous mental model change, as the economic structure of companies underlies most sustainability-related problems. Thus, the need for change in underlying decision processes is undeniable and necessarily involves managers (Rosner, 1995). Thus, mental models constitute important external constructs that help to understand the interpretation of the environment by individuals and groups while simultaneously serve as reference points influencing decisions and behaviours affecting the external world (Richardson et al., 1994).

After defining the most important theories and causations related to CSR managerial research, it is now of interest to dive deeper into the conduction of research with the aim to find out how universities can support students on their way to become CSR managers. This seems of special interest keeping in mind the many conflicts the CSR manager is facing (stakeholder indifferences, triple bottom line). To do so, mental models of students and managers will be built to compare them and see, in which cases they differentiate from each other or in which cases they are similar.

3. Methods and Material

The gap in CSR managerial research focused on how CSR managers think and what enables their quick responses to everchanging environmental problems calls for more interactive research. Adding to this, sustainability in companies is more important than ever looking at the influence of climate change on everyday life and, more important to companies, the influence it has on organisational actions (Lukin et al., 2022; Schaltegger et al., 2022). Moreover, problems arising from environmental issues are ever changing, calling sustainability managers to be quick and flexible in their decision making (Borglund et al., 2023 p. 70; Settembre-Blundo, 2021). Looking at the regulatory developments in Europe, the need for CSR managers and specialists, especially for reporting actions, is at an all-time high (Bay, 2023). In recent years new EU laws like the value chain due diligence and the CSRD reporting directive have been making headlines, putting European organisations into the duty to follow clearly defined regulations integrating sustainable social and environmental actions into business activities and putting the due diligence into the core of the companies (Altenschmidt and Helling, 2022; Bundesministerium für Arbeit und Soziales, n.d.; European Parliament, 2023a; European Parliament, 2023b; European Union, 2022). The pressure from the regulations is especially strong as they do not only apply to the bigger companies but are also bound to be put into action for smaller companies as well in the next years. Thus, organisations in Europe are preparing for the future, making the integration of CSR into the organisational structure inevitable (ibid.).

Keeping these developments in mind, this research is focused on answering the twofold question how students can be supported in their education at universities to enable them to become future CSR managers and how students' CSR decision patterns differentiate from experienced CSR managers' decision-making processes. The aim of this research is to connect the current loose ends from existing CSR managerial research with established system thinking theories including mental models to instrumentalize existing knowledge to understand sustainability driven decision making of CSR managers. Through this approach, new knowledge is aimed to be obtained to close the previous described gaps and to gather new approaches for sustainable business studies at universities and schools to prepare future CSR managers to support sustainable transformation of companies.

This research is therefore based on the rational and assumptions that currently there is a rising need for CSR managers especially in sustainability reporting on the market combined with even more pressure on existing CSR managers expertise due to laws and regulations (Bay, 2023). Also, the influence of climate change is getting more and more serious, leading to ever

renewing and everchanging problems sustainability managers are facing, implicating that CSR managers must be even more flexible, quick and spontaneous in their decision making for the sustainable transformation of their companies (Venn et al., 2022). The managers carry the responsibilities to anchor CSR and the sustainable ethos into the core DNA of the businesses, therefore creating the pathway into a more sustainable future. But due to the fast developing and growing expectations, a new generation of CSR managers is needed to meet the demand and requirements of companies (Bay, 2023; Tworzydło, 2022). As students gather mostly theoretical knowledge during classes at university, it is in the centre of interest to gather approaches that can be learned from experienced CSR managers to prepare the coming generation for their future.

3.1 Instrument: Fuzzy-Logic Cognitive Mapping and the Mental Modeler

After introducing the concept of mental models, the theory of cognitive mapping should also be introduced more detailed as it is the base for the online tool “Mental Modeler” which is used for the interviews. As it is described on the platform, Fuzzy-Logic Cognitive Mapping (FCM) is a form of concept mapping with which the user can create static qualitative models which then can be translated into dynamic semi-quantitative models (Mental Modeler, n.d.). Kosko (1986) reasons, that the graph structure is the central aspect why this is possible, as the chaining between the maps is allowing FCMs to grow forward and backward. Thus, they are suitable for picturing causal reasoning; the fuzziness allows them to picture constructs similar to decision making of human minds (Mental Modeler, n.d.). For this specific study cognitive mapping has several positive arguments: As it reflects actual thinking and decision making, it comes natural to the subjects in the interview situation. This also reflects positively on the results who will be as close as possible to the actual internal thinking pattern. Thinking patterns will be easily translated into visible qualitative models which makes them easy to compare with each other and is a first step to create a general mental model for decision making in CSR.

The “Mental Modeler” itself is a modelling software designed to capture knowledge in a standardized form and enables the usage of those standardized models for scenario analysis. It was specifically developed to support decision making and to picture knowledge flows that lead to those decisions. Through its FCM base, users can create semi-quantitative models with the software, the creators specifically underline its benefits for the development of models related to decisions concerned with environmental issues, social concerns and social-ecological systems. Mental models are expressed by three steps: First, the user defines the components of the pictured system by adding words, phrases and sentences to the user surface. Then,

relationships between the components can be defined by spanning arrows in between them and weighting them positive or negative. Lastly, as addition hypothetical scenarios can be run with the created models to examine how they react to changes (Mental Modeler, n.d.).

For this research, the last additional step will be neglected, as it is not relevant for the pre-defined research questions and research goals. However, the last step could potentially be used for further research when, for example, legislation changes or climate crises occur.

3.2 Data Collection and Processing

To gain new insights into the mental models of CSR managers and CSR enthusiastic students and to fulfil the goal of this research, interactive interviews have been conducted through which primary qualitative data has been accumulated. These semi-structured interviews have been centred around the tool “Mental Modeler” (mentalmodeler.com) to form an interactive, non-scripted and open exchange with the interviewed subjects. Subjects have been eight experienced CSR managers from German and Dutch food producing companies and consultants specialised in the agri-food-value-chain, as well as eight students from the Netherlands and Germany who are aiming to become future CSR managers. The interviewees have been recruited through emailing, students’ group chats and through the help of MVO Nederland and company websites. Selection criteria were involvement in (sustainability) managerial studies, CSR enthusiasm and CSR experience. While students were required to be interested in CSR and could potentially see themselves in the role of the CSR manager, the CSR managers have been required to have at least five years of experience on the job. The requirement of the students was ensured by putting it into the description of the search-call when looking for participants for the interviews.

In total, eight students have been interviewed, three male and five female students. Half of them is based in Germany, half of them is from the Netherlands. The average age of the subject is 27 years, with the youngest being 23 years old and the oldest being 34 years old. As only master students have been interviewed, all subjects have already obtained previous degrees: three students have a Bachelor of Arts Business Administration, two have a Bachelor of Science Agricultural Sciences, one has a Bachelor of Arts International Business, one has a Bachelor of Science Nutrition and Food Sciences, and one student has a Post Grad Agribusiness Management. In addition, two of the interviewed students have already made first experiences with CSR through the position of a working student and an internship in the field. In total, the interviews lasted averagely 35 and a half minutes.

Similar to the student interviews, eight CSR managers and CSR consultants have been asked to complete the two interview rounds with the “Mental Modeler”. In the following, the whole group will be summarized under the term “managers” for easier understanding. Five of the subjects were male and three were female, in total six of them were from Germany and two were from the Netherlands. The average age of managers was around 40 years. In total, the manager group needed an average of 40.75 minutes to complete the whole interview process. The acquired degrees of the subjects are diverse, one manager completed studies of food chemistry, two have a background as engineers, another two have earned degrees in classic business management, one studied agriculture and another one graduated with a degree in nutritional sciences. All managers accomplished at least a master's degree or comparable. Most of the interviewed managers have already gained experience in the agri-food industry, on average 14 years, whereby the manager with the most experience already worked for 29 years in the industry and the manager with the least experience for five years. Those who are now working as CSR managers already inherited other professions, such as quality manager, environmental engineer, project manager and analyst. Before getting in touch with the topic of CSR the consultants started their careers as junior consultants, consultants, project manager and product manager. On average, the CSR manager group in total has gathered a job experience with CSR of almost 2 and a half years whereas those four of the subjects who are CSR managers have gathered CSR experience of around three and a quarter year and the subjects who are working in CSR consultancy have gathered around one and a half years on average.

Before the interview, the subjects have been asked to fill out a questionnaire gathering demographic data such as age, gender, education and experience. This data will later be used to frame the results from the actual interviews and to deeper analyse possible causalities. For the interviews, a two-fold structure has been chosen: In the first step, the subjects have been asked to share their screen after following a link to the “Mental Modeler” website and logging themselves in. After a quick test run where the different features have been explained, they were asked to enter words and phrases that enter their mind when thinking about CSR from a CSR manager’s perspective. In addition, subjects were also instructed to indicate interrelations through arrows and to weight these interactions. The interviewer took over a passive role, letting subjects freely brainstorm without any intervention. After indicating that they were finished, the interviewees have been given a short break in which the interviewer talked with them about political changes such as the European Union’s value chain laws that are supposed

to be introduced in the next years, the new deforestation laws European member states have agreed on in May and the CSRD reporting directive that has been introduced in the beginning of the year. After this short digression, subjects have been advised to return to their original mental map on the “Mental Modeler” and to think about what these changes are implicating for CSR managers. In this second step interviewees should gather again what goes through their mind when putting themselves in the role of the CSR manager. Thus, they had the opportunity to add new thoughts, re-model old ones, change interrelation indicators or even delete aspects.

For data collection, mental maps have been saved after the first and after the second round of interviews. To protect the privacy of the participants, all data has been gathered anonymously and all subjects have been asked for their informed consent to participate in the study.

To make the collected data more generalizable and to enable a good comparison of mental models between students and managers, the decision has been made to code the items added by the subjects. Thus, all items from the mental models of students and managers have been gathered in a bare table, which then have been screened for doublings and similar phrasing. For coding, all the items in the table have been analysed in terms of the bigger picture they can be associated with. From this, seven code categories were formed: “time frame”, which collects all items concerned to time dimensions such as short- and long-term, “skills and knowledge”, where all items concerned special skills and knowledge are gathered, “drive”, collecting all items describing motivation factors in decision making, “obstacles and restrictions”, categorizing items describing possible setbacks, “point of view”, gathering different items naming internal and external interest groups, “characteristics”, summarising all items concerned with those characteristics being important for CSR managers when agitating and the final code category “law”, gathering all items describing law concerns. Clearly the seven code groups are rather big, but when looking deeper at the different items it made sense to choose more general categories. The sheer amount of the items in combination with their very similar meanings makes it rather difficult to find a clear cut between them, thus the formation of broader categories was more suiting for the rather broad research focus.

In Table 1, the items from the mental models have been gathered, respectively for students and managers. With the coding, general mental models for both groups could be built. To form the connections between the items represented by the codes, which can be made visible in the “Mental Modeler” program through arrows, the connections between the original items have

been gathered. At first, the goal was to build these general models with the same program through which the data was collected, but regarding the correct representation of connections between coding categories it was decided to build them through PowerPoint. The details of this decision will be explained in chapter four and the discussion in chapter five.

Table 1: Coding of the gathered Items by Students and Managers

Code Category	Students	Managers
time frame	long term development, short term goal, long term thinking, short term thinking, long term, short term, future directed	past, future, past
skills and knowledge	negotiation, balance, communication, resolving conflicts of interest/engaging in discussion, appreciating what you have, collaboration, transparency, communication, long breath, open-mindedness, dynamic thinking, collaboration, management and leadership, knowledge, leadership qualities, asking for help/advice, management skills, leadership skills, CSR competence, experience from past problems, leading by example, adaption, enforcing rules that benefit society, leveraging power, collaboration, growing together, being vigilant, thinking for the collective, patience, excellent negotiation and convincing skills, dynamic budget allocation for CSR activities, ethical lobbying committee, communication, knowing what one knows, knowing what one knows not [sic] and know who consult, policy knowledge, market knowledge	leadership skills, knowledge-never ending learning, past experience, experience, knowledge, communication intern/extern, saturation within organisation, knowledge of human nature, wholesome thinking, interdisciplinary thinking, compliance, storytelling, communication, knowledge, communication, experience, knowledge, knowledge, experience, data and IT-tool, continuous education, knowledge, experience, ongoing learning process, leadership skills, communication, knowledge-never ending learning, past experience, experience, knowledge, compliance, interpretation of legislation, more explaining/schooling intern, seeking advice, learn, communication, leadership, management skills
point of view	people, society, environment, stakeholders' interest, CSR manager, CSR, CSR, stakeholder, planet, people, profit, stakeholders, leader, CSR manager, value chain	customer, stakeholder/public affairs, internal view, team, leading position, external view, customer, stakeholder, intern, extern, strategy, vertical, horizontal, full-scale, small-scale, team, company, stakeholders, CSR manager, CSR, Me, stakeholders, team, external stakeholders, internal stakeholders, triple bottom line, team, manager/leader position, stakeholder, system, structure, people, planet, profit, consultancy, media attention, structure, strategy, national, international, stakeholders
characteristics	selfishness, ethical, creative, resilience, pro-activeness, creative, strength, quick, active, guiding, experimental, inspirational, autonomy, intuition, flexibility, charisma, inspiring, flexibility, flexibility, flexibility, flexibility, positive attitude, planner, good storyteller, open, mental strength, resilience	creativity, being a driver for topics, patience, creativity, creativity, influencing, good example, creativity, interdisciplinary, creativity, assertiveness, high frustration tolerance, resilience, confidence, pragmatism, close to reality, mindfulness

drive	responsibility, responsibility (people), sustainability, fair (equal) opportunity, responsibility (nature), sustainability, better future, values, moral considerations, social impact, urgent, ideology, sustainability, demand, belief, enthusiastic, belief, motivation, vision, enthusiasm, performance linked CSR, government support, opportunity, modernization, alignment with legalisation, enthusiasm, chances	support from upper management, motivation, opportunities, idealism, expectations, personal responsibility, company goals, individual goals, own values, ideology, motivation, chance in global competition, opportunities, chances, success, duty, chances, support, chance
laws	key role in companies => legislation, organisational and stakeholder onboarding w.r.t. legislation	regulatorily, legislative structure, national legislation vs. European legislation, legislation, law, legislation, legislation, legislation
obstacles and restrictions	struggle, organisational ambidexterity, stress, legislative pressure, internal conflicts, risks, team resources	conflicts, range of actions, constraints, costs, resources, capacity, more bureaucracy, more workers resources, obstacles, pressure, information overload, pressure, limitation, resources, capacity, pressure, pressure, risk, resource capacity

3.3 Potential Research Bias and how to avoid them

When conducting research, biases can arise at any stage of it, whenever a “systematic error [is] introduced into [the] sampling or testing by selecting or encouraging one outcome or answer over others” (Merriam-Webster, n.d.; Pannucci and Wilkins, 2010). Biases can be found in all kinds of research and across research designs and while researchers are supposed to minimize the impact of biases, it is of utmost importance to highlight possible biases within the approach to enhance transparency and enable the critical reflection and validation of research approach, design and results (Pannucci and Wilkins, 2010; Smith and Noble, 2014). As Simundic (2013, p. 12) defines, a bias is a “trend or deviation from the truth in data collection, data analysis, interpretation and publication which can cause false conclusions”. Researchers take conscious or unconscious influence on their research parameters, which skews results and interpretation of the research (Pannucci and Wilkins, 2010; Simundic, 2013; Smith and Noble, 2014).

Following these implications, possible bias in this explicit research will be presented, as well as the actions that aim at minimizing them (Table 2).

Table 2: Possible Bias for the Research that could influence the Results and how they are avoided

Bias	Counter Act
Flawed Study Design	<ul style="list-style-type: none"> - Screening participants backgrounds to filter for fitting subjects was not avoidable - Knowing about the potential threat of the bias still helps to interfere only as much as needed and as less as possible
Interviewer Bias	<ul style="list-style-type: none"> - Interviews are held online to give away as less clues as possible - The communication is limited - The selected tool “The Mental Modeler” enables subjects to work independent
Response Bias	<ul style="list-style-type: none"> - Interview style is kept open without pre-defined questions, so subjects do not get a hint in which answers could be going or which behaviour is desirable - Direct start of the interview to minimise the time for subjects to start over-thinking the task - Emphasis on how there are no wrong answers possible
Social Desirability Bias	<ul style="list-style-type: none"> - No evaluation of answers given by participants in front of them - Keeping the interview situation as professionally and neutral as possible
Self-Selection Bias	<ul style="list-style-type: none"> - A pre-selection of participants was not avoidable to ensure that research goals can be met - But knowing that the bias has a potential influence on the research helps to analyse results in the right context

The proposed possible biases are a selection of the most prominent ones that can potentially influence the results of the study. They are discussed as it is important to be clear and transparent about the influences when conducting interviews as well when interpreting the results (Pannucci and Wilkins, 2010). A further explanation of each of the biases can be found in the appendix.

After introducing the research topic, gaps, aims and questions as well as the theoretical background and used methodology, the results from the interviews will be presented. Here, mental approaches from CSR managers in sustainable decision making will be presented next to those of students aiming to become CSR managers in the near future. Following these findings, a discussion will be directly adjoined, screening research results on a multidimensional level and place them alongside the approaches from the literature analysis.

Finally, a conclusion will be drawn, summarizing results and answering the research questions, before finishing with an outlook into the future for research.

4. Results and Findings of the Interviews

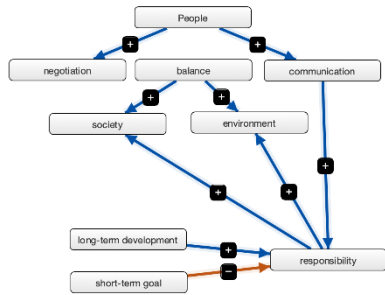
After introducing the theoretical background and explaining the data collection approach, the results from the interviews will now be put in the focus. First, the collected mental models of the eight students from the two rounds of interviews will be introduced, analysed and summarized before proceeding with the same approach for the CSR managers' mental models. Then, the mental models of students' and managers' will be compared to carve out similarities and differences, which then will be used to answer the research questions in chapter 6.

4.1 What Students think CSR Managers fall back on when making Decisions

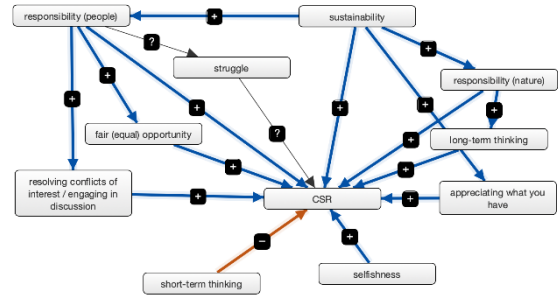
The descriptions of the interview results will start with the student focus group. In the following, the mental models of the first and second round of interviews will be described, compared and finally used to build a general mental model representing students' way of thoughts.

First Round of the Interview

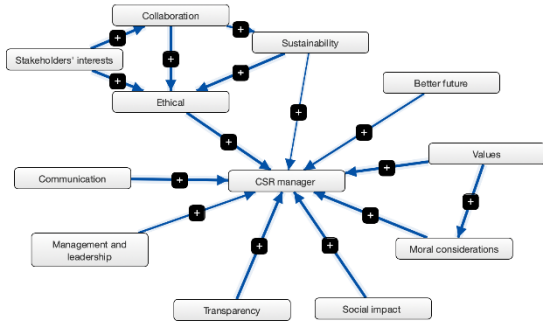
As explained in chapter 3, the interviewees run two rounds of the Mental Modeler with a small break in between. In the first round (figure 1), students were asked without further context and extensive information to collect items of which they think are necessary for a CSR manager in their daily decisions and to make possible connections and influences between them visible through arrows. On average, students gathered around 11 items per mental model. The items have been coded and summarized through seven general codes that will help to analyse and summarize the different mental models in one generic model representing the opinion of students. The seven code families are "time frame", "skills and knowledge", "drive", "obstacles and restrictions", "point of view", "characteristics" and "law". The largest of the code categories are "drive" with 21 items and "skills and knowledge" with 20 items. The category "characteristics" gathers 18 items, "point of view" achieves 14 items, "time frame" collects seven items, in the category "obstacles and restrictions" two items are gathered and the category "law" does not enclose any item within the first round.



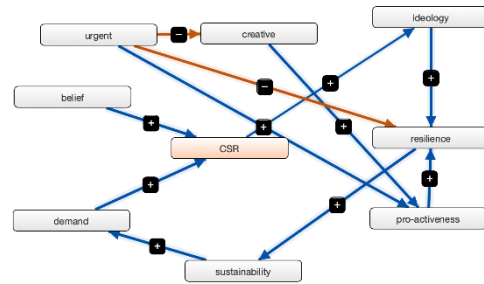
Student 1



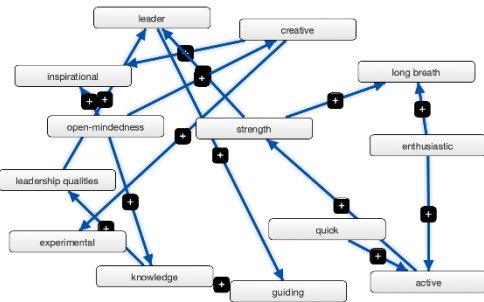
Student 2



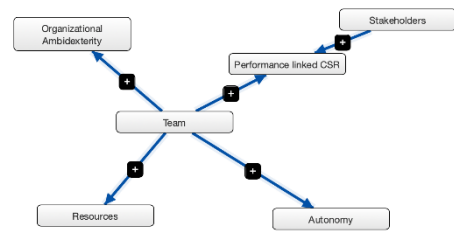
Student 3



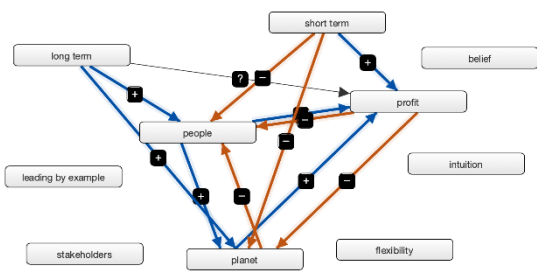
Student 4



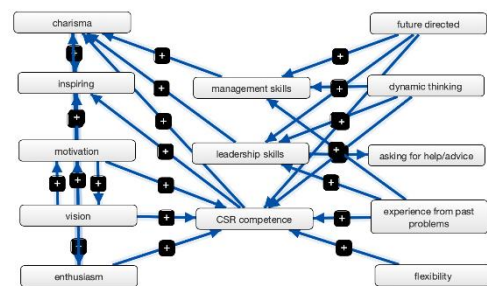
Student 5



Student 6



Student 7



Student 8

Figure 1: Mental Models of eight Students after the first Round of Interviews, all models can be found in detail in the appendices

One of the most doubled items in the code category “time frame” are *long-term* and *short-term*, showing that students connect decision making of a CSR manager with different time dimensions and that different outlooks on the time frame lead to different effects on the results. Looking at the category “point of view/outlook”, *CSR* and *stakeholders* are the most mentioned interest groups that have an influence on decision making. Also popular are items describing the *triple bottom line of people, planet and profit*, showing the multidimensionality of decision making. Within the code category “skills and knowledge”, the most doubled items are *leadership* (and items connected to leadership) and *communication*. When looking at which characteristics are the most important for students when putting themselves in the position of a decision-making CSR manager, *creativity*, *flexibility* and *inspiration* are the most significant terms. The biggest code category “drive” also has multiple doubled items, most important for students are *responsibility*, *sustainability*, *belief* and *enthusiasm*. Looking at the results from the category “characteristics” and “drive”, the answers given by students overlap with the findings of Venn et al. (2022, p.2) who note, that for CSR managers being inspiring and motivating are a key competence on the job. Only two interviewed students named “obstacles and restrictions”, one mentioning *struggle* and the other one naming *organisational ambidexterity* influencing the decision process of the CSR manager. It can be summarised, that while students were thinking of the CSR occupation without further context weight competences belonging to “characteristics”, “skills and knowledge”, “point of view/outlook” and “drive” relatively high, “obstacles and restrictions” and “law” are being more neglected.

After coding the results from the first round, it is also important to analyse the connections between the different items to be able to build a more general mental model representing all students. An interesting first impression of the mental models is, that positive connections make up the most part of visualized connections. Only few students visualised red arrows signalling a negative influence, others also did not colour the arrows to signal either neutrality or ambiguous connections meaning that it could, depending on the meaning of the item and the meaning for the manager, be either a positive influence or a negative, those “neutral” connections have been neglected. The same approach has been accomplished for the managers group, where even more subjects chose to draw connections without weighting them. This will be further discussed in chapter 5. This implicates the need for a more detailed representation; thus, the software Mental Modeler has been neglected for this task and instead a model has been built by hand in PowerPoint in order to be able to depict all connections. Red lines indicate a negative weighting, red lines indicate a positive weighting and the arrows show, in which

direction the influence flows. The thicker the lines of the arrows, the more students are supporting this connection between items. Colours of the frames drawn around the code categories implicate how often items in the respective category have been named by the students, a yellow frame indicates 10 or more items within the category, a red frame indicates that there are 15 or more items within the category.

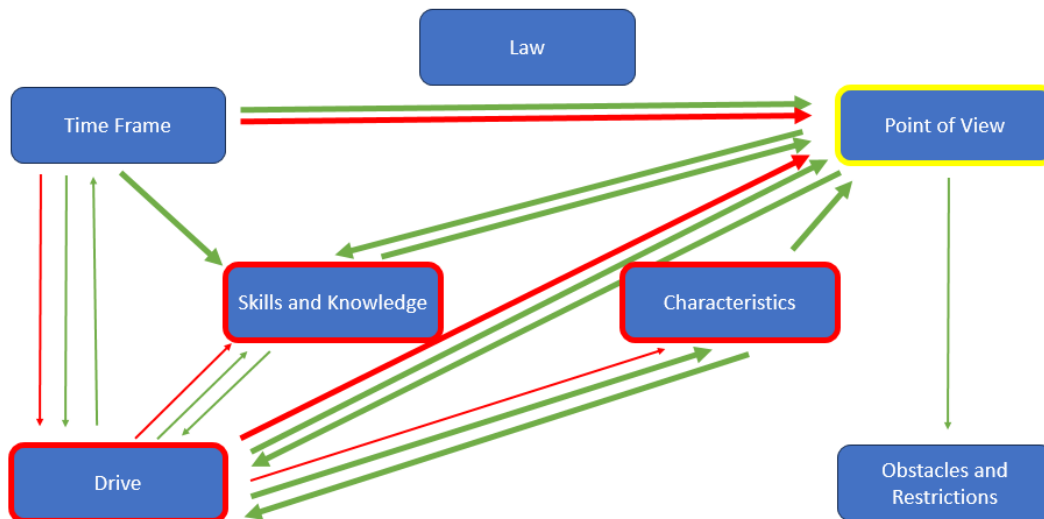


Figure 2: General Mental Model representing Students after Round one

Building the general mental model with the code categories three code categories are striking due to the number of items gathered by students that can be summarised within them: “drive”, “skills and knowledge” and “characteristics”. This shows how significant the felt value for CSR decisions is for students. The category “point of view” also gained significant reception. It can also be noticed that summarising all student mental models, the connections between the categories mostly run in both ways, implicating that there is a feedback effect between them (figure 2). The category “time frame” can be connected with the categories “point of view”, “drive” and “skills and knowledge”. This implicates, that students interpret, that the perspective of time dimensions in decision making also have an influence on the points of view that are taken into consideration as well as the motivating factors for CSR and the skills and the kind of knowledge that is applied in decision making. Within these connections, a distinction must be made between positive and negative correlations and the strengths of the connections. While the time dimension in students’ opinions can have a positive impact on the motivational factors, a strong positive impact on the skills and knowledge needed for decision-making as well as on

the stakeholders (especially when talking about the *long-term* dimension), time can also have a slightly negative impact on motivation and a strong negative impact on the inclusion of different points of view (especially when talking about *short-term* goals). Vice versa, the category “drive” is also positively connected to “time frame”, implicating the expression of students that the motivation of the CSR manager affects the timely thinking when making decisions. Another positive feedback connection in both ways can be made between “drive” and “point of view”, “drive” and “skills and knowledge” and “drive” and characteristics”. Thus, students express their opinion that the motivational factors of a CSR manager influence other competences applied in decision processes. The motivation that drives the CSR manager seem to have an impact on the points of view and the outlook with which decisions are being made. Vice versa, the outlook and the point of view that is taken during the process seem to have an impact on the motivation. It is also implied by the students that the driving factors of the CSR manager influence the set of skills and the knowledge that is implemented in the decision process and vice versa the skills and the knowledge the CSR manager inherits are influenced by the motivation he or she has. The motivation also seems to affect the characteristics of the CSR managers, just like the characteristic influence the motivation. Still, negative influences should not be neglected, students indicate that depending on which factors motivate students the drive can strongly negatively impact the inclusion of different points of view in decision making. For example, those stakeholders not supporting the goals of the CSR manager could be faded out of the decision-making process. The motivation can also slightly negatively influence the skills and knowledge and the characteristics of the manager, as students show. The set of skills and knowledge seem to play a strong positive supporting role when selecting which points of view and outlooks are taken into consideration when making decisions. This gives room to the implication, that students think that the more CSR and managerial related skills and knowledge they obtain, the more they are enabled to include different points of view from interest groups in their decisions as potential CSR managers. Vice versa, including different points of view in CSR decisions seems to have a strong positive impact on the formation of skills and knowledge students assess as important to the CSR occupation. Between “point of view” and “obstacles and restrictions” a singular slightly positive weighted connection can be drawn which leads to the assumption that students have the impression that the point of view and the outlook a CSR manager is taking during decision making influence the kind of obstacles and restrictions that are taken into consideration. Lastly, the categories “characteristics” and “point of view” are connected through a single arrow weighted strongly

positive indicating, that the characteristics the manager inherits affect the points of view and the outlook from which the CSR manager is able to make decisions.

In addition, those students that indicated a negative influence suggest that the items within the “point of view” category can have an ambiguous relation, especially the items concerned with the triple bottom line. This implies that not every influence needs to be conducive for decision making and while some students see connections as positive, other students imply possible negative side effects. Another distinctive feature that should be named after analysing the results is that while the item *urgent* has been summarised within the code category “drive”, it distinguishes from the other items as the student who added it visualised a negative influence on the characteristics *resilience* and *creative*. Thus, the *urgency* is a motivating factor when making decisions, but its motivational abilities can also have a negative influence on other items.

What is striking in the general mental model representing the students' group after the first interview round is, that the category law is fully left out. No items have been collected; thus, no connections can be drawn to or from other categories.

Second Round of the Interview

Before starting round two, students have been confronted with the political situation in Europe, explaining freshly introduced laws as well as future plans for additional laws (chapter 2). Afterwards, they returned to their original mental models and were allowed to add or delete items, as well as changing connections (figure 3). None of the students deleted items and none changed connecting arrows. On average, students added approximately five items to their finished mental models; in total 17 items could be added to the code category “skills and knowledge”, two items were summarised in the category “point of view”, nine items were added to the code “characteristics”, seven could be attached to the code category “drive”, two more items could be summarised within the category “laws” and finally four added items could be attached to the code “obstacles and restrictions”.

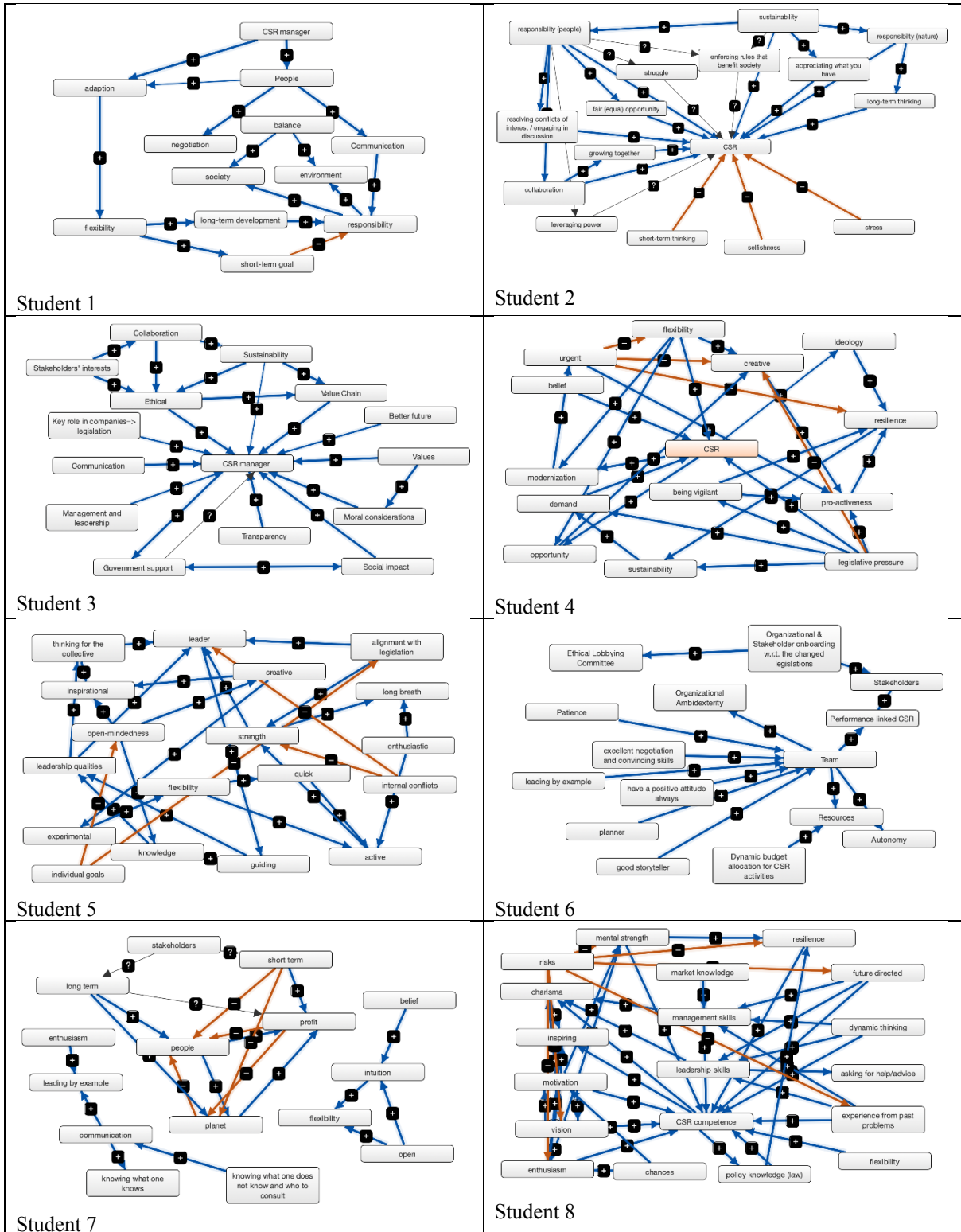


Figure 3: Mental Models of eight Students after the second Round of Interviews, all models can be found in detail in the appendices

In the section “skills and knowledge”, *communication* became even more relevant, and *collaboration* grew in significance as well as *knowledge* itself, mostly connected to future specific areas such as markets and policy. This aligns very much with what Venn et al. (2022, p. 2f) summarise in their work: the ability to communicate seems to be the most important key

competence of a CSR manager, also important are (sustainability related) knowledge and intervention competency which gathers abilities such as collaboration, facilitation and the consensus building. Students in this specific study in addition underline the importance in decision making to *know what one knows* and *knowing what one knows not [sic] and know [sic] who to consult*. Furthermore, items in the code category “characteristics” also obtained more recognition: three students added *flexibility* to their mental models, underlining its importance for students when putting themselves in the role of the CSR manager making daily decisions with the background of changing legislation. The item *strength* in the same coding category also grew in significance strengthened by the addition of familiar characteristics such as *resilience*. Within the category drive, the item *enthusiasm* also got more mentioned. In this category students also started associating *opportunity*, *modernization* and *chances* with the change in legislation. “Law” as code category gained items, one student called legislation the *key role in companies*, another student thought about the specific importance for the daily business of the CSR manager to care about the *organisational and stakeholder onboarding* and that this has to be done *with respect to legislation*. Finally, students also added items that could be summarised through the code category “obstacles and restrictions”, for example *stress* and *pressure* gained relevance.

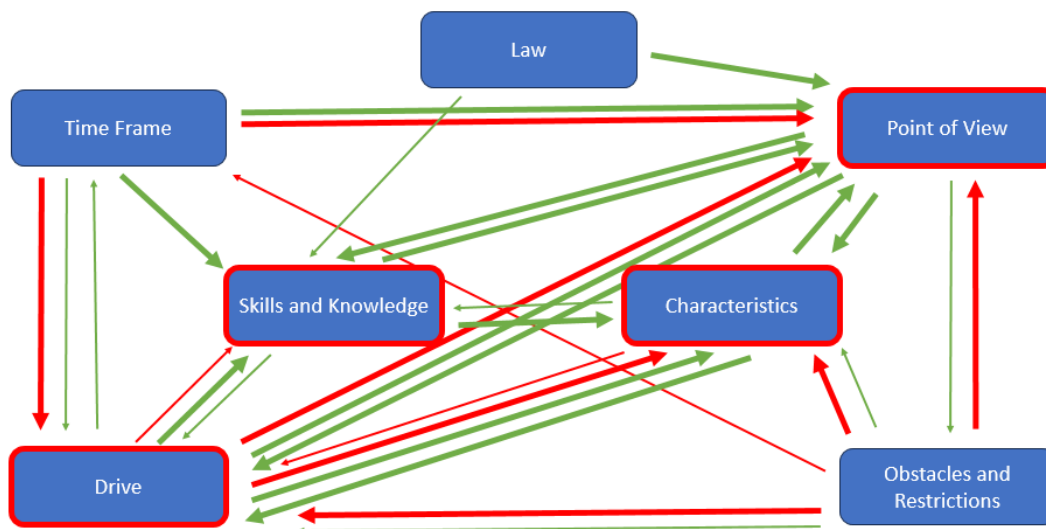


Figure 4: General Mental Model representing Students after both Rounds

Looking at the importance of the categories, “drive”, “skills and knowledge” and “characteristics” are still the categories with the most gathered items after the second round.

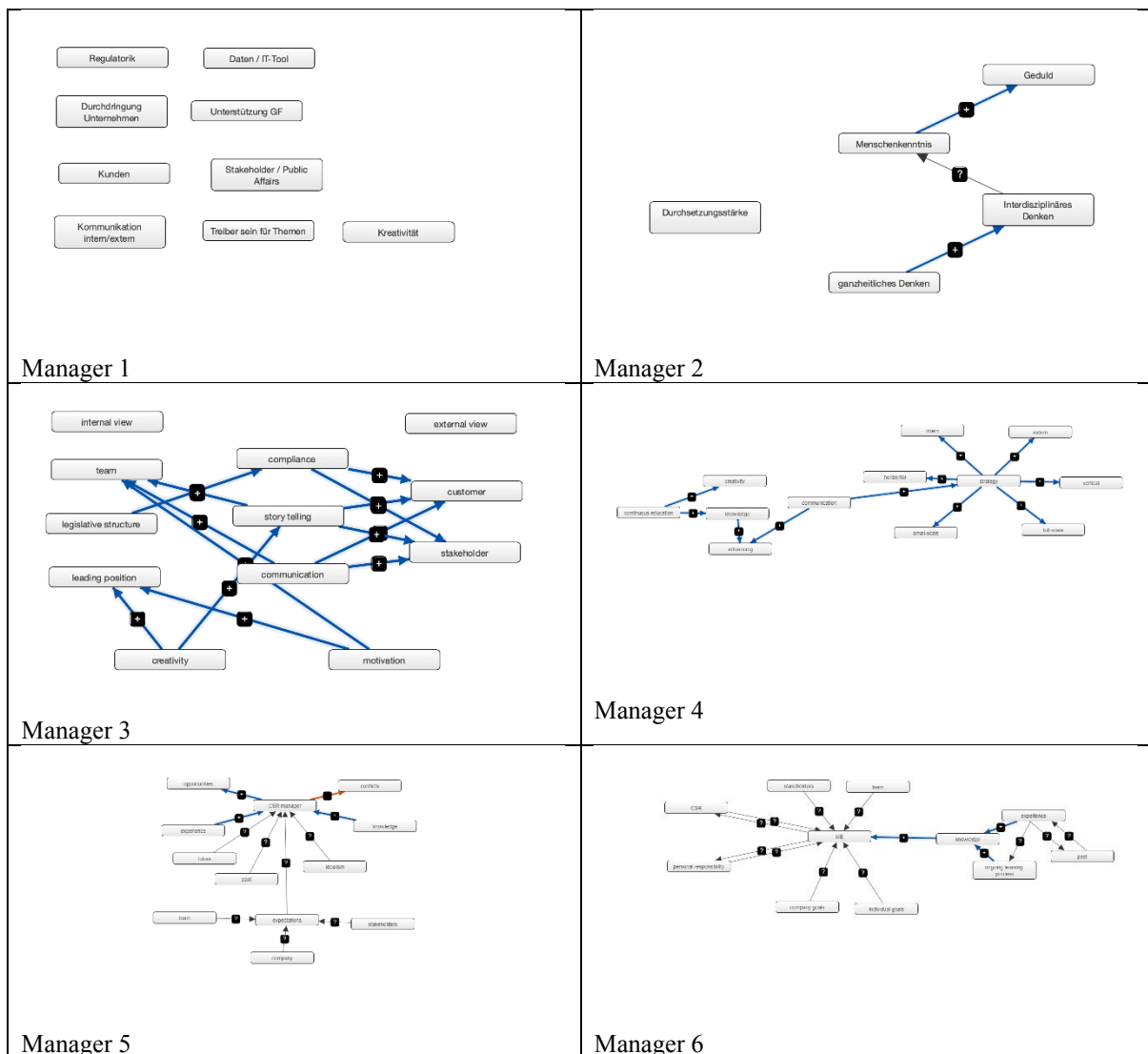
The category “point of view” gained several items, implicating that after gaining information about CSR legislation, students weight the impact of stakeholders and differentiating views in CSR decisions even higher. As mentioned previously, students did not delete connections between items, but they added more arrows representing influences and connectivity (figure 4). Through the addition of new connections, the described relation from round one of the interviews gained strength, but also new relations were formed. With the additional information about European laws concerned with CSR, students now also connect items summarized in the category “obstacles and restrictions” negative with categories like “time frame”, “point of view” and “characteristics”. With more political context, students seem to weight possible obstacles and restrictions and their effects on CSR stronger than before, and thus also the influence this category can have in decision making. Students indicate that items from this category can influence the timely dimension, the points of view and the outlooks that are taken into consideration and the character features the CSR manager implements. But while the connection with other categories grew significantly, students did not add significantly more items to the category. The category “law” is no longer unnoticed, the subjects indicate a positive relation with items of the “point of view” category and the “skills and knowledge” category. Students in this round seem to evaluate that laws influence the points of view and the outlooks a CSR manager is taking into consideration when making decisions, just like laws seem to influence and enhance the set of skills and knowledge of the CSR manager. Lastly, it can be noticed that after the second round a positive feedback loop can be drawn between “skills and knowledge” and “characteristics”, where the positive influence of inherited CSR skills and previously gained knowledge on the characteristics of the CSR manager are stronger than the slight positive impact from CSR characteristics on the usage of skills and knowledge in CSR decisions.

4.2 What CSR Managers fall back on when making Decisions

Similar to the student interviews, the interview results of the manager focus group will now be described further. In the following, the mental models of the first and second round of interviews will be described, compared and finally used to build a general mental model representing managers’ way of thoughts.

First Round of the Interviews

Within the first round of the interviews, the manager group built their mental models (figure 5) with an average of around 12 items. The most outstanding code category is the “skills and knowledge” category, all managers included items that can be associated with the code, a total of 30 items could be collected here. The category “point of view” is the second largest code category, summarising 28 items, while the code categories “characteristics” and “drive” include 11 items each. Six items can be assigned to the code “obstacles and restrictions”, three items can be summarised under “time frame” and lastly two items can be connected to the category “law”.



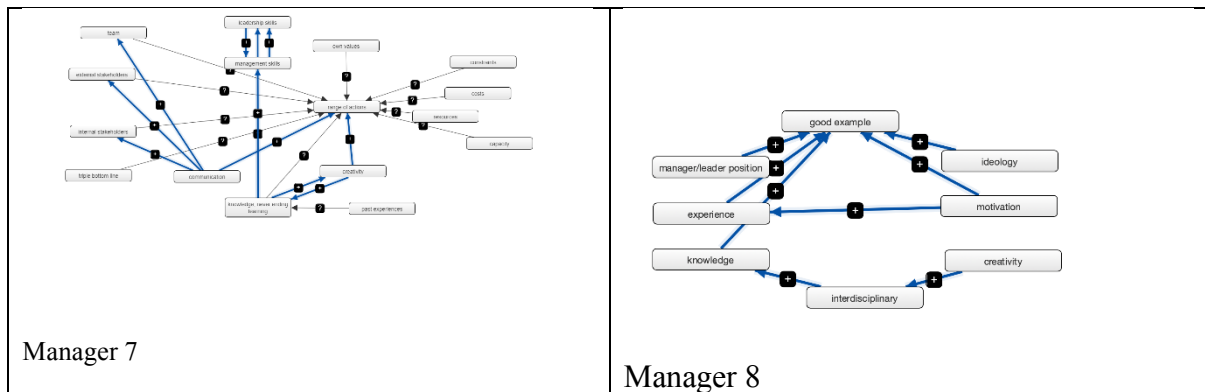


Figure 5: Mental Models of eight Managers after the first Round of Interviews, all models can be found in detail in the appendices

Looking at each category in detail, some items can be highlighted due to the entry of them from several subjects. In the category “time frame”, the item *past* could be collected two times, implicating that for one quarter of the interviewed managers the past influences their CSR activities and decision-making processes. In the largest category “skills and knowledge” items such as *knowledge*, *communication*, *thinking*, *learning* and *experience* stand out as multiple subjects included them in their mental models which leads to the assumption that these capabilities seem to be the main competences a CSR manager needs for decision making. These items have also been significantly mentioned in the interviews of Venn et al. (2022). The subjects in their study highlighted the importance of communication, sustainability related knowledge and strategic and systems thinking. When thinking of the “point of view” of the CSR manager, the managers highlighted the actors *stakeholder* and *team* and distinguished between *external* and *internal* influences on their daily decisions. CSR managers seem to include the opinion of stakeholders in a similar amount as the opinion of the team in their decisions, but it seems crucial to distinguish them in their standing to the manager himself as well as the company. The most mentioned item in the code category “characteristics” is *creativity*, implicating that 62.5% of the subjects think that this characteristic is necessary for their decision making in the CSR context. Creativity seems to play an important role in enabling decisions regarding CSR. Items assigned to “drive” are more diverse, only a quarter of managers aligned with the item *motivation*, all other items gathered by the managers have not been doubled. This leaves room for the implication that being motivated is the overarching competence of the CSR manager, but what kind of motivation drives the CSR manager is very individual. Two managers already added items concerned with the category “law”, mentioning the influence of regulations and the legislative structure for their decisions. In the category

“obstacles and restrictions” two managers gathered six diverse items without any overlapping. This category seems to behave similar to the category “drive” where items also differentiated, thus indicating that CSR managers also experience obstacles or restrictions in their decision making very individually. After sorting out the coding, it is now of interest to look at the connections made by the managers, with the goal to build a general mental model representing CSR managers when facing decisions (figure 6).

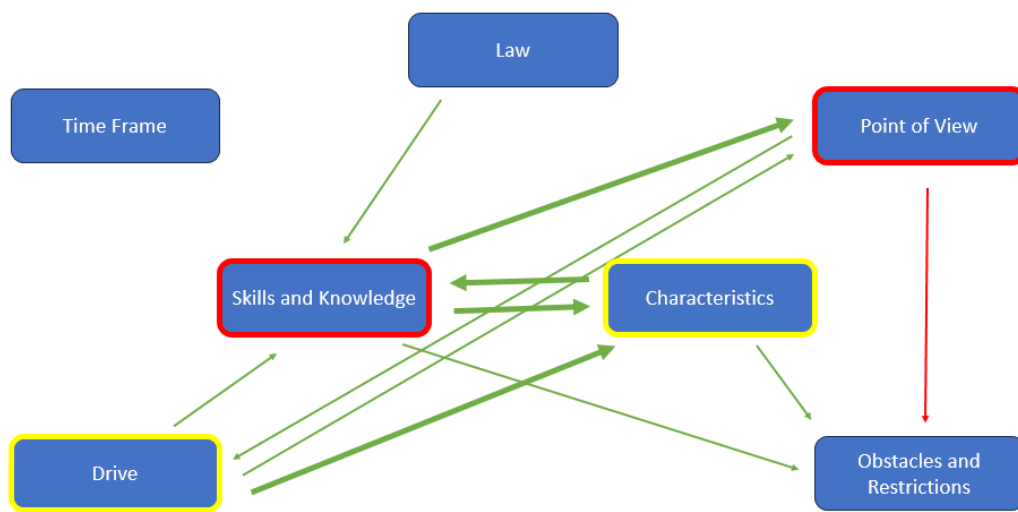


Figure 6: General Mental Model representing Managers after Round 1

Like the approach with the students’ general mental model, categories with 10 and more items are marked with a yellow frame, categories with 15 and more items with a red frame. As it can be seen in figure six, the categories “skills and knowledge” and “point of view” summarise the most items gathered by the managers, shortly followed by the categories “drive” and “characteristics”. This allows the implication, that managers value competences connected to skills and knowledge obtained in advance, characteristics they bring to the job, the different points of view on CSR actions and the drive that motivates the manager in their daily CSR decision-making process. Noticeable after the first interview round with the manager group are the few but strong indicated connections. The subjects mainly connected the code categories “skills and knowledge”, “characteristics”, “point of view”, “obstacles and restrictions” and “drive”. Two of these categories are connected through positive feedback relationships after

summarising all eight models. These feedback relations can be found between “skills and knowledge” and “characteristics” (strongly positive) and “point of view” and “drive” (slightly positive). This indicates that the skills and knowledge a manager brings to the job also influence and positively support his characteristics, and these characteristics form the much-needed CSR decision-making skills and knowledge of the manager. A CSR manager’s motivational factors positively affect the way and extend the manager includes different points of view and outlooks in his decisions. Vice versa, the different outlooks which are recognised by the CSR manager influence and channel his drive for CSR. In addition, singular connections representing ambivalent effects or influences can be made between “skills and knowledge” and “point of view”, “point of view” and “obstacles and restrictions”, “drive” and “characteristics”, “law” and “skills and knowledge”, “characteristics” and “obstacles and restrictions”, “skills and knowledge” and “obstacles and restrictions” and lastly between “drive” and “skills and knowledge”. So, to summarise, items concerned with describing skills and knowledge the manager inherits also have a positive influence on the extent in which point of view and outlook are included. But, as managers indicated within their mental models, the points of view included in decision making can have a slightly negative influence on how obstacles and restrictions are perceived and involved in decision making. Also, including differentiating opinions of different stakeholders in decision-making can lead to hurdles in CSR solutions. As Parmar et al. (2010, p.10) summarise, CSR underlines the gaps and potential problematics between ethics and capitalism. For the CSR manager, obstacles and restrictions arise, when the social and financial expectations of different stakeholders clash with each other, thus explaining the indications from the managers in their respective mental models. The mental models of the manager group also indicate that the motivation of the CSR manager slightly positively impacts and supports the skills and knowledge he inherits and the extent to which he indulges in them when facing decisions. The requirements for CSR formulated in new European and German legislation, for example, have a slightly positive impact on CSR-related skills and knowledge and seem to support CSR managers in gaining more of them. Those skills and knowledge can then have a slightly positive impact in minimising obstacles and restrictions, or slightly positively support the CSR manager in solving conflicts in CSR decision making. The same counts for CSR managers’ characteristics, competences forming the CSR manager in his character seem to strengthen him in such a way, that the manager can fall back on them when facing hurdles and dealing with them in the decision process.

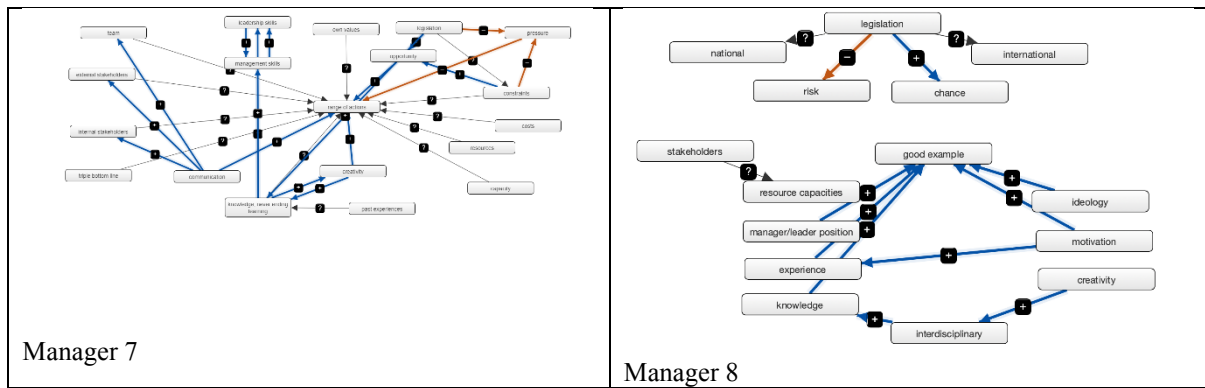


Figure 7:; Mental Models of eight Managers after the second Round of Interviews, all models can be found in detail in the appendices

For “obstacles and restrictions”, the items *pressure* and *capacity* can be highlighted as several managers included those in their mental models, showing that CSR managers experience these two factors as most restricting when making decisions. They have to think about the capacities they have for sustainable solutions, and the pressure they feel in decision processes influences their behaviour. With the added items in the category “point of view/outlook” subjects further highlighted the importance of the *stakeholder*, but also put a new focus on the *triple bottom line* (people, planet, profit) and *structure*. As Książak and Fischbach (2017) point out, the three pillars people, planet and profit are correlated to each other. Thus, a CSR decision is only then sustainable, if all three aspects are included because if an action responds to profit and people, results for the company will be “equitable and fair” (Książak and Fischbach, 2017, p. 99), but will backfire in its influence on the planet. Including only planet and people will make the actions “bearable” (Książak and Fischbach, 2017, p. 99), but in the long run the company may not survive due to missing profits. And lastly, respecting only profit and people in CSR decisions may make the business actions “viable and profitable” (Książak and Fischbach, 2017, p. 99), but missing the social variable might have a negative influence on employee motivation and the surrounding society. The categories “skills and knowledge” and “drive” each got eight new items assigned, putting the skills of *compliance* and *leadership* more into focus and further underlining the importance of *learning* and *communication*. Taking the position of the leader and inheriting leadership skills seems to be a central personality trait for CSR managers towards more sustainability in companies. The results imply, that compliance with regulations is important for the everyday decisions. Through communication and continuous learning, the CSR managers seem to be enabled in their thinking processes. And while in the first round the item *motivation* was the most significant item within the category “drive”, the importance of the item *chance* is outstanding in round two. This implies, that CSR managers want to take

chances for them, the company and sustainability with their decisions, but it can also be concluded from the results that the managers see chances in changing towards sustainability. Looking at the category “characteristics”, the six additional items here are very diverse and are not overlapping with the already added items from round one. This leaves room for the implication, that the importance of character-forming competences is very individual for every CSR manager. But while the characteristics in round one are rather positive (*creativity, patience, being a driver for topics, influencing, good example, interdisciplinary*), the items of round two are more concerned with mental strength in decision processes (*resilience, high frustration tolerance, confidence, pragmatism, close to reality, mindfulness*). Similar to this code category, six new items have also been added to the category “law”, underlining the focus on the item *legislation* and suggesting, that with the upcoming laws on European level the legislation is now playing a central part in decision making of CSR managers.

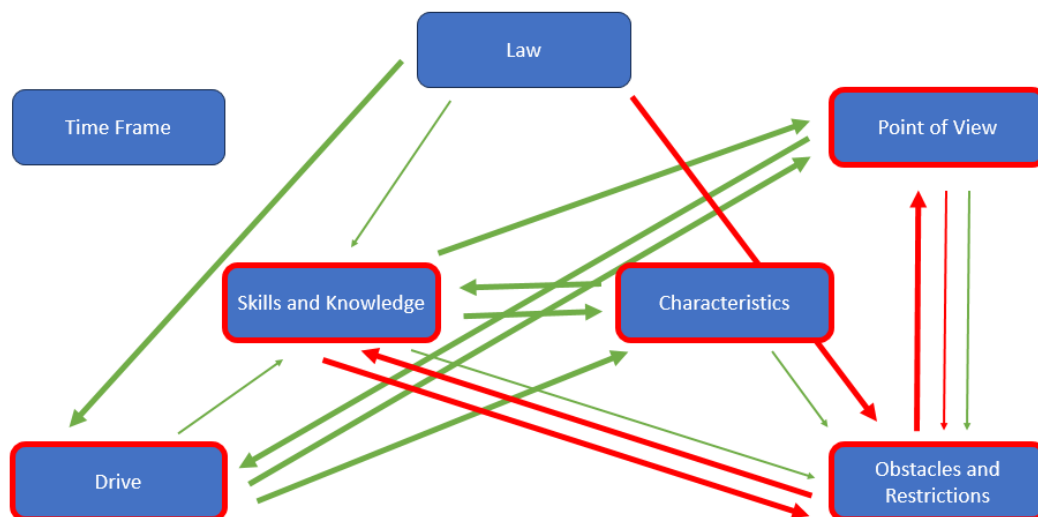


Figure 8: General Mental Model representing Managers after both Rounds

Similar to the proceedings after coding the items from all eight manager models, the arrows drawn between these items will now be assorted to the code system (figure 8). While most made connections support the already drawn connections from the first round, some additions were made. These additions lead in two cases to the formation of negative feedback relations: managers associate negative influences from “skills and knowledge” with “obstacles and restrictions”, leaving room for the implication that the wrong kind of skills and knowledge as

well as the lack of useful skills and knowledge, maybe from missing experience, strongly negative accelerate or intensify the obstacles and restrictions hiding in the ambivalent CSR context, for example from the dealing with differentiating stakeholder expectations (Parmar et al., 2010). Accelerated obstacles and restrictions can vice versa strongly negatively influence the obtaining and usage of relevant skills and knowledge. Spinning this implication from the manager group further, one could think of the situation that certain obstacles leave the CSR manager locked up in his ability to react, leaving him trapped and unable to make use of his skills and knowledge appropriately. But this should be further examined in a different study and for now is only an interpretation. Another negative feedback relationship was formed between the categories “point of view” and “obstacles and restrictions”, concluding that both item categories influence each other negatively. Managers indicated that obstacles and restrictions strongly negatively impact them in their inclusion of different points of view in their decision making and, as already explained in the analysis of the first round of manager interviews, that differentiating points of view slightly negatively influence further obstacles and restrictions in decision-making. But contradictory to that, some managers also implicate that there can also be a slightly positive support from the integration of different points of view or outlooks in CSR decision making on counteracting or dealing with hurdles summarised in the category “obstacles and restrictions”. Furthermore, two other new connections can be drawn between the categories “laws” and “obstacles and restrictions” (strongly negative) and “laws” and “drive” (strongly positive). These new links implicate, that managers assess the laws concerning CSR to have multidivergent effects on many dimensions used for decision making. For example, items concerned with the category “laws” seem to negatively impact the way managers experience “obstacles and restrictions” or add even more obstacles and restrictions to think about when making decisions. Maybe the new CSR-related laws also accelerate already existing hurdles the managers face on a daily basis. On another note, some managers also seem to draw motivation out of the upcoming legislative chances, maybe because they see a new chance to create value and achieve CSR goals. Also, interesting when analysing the managers’ models are the interrelations between items of the same coding category, especially strong are the implications for relations between characteristics of CSR managers and the point of view and outlook from which decisions are approached.

Looking at the general reception of categories, it can be said that out of the seven categories managers assess “drive”, “skills and knowledge”, “characteristics”, “point of view” and “obstacles and restrictions” as most important competence categories. In comparison to the

general model of the first round of interviews, the categories “drive” and “characteristics” gained importance, but most significantly managers added even more items that can be summarised within the category “obstacles and restrictions”. After being reminded of the legislative changes in the European political landscape, managers seem to assess the implications that possible obstacles and restrictions have on their decisions more than before.

4.3 Students and Managers – A Comparison of the Mental Models

After completing the coding and assembling towards general models for both the students’ group and the managers’ group, similarities and differences can be noticed. For instance, the visual difference is noticeable at first sight: while the students’ model looks very busy with a lot of connections, the managers’ model looks more cleaned up. This shows how different students without or with little expertise and experienced managers approach CSR. For example, while students incorporated items of the category “time frame” more into their models, managers seem to neglect this category more, which implies that the timely perspective is not acute for them in decision making. This behaviour aligns with the findings of Venn et al. (2022, p.3), where CSR managers showed little interest in considering futures thinking in their decisions for sustainability. On the opposite, managers seem to assimilate more diverse influences from items concerned with the category “law”, similar to the expression of subjects in the interviews of Venn et al. (2022, p.11) that stressed the importance of political competency for CSR management. In this interview, legislation is much more present to CSR managers than to students, which leads to the conclusion that students at university are not often confronted with laws and changing legislation influencing their daily business, while for actual CSR managers the laws are a central element in their daily decision making. This leads students to neglect the influence legislation has, while managers are more realistic regarding the compliance. In addition, the manager group did not see any connection between “time frame” items and “drive” items, while the student group implicates a stronger feedback connection between the categories. For them, the aspect of time and time horizon has an influence on the motivation with which they approach CSR, as well as their motivation influences the timely perspective in CSR decisions. Also, students show an influence of factors representing the “drive” towards CSR on “obstacles and restrictions” they might face in decision making. So, their motivation seems to alter their perceived “obstacles and restrictions”. Another interesting difference: students see a connection between their CSR manager “characteristics” and the “point of view/outlook” from which they approach decision

processes, indicating that “characteristics” influence the “point of view/outlook” and vice versa. Managers on the contrary do not recognize this connection and keep both categories separated from each other. The same phenomenon applies for the approach of students towards connections between the categories “characteristics” and “drive”, as managers also do not acknowledge a possible influence between both factors in their decision making. They also do not see a connection between “obstacles and restrictions” and “characteristics”, while students express their opinion that “obstacles and restrictions” do influence their CSR manager “characteristics”.

When looking at the importance students and managers devote their attention to, similarities and, most importantly for this study, differences become visible. While both groups evaluate items concerned with “drive”, “skills and knowledge”, “characteristics” and “point of view”, only managers indicate the significant importance of “obstacles and restrictions”. This can be interpreted in several ways: for example, due to their experience, CSR managers simply “know better” than students as they have dealt with the hurdles already a lot in their decisions. Or maybe students are still more naïve when putting themselves in the position of the CSR managers and assess obstacles and restrictions as somehow always manageable.

While these were the most significant differences in the general models, students and managers seem to value similar items important for their work. Both groups are aligning with the significance of communication for CSR work and decision making. While most subjects make use of the general term “communication”, some participants specify the item in regard to whom to communicate with: the team, stakeholders in general, with the “people”, with the customer. When looking at the comparing literature, Venn et al. (2022, p. 2) discover similar evaluations in their interviews with CSR managers. They conclude that the ability to communicate is the most important key competence of a CSR manager.

Students and managers also implicate very similar relations between items they need when making CSR decisions. Both groups implicate influences between “point of view/outlook” and “obstacles and restrictions” and vice versa, the same indication applies to the relation between “characteristics” and “skills and knowledge”, between “point of view/outlook” and “skills and knowledge” and between “drive” and “point of view/outlook”. So, both groups agree that items formulating concerns of possible obstacles, boundaries or restrictions that influence decisions in CSR also influence the perspective through which they run the decision process and vice versa. The skills and the knowledge a CSR manager includes and relies on during decision

making are closely connected to the character a CSR manager should bring to the table. Similarly, the character seems to influence the skills and knowledge a CSR manager acquires that are necessary for his decisions. In addition, the perspective from which the manager is looking at the problem and which he is including in his decisions affect the competences he applies. Of course, as both groups imply the motivational factors from which the CSR manager is fulfilling his work, the perspective he applies during decision is influenced and the perspectives the manager includes in his decisions also influence his motivation.

5. Discussion

After obtaining the results, it is now of interest in a first step to discuss the strengths and weaknesses of data collection and the approach of the research as a whole. Then, to enable a multiperspective view on the deducted research and its results, the results will be put into context with existing CSR managerial research.

5.1 Discussing the Data Collection

Within the data collection, one major obstacle occurred. When recruiting CSR managers from the Netherlands, many of the contacted managers did not reply to the request and if they answered, most replied that they had no capacities for the interviews, even though they support the research goal. German CSR managers also had a low reply rate, but once the first CSR manager was recruited, he contacted other managers and thus more managers could be recruited. The missing Dutch CSR managers could be a result of the language barrier, but also of the time frame set for the Master thesis of around 6 months could be a reason why they could not be recruited. As alternative, CSR specialised consultants have been asked to join the interviews instead and for the goal of the research have been put in the CSR managers' position. In addition, the results must be seen within the context of the individual situation of the study participants and thus reflect the point of view of in total 16 subjects. This opens the door for further thoughts on how to improve the research design for future explorations of CSR expertise: the number of participants could be largened to re-evaluate the obtained results and to find out, if there are maybe even more items and if the code categories for the items are still fitting. In addition, instead of just looking into CSR managers' minds, the object of research could be broadened, recruiting more subjects from different CSR expertise. For example, not only students, managers and consultants could be included in the interviews, but also non-profit organisations, representatives from social companies, teachers and politicians. Of course, the time frame would need to be even larger, but results could give even more in-depth multidimensional insights into CSR thinking. Thus, the gaps between theoretical CSR knowledge and practical CSR inclusion could be illuminated even more detailed as more professions concerned with CSR could be represented.

Another aspect that has been neglected in this study is the possible difference in CSR thinking of the genders, as the number of subjects is relatively small. Authors like Alonso-Almeida et al. (2015) indicate that there could be a potential difference as previous studies conclude, that women could be "more sensitive to CSR issues than men, particularly in relation to

environmental issues” (p.4). Data from 2008 show, that female read students value the CSR dimensions of businesses more than male students, who were more focused on the classic economic approach of companies which is based on maximising the value for stakeholders of the business. Nonetheless, other studies with the goal to synthesise gender differences in the CSR perception have found no noteworthy deviation between women and men in their attitudes towards CSR (Alonso-Almeida et al., 2015, p. 5). So, for future research with larger number of participants it might be of interest to include the question, if female and male subjects today show significant differences in their CSR thinking.

While the interview approach with the free gathering of items through the “Mental Modeler” showed a good resonance with all subjects, the analysis of the data showed, that the tool also has its weaknesses. For example, relations between items are very simplified, so items cannot be connected in one direction more than once, thus different interpretation views can hardly be depicted, and subjects have to decide for either a positive or negative influence. This also became a hurdle when analysing the different mental models and trying to build the generalised models after the respective rounds for the respective groups. Thus, the mental models have been rebuilt by hand in PowerPoint, enabling the picturing of several arrows with negative and positive colouring. Some students and many managers decided to connect items with arrows without any weight. As reasoning for these actions was not provided and could not be gathered due to the interview approach, it was decided to leave them out as they leave room for unreasoned interpretations. Thus, the Mental Modeler could be a good introduction into a bigger interview setting with several rounds. To add more in-depth and giving managers the time to explain their items even further and explain correlations between them, further interview steps could be added in future research, making use of group interviews or one-on-one interviews to obtain more insights. For evaluation of CSR competences, Likert scales could be used, as they are simple to understand for subjects and supporting for researchers when analysing results. The research from Alonso-Almeida et al. (2015) shows promising results from the usage of the scales. For the time frame of this research a combined approach including several interview stages and analysing tools was not feasible, but the results show that the Mental Modeler could be a potential helpful tool in interviews, at least to some degree as it is a good door opener and a playful element which is very self-explaining and easy to handle.

5.2 Discussing the Results in front of existing Literature

As mentioned above, the obtained results must be seen in the context that they reflect the opinion of the subject in its current situation. According to Rosner (1995), each set of mental models is unique to every individual as they reflect past experience they made, for example during their time as CSR manager or even from the occupation before, as well as underlying beliefs. This leads to the question, if the study of mental models of CSR managers can help to translate learning strategies and goals for sustainability related management classes at universities. But as the results prove, subjects named the same items, even students and managers overlapped in competencies such as *communication* or *creativity*. Also, the possibility to code the gathered items through the seven categories “time frame”, “skills and knowledge”, “point of view/outlook”, “characteristics”, “drive”, “laws” and “obstacles and restrictions” shows, that the competencies students and CSR managers think they need when making CSR decisions can be summarised in an overarching relation context. So, while Rosner (1995) might be correct in stating, that the mental models of each is individual, it does not mean that they are not relatable or comparable with others. He also states that the cultural context of society is a factor that forms the perception and interpretation of mental models; when looking at the subjects in this study it can be seen that, as they are all living in the Netherlands or Germany, they share mostly similar cultural circumstances. From the results in this study it can be assumed, that while the interpretation of relations between items as well as the importance of some items in decision processes might be individually based on past experiences, own beliefs and the current situation of the subject, overarching values and concepts could still be comparable with each other, especially when sharing same cultural backgrounds and structures of society.

Looking at the results that Venn et al. (2022) obtained, some differences occur. While managers in this study aligned that knowledge is important when making CSR decision, the gathered items lack more detailed descriptions, which kind of knowledge is important. The subjects of Venn et al. (2022) answer more detailed, so that the authors were able to categorize knowledge in competencies such as methodological, social, personal and implementation competencies. But again, as mentioned previously, their study differentiates from this study as the researchers made use of another interview strategy, implementing interactive workshops, semi-structured interviews and an online survey. This study however was laid out as open strategy to give a voice to students and managers as Venn et al. (2022) do not interview students, instead they implement a literature research to depict the opinion of scholars and interview 25 sustainability

professionals. Thus, this study can be seen as a way to give more depth in the analysis of students' capabilities and what they have learned so far at university, thus representing the actual state of the art of CSR-related managerial research and teaching at universities. For example, while Venn et al. (2022) state, that competencies of CSR managers differ from competencies taught in higher education as actual experienced managers are more focused on implementation and cooperation with stakeholders, this study shows that also students already include the opinion and point of view of external and internal stakeholders in their mental models concerned with CSR decision making. They treat the stakeholder as equivalent to CSR when defining different points of view that need to be considered when making decisions. Still, the general mental models of students and managers show differences. Here, the implication similar to the one of Venn et al. (2022, p. 4) shows to be applicable: some competencies that are well established in theory and embodied by students seem to be not as relevant in real-life settings of the CSR manager.

6. What can be learned from the Results

As Alonso-Almeida et al. (2015) already summarised, universities and faculties that teach economics and related topics have a responsibility towards their students: they stand in the due diligence to ensure that their graduates act in ethical and responsible ways in their professions and help the companies they join after graduation to embrace socially, ethically and environmentally sustainable operations. The education students receive at universities can be seen as catalyst for the development of moral and ethics, and it forms students today who will turn into the leading managers of tomorrow. Thus, it is necessary to move away from theories that indicate economics without morality and to put more emphasis on ethical morals and CSR.

Also, the “Association Internationale des Etudiants en Sciences Economiques et Commerciales” (AISEC) already gathered data in 2006 indicating that students wish for more inclusion of CSR aspects in the teaching at universities as they see a value for them in the formation of the future corporate landscape (Alonso-Almeida et al., 2015, p. 4).

Keeping this movement in mind, it is even more interesting to answer the previously formulated research questions that have been guiding this research approach: Which educational support do these students need to be able to become CSR managers? Do mental models of CSR enthusiastic students differ from those of experienced CSR managers?

In regard to educational support, the first result from the interviews with the students give a first clue. As the category “law” included very little items and those items only have been added in the second round after political information has been given, it can be concluded, that the legislative regulations towards CSR activities are not present enough to students at university. Thus, adding the legislature and the political context to the curriculum of economic sustainability classes could help students to understand the importance of CSR while also understanding that those activities have to follow certain guidelines. Also, understanding these guidelines before being confronted with them on the job could pose as helpful skill for the future managers. In addition, experienced CSR managers’ mental models indicate, that experience is also forming the CSR manager and enable them in their decision-making process. Thus, universities and respective coordinators should have a further look in how it is possible to include more opportunities to gain experiences for CSR-interested students. After own experience at both Dutch and German universities, Dutch universities already include mandatory consultancy training in business-related studies, here a good opportunity could be to have some specialised CSR project from actual companies included to enable interested

students to get in contact with CSR managers and their actual problems. German universities do not include such classes in large scale, but for example make use of market strategy games within business classes, where students learn about how national and international markets and marketing strategies work. Here, special focused could be laid on possible opportunities to make these learning games working for first CSR experiences.

Surprisingly, the mental models of students aspiring to become CSR managers do not differ as much from those of experienced CSR managers as anticipated. In their core, they already have the same values for similar competences and problems they could be facing in CSR decision-making. This could be explained by the motivation for sustainability that those specific students bring with them and their already high education grade. This also leads to the recommendation to make use of the motivation of students that sign up for sustainable businesses classes and support them in accelerating their knowledge. Nonetheless, in important categories students seem to under-evaluate the importance and possible influences that could result from, for example, legislature and the interaction of competences and hurdles. When comparing the mental models of the students and the managers, this is the most significant gap that can be detected. However, students imply more feedback relations between the categories and overall, more relations between items. This could indicate that the younger generations have already learned newer approaches to classical economic theories and therefore see multidimensionality as more important. But it could also mean, that the gap between theoretical approaches to CSR and actual practical application is still there, as literature already suggested (Alonso-Almeida et al., 2015).

After answering both questions, a summarising recommendation for future curriculum changes giving students the right tools to enable them to be the leading CSR managers of tomorrow can be given. The mental mapping in this study leads to several implications: The motivation that CSR-interested students bring to the table is strong, universities should channel this as source for accelerating skills and knowledge and to form ethical and moral values necessary for their future occupation. What seems to be widely missing in the curriculum is the change of legislation in the CSR perimeter, especially as they are very complex but all the more important and inevitable. Then there is the gap between theory and experience. Of course, it can hardly be required that students are already highly experienced when graduating, but first insights into the practical application of CSR competences could help to guide them through the first steps of becoming a CSR manager and to give them a direction. Thus, universities should try to give interested students enough opportunities to gain this needed experience. But companies should

also understand that most CSR managers are not solely made out of CSR theory, they need time to develop and to learn on the job. But overall, the participating students show, that a lot of the CSR thinking patterns are already rooted in their business thinking. Mental maps therefore can also be useful for universities and sustainability programs to evaluate the effect of the curriculum and gives hints where changes are needed.

Nonetheless, research is still needed. This thesis can be seen as a first step to connect research on students and managers and can be used as base for further developments. As already mentioned, the sample size of this study is rather small due to time restrictions and implementation possibilities. In the future, similar research should be conducted with a bigger sample size and maybe even more sample groups. The topic of CSR-managerial research is still relatively small and undiscovered, even if the interest is growing and the demand is even more increasing. Universities should not under-evaluate their role in forming future leaders and CSR managers and should take action to enable students to keep up with the developments on the market and in politics.

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Appendices

Demographics Students

Anonymisation	Interview length (in minutes)	Age	Gender	Country	highest achieved degree	current degree	work experience in CSR	if CSR experience, what?
S1	26	25	f	NL	BA International Business	MSc Sustainable Business and Innovation	none	none
S2	31	24	m	NL	BA Wirtschaftswissenschaften (Business and Economics)	MSc Sustainable Business and Innovation	none	none
S3	23	23	f	NL	BA Business Administration	MSc Sustainable Business and Innovation	none	none
S4	34	24	f	DE	BSc Agrarwissenschaften (Agriculture)	MSc Agriculture and Food Economics	yes	8 month internship in German sugar company
S5	42	31	m	DE	BSc Agrarwissenschaften (Agriculture)	BSc Agrarwissenschaften (Agriculture)	none	none
S6	63	35	m	NL	PostGrad Management - Agribusiness Management	MSc Sustainable Business and Innovation	none	none
S7	31	27	f	DE	BSc Ernährungs- und Lebensmittelwissenschaften (Nutrition and Food Sciences)	MSc Agriculture and Food Economics	yes	working student for a business in the chemical industry since January 2023
S8	34	28	f	DE	BA Administración Comercial (Business Administration)	MSc Agriculture and Food Economics	none	none

Demographics Managers

Anonymisation	Interview length (in minutes)	Age	Gender	Country	previous degrees	job experience in years	previous job(s)	job experience with CSR in years
M1	42	54	m	de	Studium der Lebensmittelchemie	28	Leiter QM/QS/Lebensmittelrecht	6
M2	31	30	f	de	Bachelor of Science: Umwelt-ingenieurwesen Master of Science: Umwelt-ingenieurwesen MBA Sustainability Management (on the job)	5	Umwelt-ingenieur	1
M3	48	56	f	de	Diplom Ingenieur Agrarwissenschaften	29	association work/project manager	4
M4	39	38	m	nl	BA Business Management/ MA International Business	14	Analyst	2
M5	36	34	m	de	BSc Pharmazeutische Chemie/ Msc Arzneiwissenschaften	9	Product Manager	1
M6	46	33	f	de	BA Music/BSC Oekotrophologie/ MSC Oekotrophologie	6	project assistant, Analyst	0.5
M7	43	35	m	de	BSc Agrarwissenschaften/ MSc Agriculture and Food Economics	9	junior Consultant	2
M8	41	37	m	nl	BA Business Management/ MSc Agriculture and Food Economics	13	Consultant	3

Further Explanation of Biases within this Study

Flawed Study Design

As main pre-trial bias (Pannucci and Wilkins, 2010), the bias within the study design is a possible shortcoming of this research. The main factor arising from the chosen design is the inability to randomize the participants and blind-select them. But this strategy was not possible, as the research question is aimed at a very specific and still widely unknown research topic: CSR managerial research. As students and managers still needed to be comparable, the background needed to be similar, therefore only students ambitious in becoming CSR managers from a master's degree connected to economy have been selected. Therefore, it was necessary to screen students' backgrounds and intentions as well as CSR managers and their companies.

To minimize the effect on the results and interpretation, interviews have been anonymized, and only demographic data has been collected. Also, the precise background checks help future researchers to recreate the conditions to understand the results.

Interviewer Bias

It is out of question, that most biases stem from the behaviour and impact of the interviewer itself. There are plenty of independent variables such as age, gender, interaction style and personality of the interviewer that can influence participants' behaviour and answers during a personal interview (Salazar, 1990). To minimize this effect, the interviews are held online via Microsoft Teams so that participants get as little clues about these variables as possible. Also, the communication within round one and two is held to a minimum, participants are allowed to ask questions, but they are supposed to build the mental map on their own without help to keep the results as true as possible.

Response Bias

The response bias could also be a potential bias influencing the interviews. When respondents add components to the mental map not based on their own experiences or beliefs but, for example, based on social desirability of their answer, the mental model might not picture their actual thinking patterns connected to CSR (Wetzel et al., 2016). To work against this, the research design is laid out as an open interview without pre-defined questions, so there is no hint at what approach possible answers could take. With a direct start without further in-depth context, respondents also do not get too much time to think about possible outcomes. For the

second round of mental cognitive mapping with more political context, it is also added, that there are no wrong answers to console participants.

Social Desirability Bias

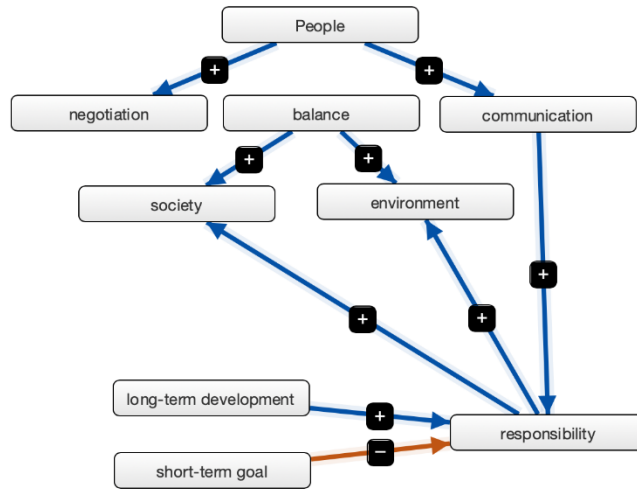
As already mentioned in context of the response bias, a potential threat to the accuracy of the results can be answers based on social desirability. After Grimm (2010), social desirability bias is “[...] the tendency of research subjects to choose responses they believe are more socially desirable or acceptable rather than choosing responses that are reflective of their true thoughts or feelings”. This bias is closely connected to respondents’ personality and if they need social reassurance (ibid). Sustainability can be a very emotional topic, as it can be found a lot in daily media reports and it is heavily discussed (DiRusso and Myrick, 2021). Thus, during the interviews, it is tried to keep the topic as professional as possible and to reassure respondents, that the focus is put on the CSR role within the company. An evaluation in front of respondents of positive or negative aspects is avoided to create a safe space during the interviews.

Self-Selection Bias

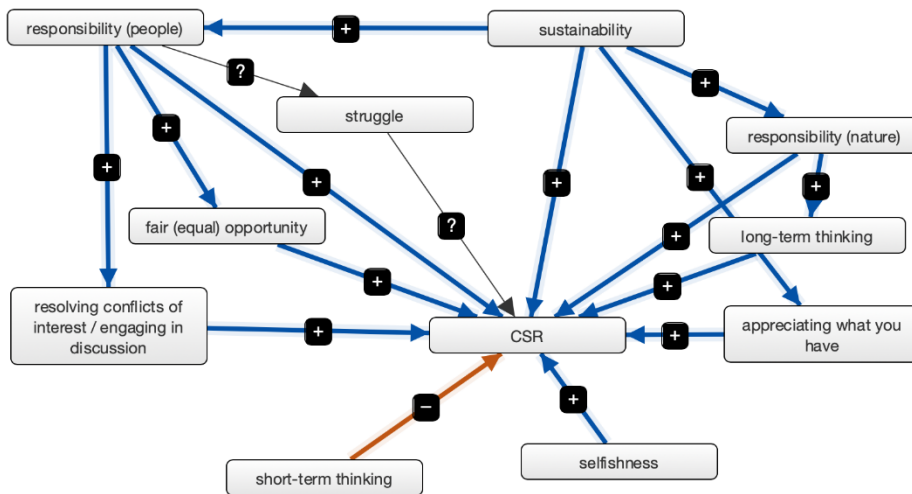
The (self-) selection bias can occur in any study where the underlying objects of research are not sampled randomly (Heckman, 1990). For this study, it was not completely possible to randomly select the respondents, as search criteria needed to be met. For students, respondents needed to be in their master's degree to ensure, that they specialised already enough to think about their career path and have already gathered enough knowledge to know the context of CSR management. Also, they needed to be enthusiastic about CSR. As there was no existing database, some needed to be approached directly as the response to chain mails and texts into bigger chatting groups was very small. For the CSR managers, there was also no underlying database available to use, some were contacted through the MVO Nederland community, but most of them have been found via LinkedIn. Also, CSR managers needed to be either from German or Dutch companies for the scope of research. Thus, a randomization was not entirely possible. It is also in question, if total randomisation is suiting for the research goal of this particular study, as the personal approach proved to be way more effective, and this thesis had a limited time frame. For future research, the sampling should be improved and the time frame for the interview process should be extended to receive a higher degree of randomization.

Screenshots from the Mental Models (more detailed Pictures)

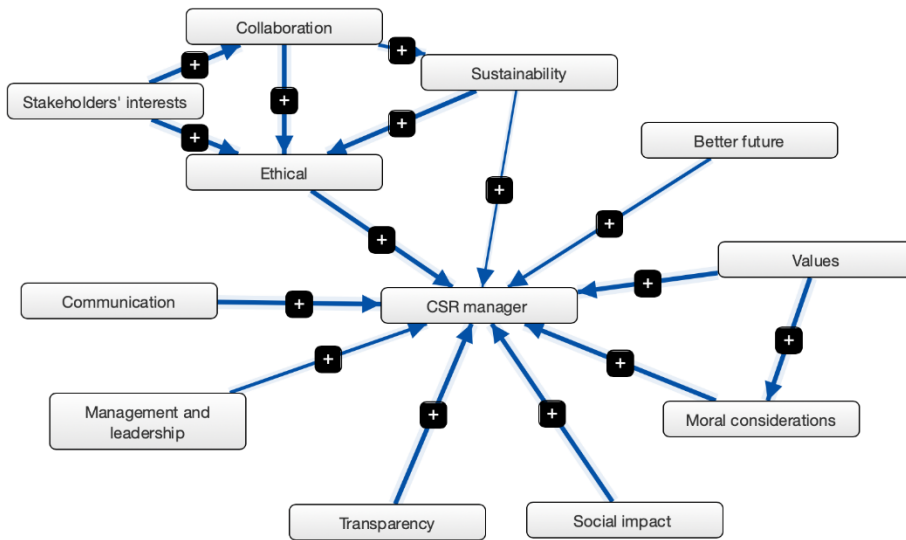
First Round of Interviews:



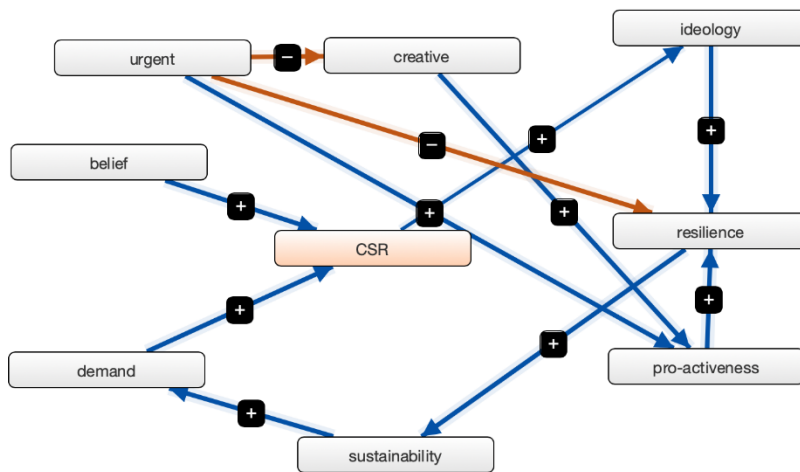
Student 1



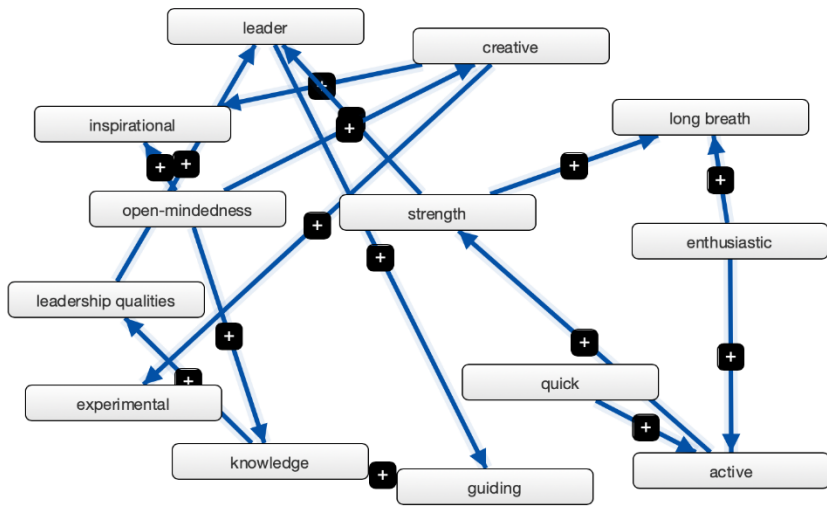
Student 2



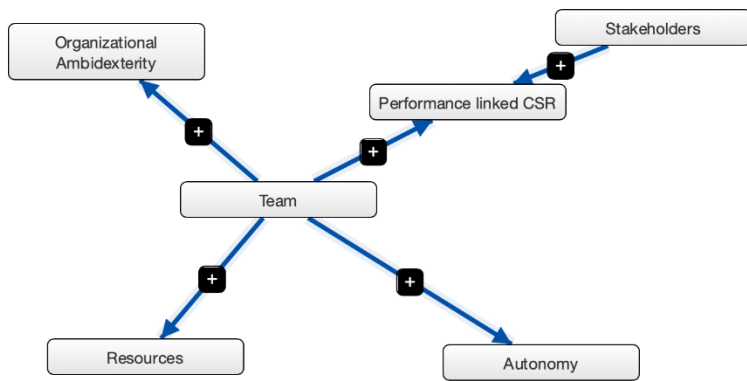
Student 3



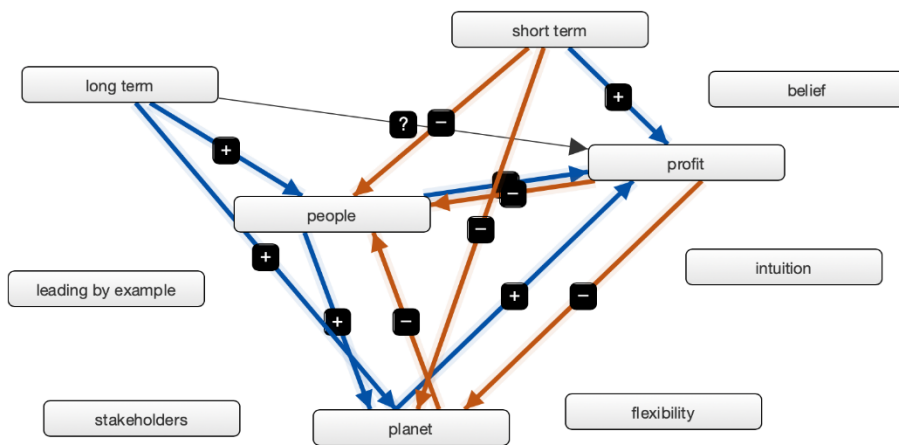
Student 4



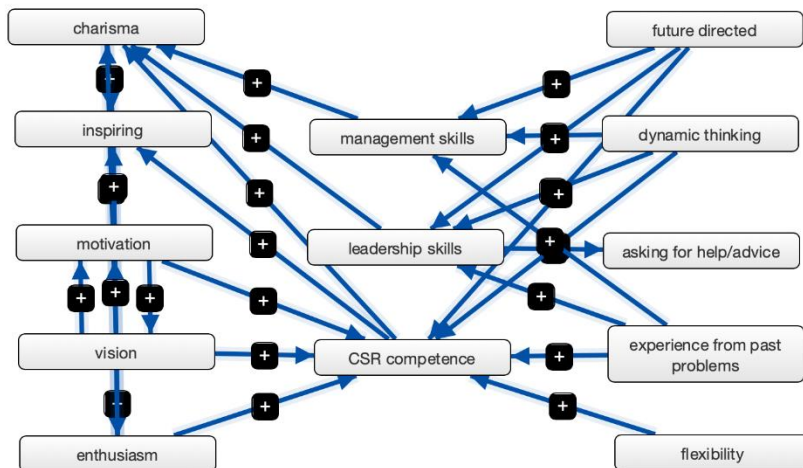
Student 5



Student 6



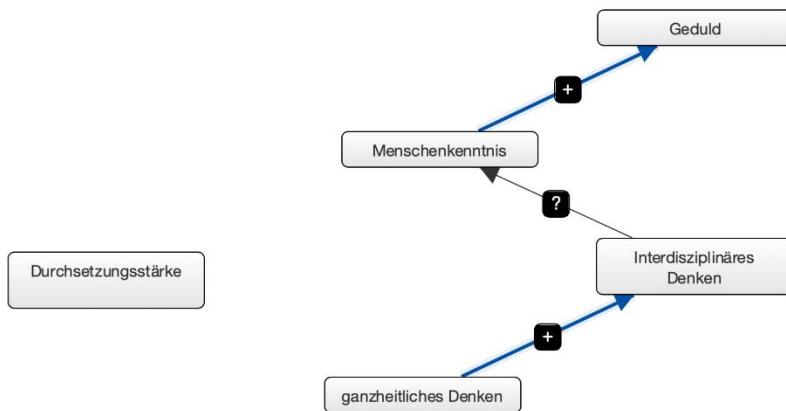
Student 7



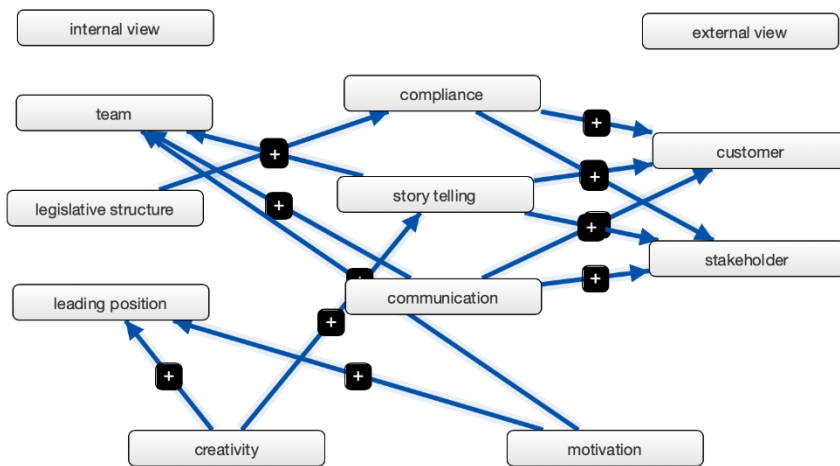
Student 8



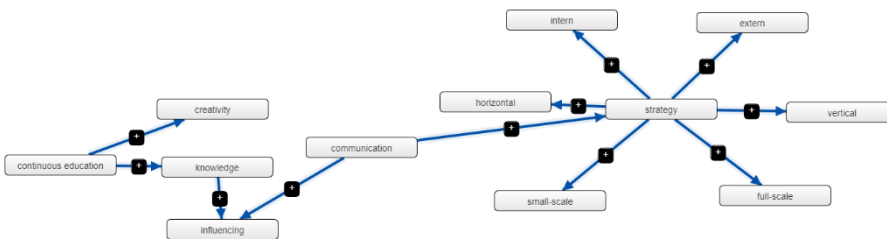
Manager 1



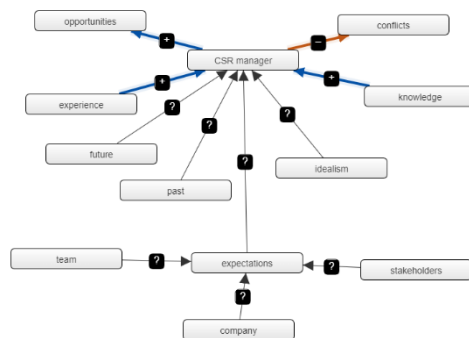
Manager 2



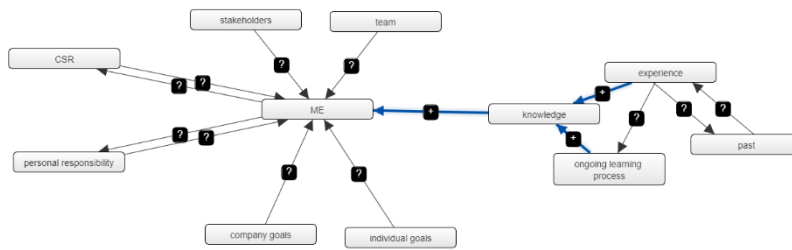
Manager 3



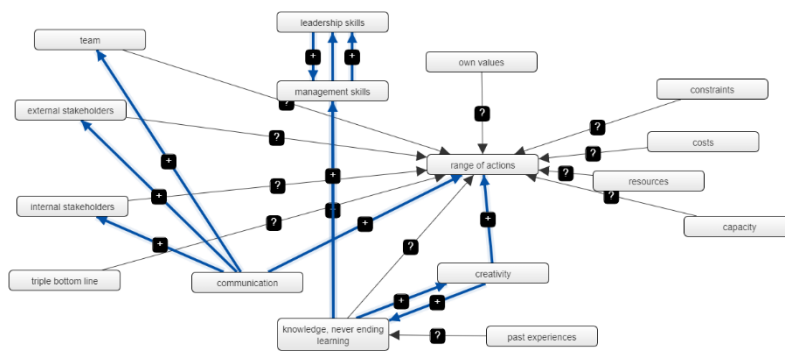
Manager 4



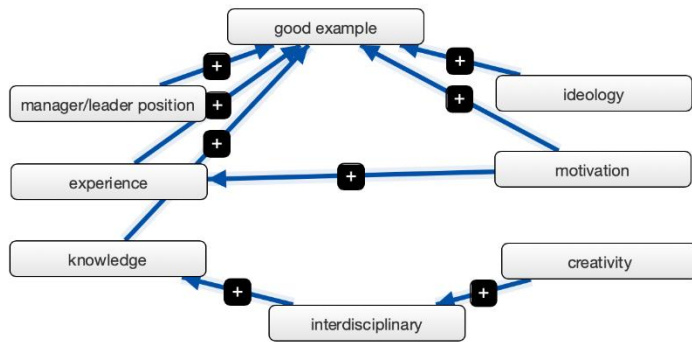
Manager 5



Manager 6

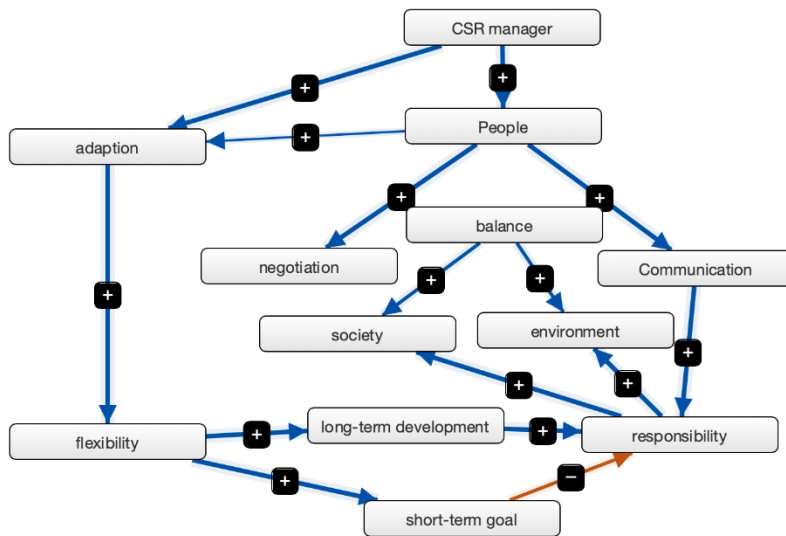


Manager 7

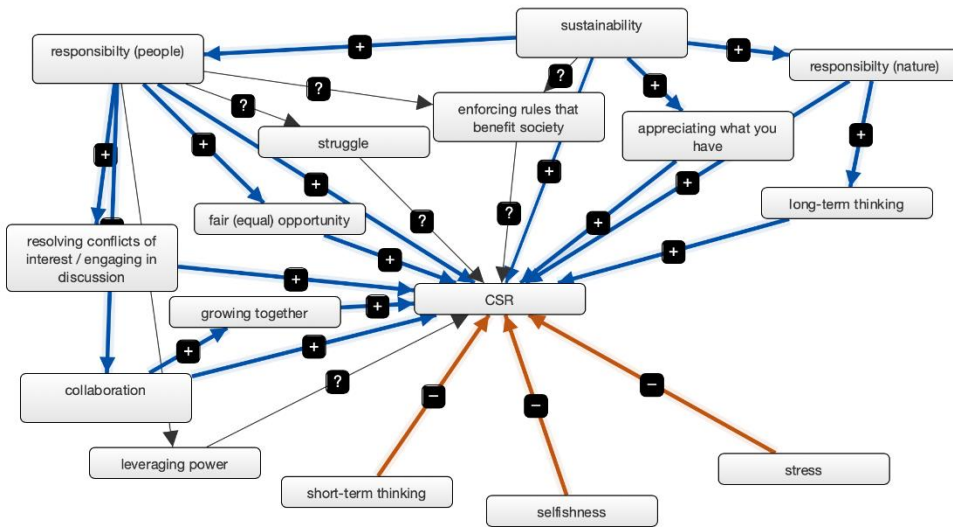


Manager 8

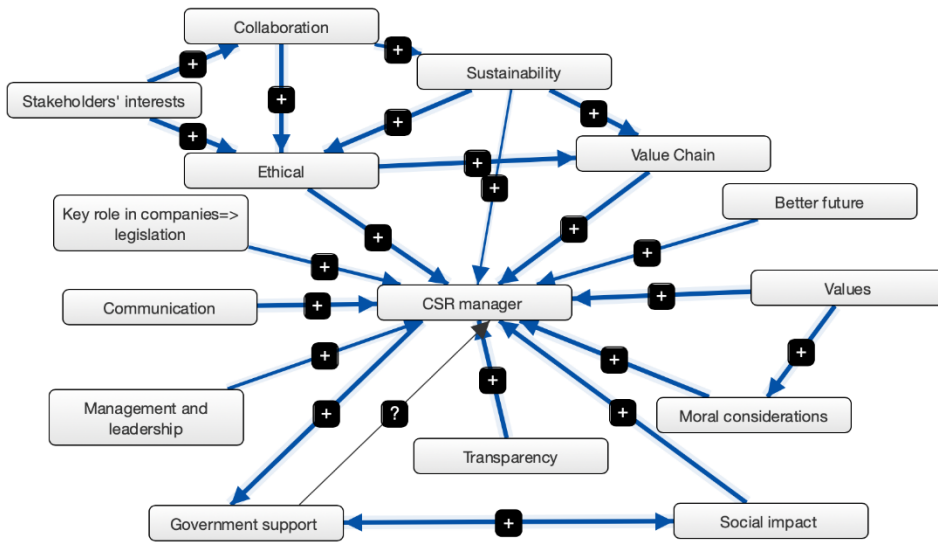
Second Round of Interviews



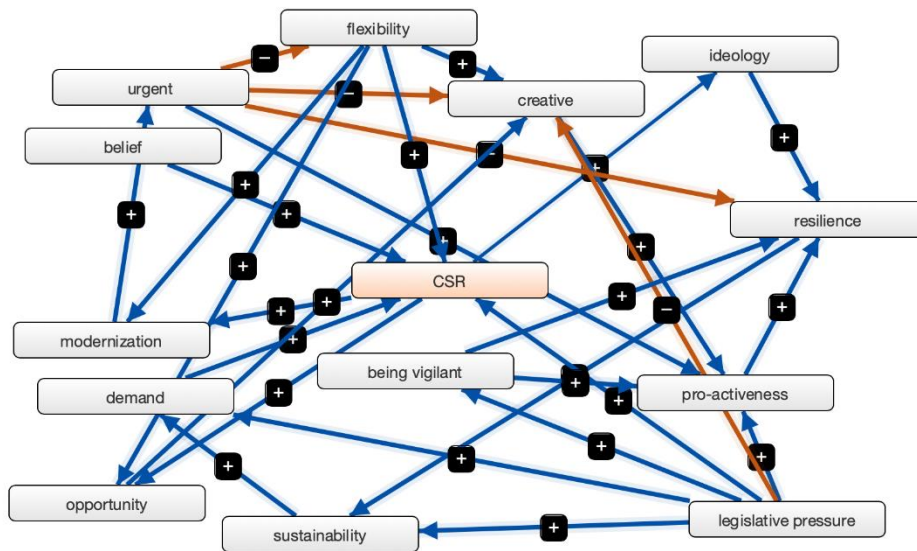
Student 1



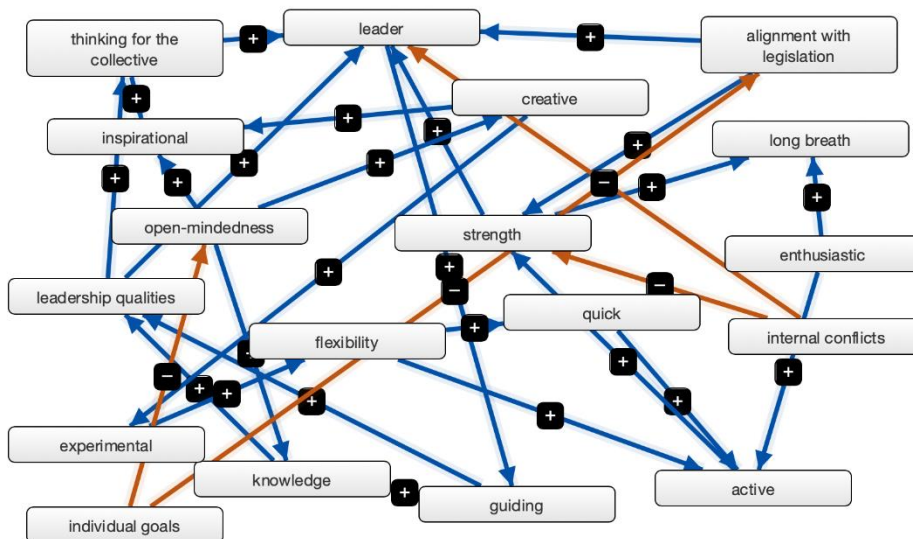
Student 2



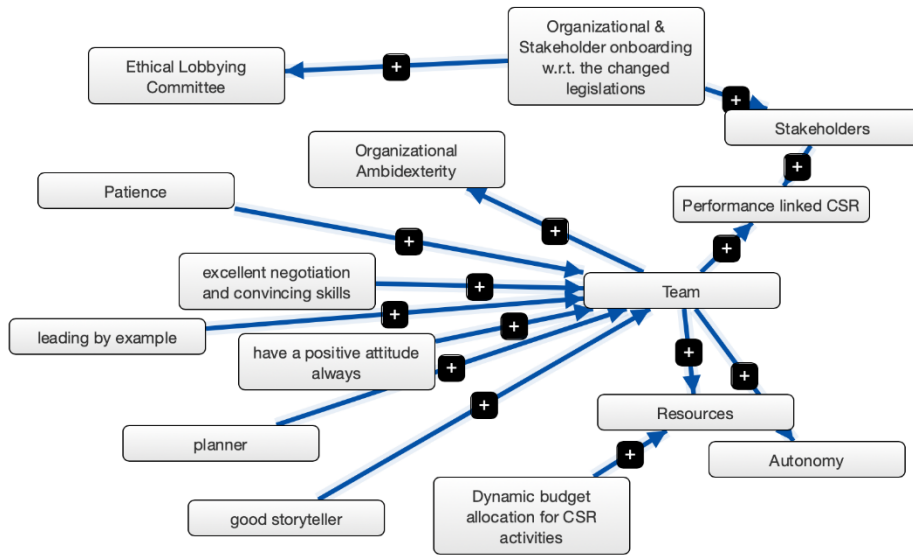
Student 3



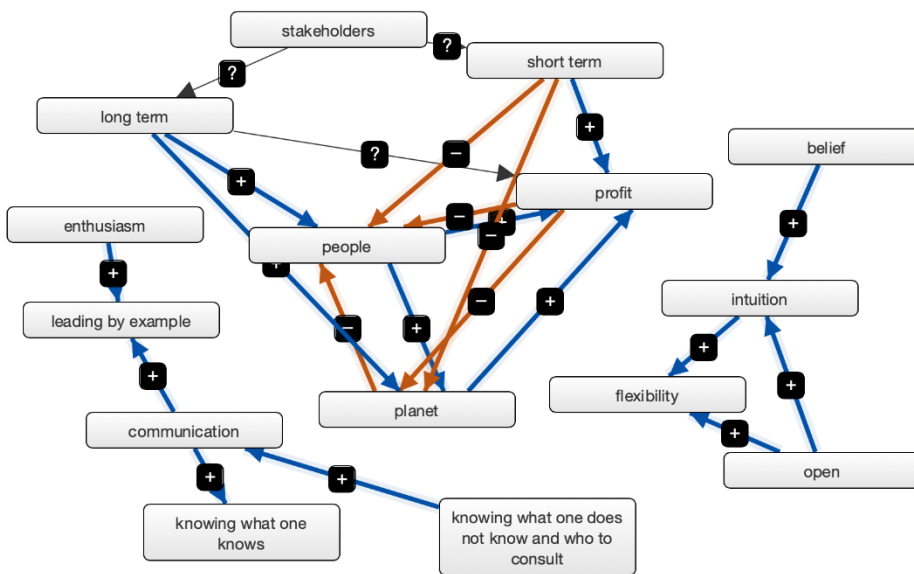
Student 4



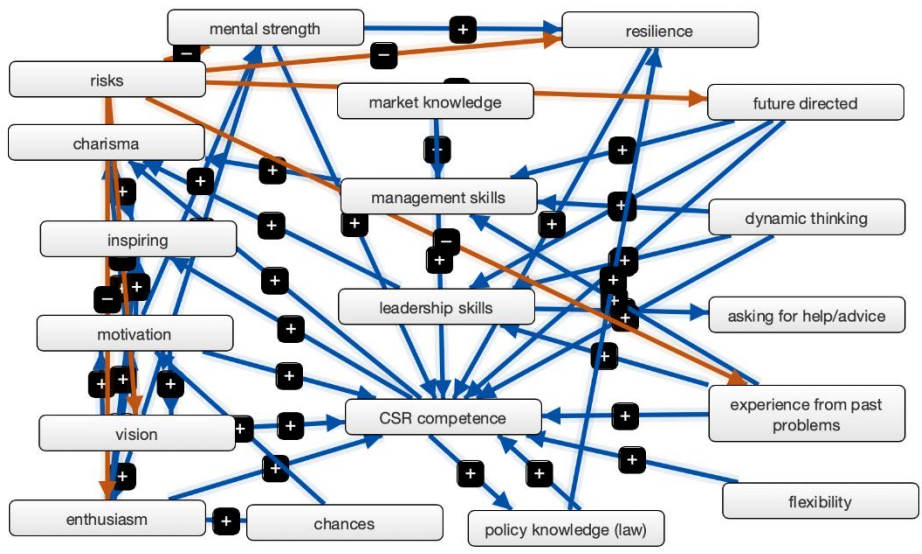
Student 5



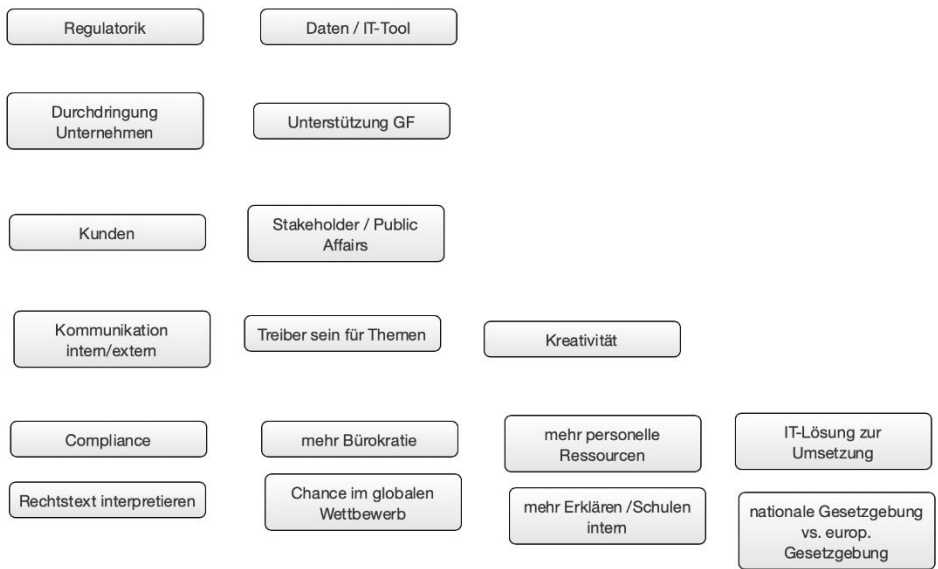
Student 6



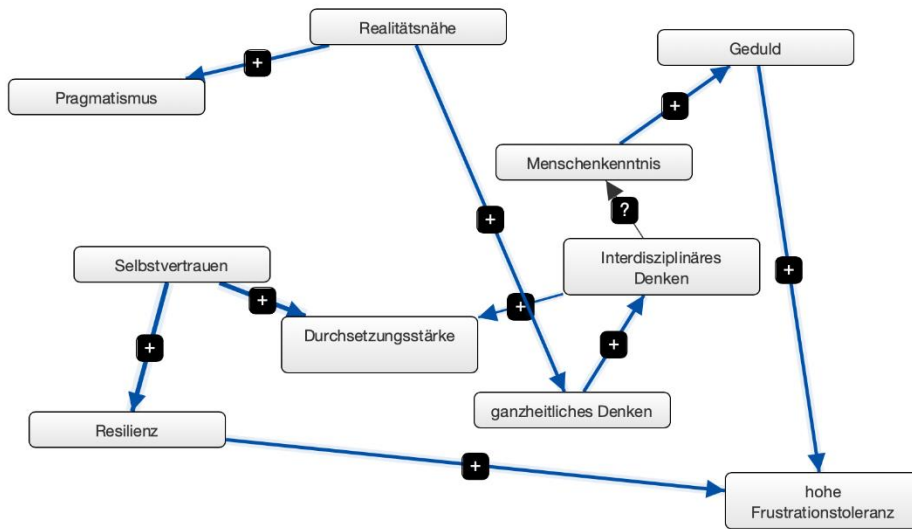
Student 7



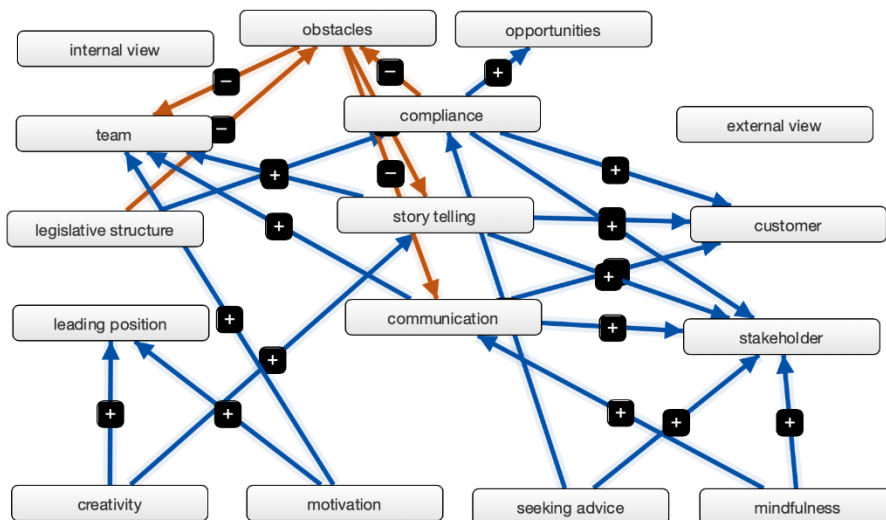
Student 8



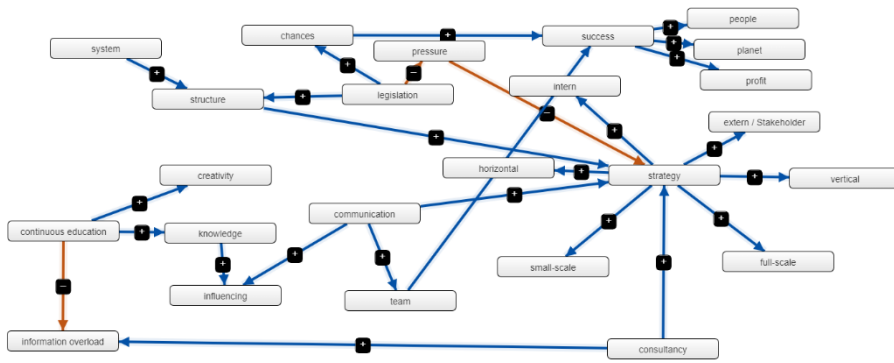
Manager 1



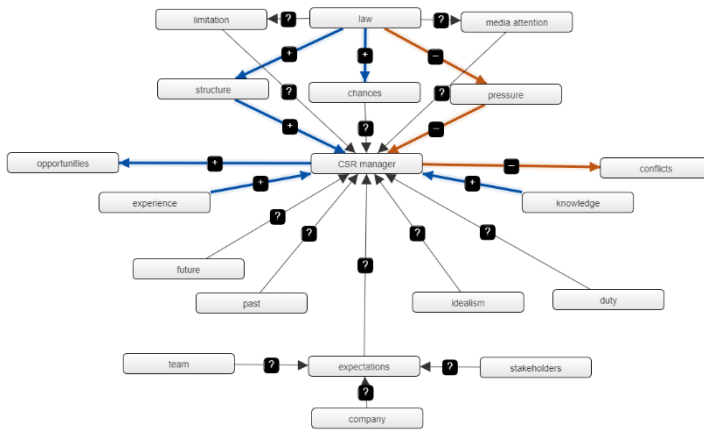
Manager 2



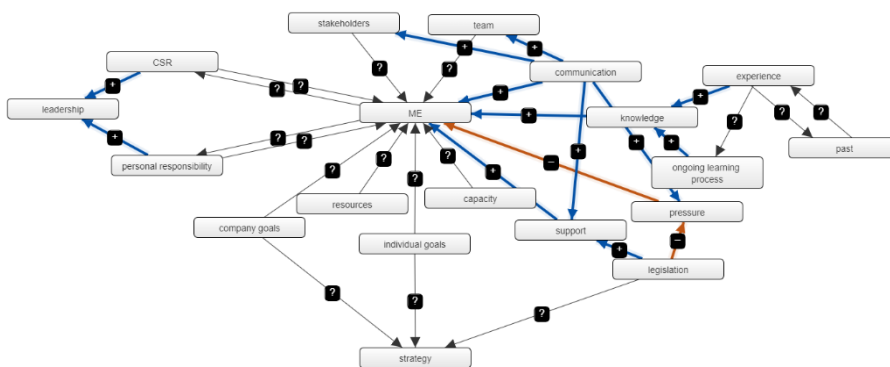
Manager 3



Manager 4



Manager 5



Manager 6

