TOWARDS A SOCIAL CHANGE: INDIVIDUAL EMPOWERMENT THROUGH CSA

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SUMMARY

Overwhelmed by complexity and uncertainty, citizen-consumers risk an experience of disempowerment to engage in sustainability transitions. Besides possible personal frustrations that might evoke, disempowerment could hamper their potential to change dominant institutions and social relations. This is inadequate, because citizen-consumers can be seen as change agents in the sustainability transition. Community supported agriculture (CSA) is a grassroots innovation that might empower people to take up sustainable practices. People are actively involved by volunteering, participating in the decision-making process, and sharing the risks and benefits of the produce with each other and the farmer. The power to have an impact in the agricultural sustainability practices may affect a sense of power to change their own daily practices as well. The research question "whether and how do CSAs in the Netherlands empower citizen-consumers to engage with more sustainable practices in daily life?" is analysed in a framework on psychological empowerment, introduced by Avelino et al. (2019). The framework consists of six dimensions, being autonomy, competence, relatedness, meaning, impact, and resilience. Twelve interviews are conducted among shareholders, volunteers and trainees of one CSA case study. A large range of sustainable daily practices were identified by the different interviews. However, some dimensions regarding CSA were perceived to contribute more than others. Dimensions that are not frequently experienced are considered to be lacking in CSA to stimulate taking up sustainable practices in everyday life. In addition, relations between the dimensions were observed, extending the framework of Avelino et al. (2019). By defining them, the dimensions were linked to each other, nuancing the frequencies, and exploring the possibilities to complement each other. The empowerment to engage in sustainable practices turned out rather dispersed in the case study. Especially volunteers and trainees experienced a sense of empowerment, in contrast to shareholders.

There is a growing consensus that current societies often have damaging effects on the natural environment. Biodiversity loss, climate change and resource overconsumption are just a few examples of these effects (Feola, 2019). According to Dudley & Alexander (2017), agriculture is the largest contributor to biodiversity loss by its practices releasing pollutants, and changing natural habitats to strongly controlled systems (Dudley & Alexander, 2017). A sustainability transition cannot evolve by socio-political and technological innovations alone; however, being the point of focus in academic literature (Hinrichs, 2014; Seyfang et al., 2010). Sustainability transition is understood as resolving ecological problems through participatory strategies, taking into account the complex relations between the ecological, social and economic domains (Grin et al., 2010). The role of citizen-consumers in sustainability transitions has been undermined in academic research (Hinrichs, 2014; Psarikidou & Szerszynski, 2012; Seyfang et al.,2010). However, citizen-consumers have the capacity to influence the sustainability transition by changing social relations and dominant institutions (Avelino et al., 2019) by their daily practices, such as holidays and food habits (Spaargaren et al., 2006).

Because of their role as possible change-agents, citizen-consumers need to be empowered to be able to contribute to a sustainability transition (Hölscher et al., 2019). It is thus important to study factors that induce such empowerment, thus a social change (Seyfang et al., 2010; Shove & Walker, 2010, Spaargaren et al., 2006). This thesis investigates the factors that induce social change within agricultural practices through the lenses of psychological empowerment. Psychological empowerment can be seen as the process in which individuals gain intrinsic motivation to engage with sustainable practices (Avelino & Wittmayer, 2015). However, as argued by scholars interested in sustainability transitions, there is a risk of individuals feeling disempowered to engage in sustainability transitions (Hölscher et al., 2019; Diduck, 1999). Disempowerment might occur when actors do not feel able to contribute to the sustainability transition (Hölscher et al., 2019), overwhelmed by complexity and uncertainty (Avelino, 2009; Diduck, 1999). Therefore, the individual experience of disempowerment could hamper a sustainability transition.

Grassroots innovations could empower citizen-consumers by involving them in community-level action (Ahmad & Abu Talib, 2016). Grassroots innovations are innovative networks leading bottom-up sustainability transitions, responding to the local situation (Seyfang et al., 2010). Generally, the values of the communities are involved (Seyfang et al., 2010), causing behaviour change (Tegear, 2011). In turn, this behaviour can have an important role in the sustainability transition (Tregear, 2011). Nevertheless, behaviour change related to pro-environmental behaviour seems hard to realise, since major changes in environmental-damaging consumption patterns have been lacking (Welch, 2017).

Therefore, a better understanding of changing practices and behaviour within the wider area of social change can inform practice and policy (Seyfang et al., 2010).

This research is focused on a specific kind of grassroots innovation, named community supported agriculture (CSA). CSA can be implemented in multiple forms. However, the overarching notion is that farmers and consumers have a contractual agreement in which the costs and benefits of the production are shared (Abbott Cone & Myhre, 2000). The case study for this research, Tuinderij De Volle Grond (TVG), relies on three CSA principles, building on an interaction between the CSA and its involved actors. These principles are sharing risks of the harvest, sharing costs, and transparency regarding pricing, policy, and accountancy (Tuinderij De Volle Grond, 2020). This is realised by shareholders paying for a vegetable box, regardless of the yield of the farm (Tuinderij De Volle Grond, 2020). CSA can be a platform for citizen-consumers to reframe, rethink and remake daily choices that substantiate unsustainable agricultural practices; resulting in practices like sharing, volunteering and interchanging (White, 2020). Therefore, CSA's community involvement in sustainable agricultural processes has been considered a substantial element for a sustainable development (Stevens & Morris, 2001).

Existing research regarding CSA focusses on the sustainability effects within this agricultural system (e.g. Stevens & Morris, 2001; Tregear, 2011), or on the impact of CSA as a whole on society (e.g. Krul & Ho, 2017; Paul, 2017). When zooming in at the individual level, motives to join a CSA have been studied frequently (e.g. Brehm & Eisenhauer, 2008; Perez et al., 2003). In order to complement the different perspectives in CSA research, this thesis will investigate the impact of CSA on individual practices, influencing society. The aim of this research is to analyse the psychological empowerment (Avelino et al., 2019) of citizen-consumers regarding one's position in the CSA case study; and how this affects the engagement with sustainable practices in daily life, outside the context of the CSA. The research question is as follows:

Whether and how do CSAs in the Netherlands empower citizen-consumers to engage with more sustainable practices in daily life?

Two sub-questions derive from the overarching research question:

1. How do members of CSAs feel empowered within CSA?

2. How do members of CSAs feel empowered within society to perform sustainable practices as a consequence of CSA?

The sub-questions will be examined by the interviews of the case study, based on the theoretical background. Firstly, key concepts composing the theoretical fundaments of this research will be explained; named community supported agriculture, social change, sustainable practices, and

empowerment. Then, in the method section, the case study and the methods that are used for data collection are elucidated, followed by a substantiation for the tools of data analysis. Thirdly, by combining the results and the discussion the outcomes of the interviews are presented against the theoretical background. The limitations and implications delineate the potential for further research, given the scientific and societal value of this thesis. Lastly, the answer to the research question is met by a reflection on the research in the conclusion.

2. THEORY

Given the sometimes ambiguous definitions in scientific literature regarding the concepts of this research, the key concepts need to be defined for an aligned starting point. The outline of the concepts is by no means extensive and considered to be 'the truth'. Nevertheless, the conceptual framework provides a definition for the concepts of community supported agriculture, social change, sustainable practices, and empowerment. These definitions form the contextual background for the analytical framework of psychological empowerment. The framework elaborated by Avelino et al. (2019) is converted to the aim of this research by decomposing and redefining the concepts.

2.1 CONCEPTUAL FRAMEWORK

2.1.1 COMMUNITY SUPPORTED AGRICULTURE

There is no standardised definition for the term Community Supported Agriculture (CSA) (White, T., 2020). Nevertheless, there are some basic principles that comprise CSA. White and Stirling (2013) describe CSA in its basic form as an initiative standing for "local and communal stewardship of land through jointly growing food, investing in and managing space, and the redistribution of risk between growers and consumers" (p. 839). The produce of CSA supposes to be fresh, locally grown and seasonal. Pesticide-use is avoided in most of the cases; however, this is no CSA requirement (Matzembacher & Meira, 2018). Furthermore, CSA has been seen as a way to connect consumers to their food, to each other, and to the producer of their food, the farmer (Perez et al., 2003). Shareholders usually pay the farmer at the beginning of the season, which ensures the farmer a stable income, regardless of the yield (Perez, Allen & Brown, 2003; White, 2020). In addition, shareholders are involved in the decision-making process regarding the produce and organisational factors (White, 2020). CSA could thus be a platform for citizen-consumers to reframe, rethink and remake daily choices that are more aligned to sustainable practices by sharing, volunteering and interchanging (White, 2020).

Regarding the involvement of shareholders in CSA, Chen (2013) made a distinction between two different types of CSA: CSA as a distribution share and as a working share. In a working share, shareholders rent a plot of the CSA farm site. By renting the plot, the shareholders are responsible for the yield themselves (Chen, 2013). Opposing this working share, shareholders do not work in a distribution share. Instead, they receive a vegetable box in return for sharing the risks and benefits by paying before the growing season, regardless of the yield, so the farmer has a stable income (Chen, 2013).

The division Chen (2013) makes between distribution share and working share may be less distinct in practice. The involvement of CSA's shareholders can be scattered between a distribution share and a working share and may differ among involved actors within one CSA initiative (Perez et al., 2003). Shareholders could fit in a distribution share, according to Chen's (2013) theory, while also physically working in the farm (Perez et al., 2003). An example is the active engagement of shareholders in making key decisions for the community as a whole, such as growing practices, strategy, finance and logistics (Matzembacher & Meira, 2018; Paul, 2018). Such a combination is CSA at its best, according to Paul (2018). These kind of interactions, where shareholders have the power to influence the functioning of the farm, can be seen as distinctive for CSA compared to mainstream food systems (Tregear, 2011). Therefore, this element of power can be of importance regarding psychological empowerment of actors to engage more in sustainable practices (Avelino et al., 2019). The concept of psychological empowerment will be elaborated in section 2.1.4.

2.1.2 SOCIAL CHANGE

Agricultural transitions towards sustainability could be considered from different perspectives, such as the biological, ecological and economic perspectives. In this thesis the sustainability transition will be examined from a social change perspective regarding CSA actors, which is often neglected in transition theory (Hinrichs, 2014; Spaargaren et al., 2006). Social change occurs when dominant systems are overthrown leading to a transition (Seyfang et al., 2010). The dominant system, according to Seyfang et al. (2010) is "the prevailing 'regime' of production and consumption, including the associated practices and set of actors" (p. 2). As reported by Cheney et al. (2004), social change implies a context in which ethics and principles are recognised and where the core values of justice and dialogue are interwoven in the sustainability transition. This perspective is important according to Hinrichs (2014), because the integration of governance, politics, ethics and values in the agricultural landscape strengthens a change towards sustainable practices. Within the social change perspective of this research, particular attention is paid to the change of individual everyday practices towards more sustainable ones.

Changing practices are influenced by the individual lifestyle, and by the system of provision, as is illustrated by Spaargaren et al. (2006) in figure 1. Lifestyle is conceptualised as "… the sets of social practices, together with the story-telling that goes along with it" (Spaargaren et al., 2006, p. 108). With system of provision Spaargaren et al. (2006) meant the "contexts of action, specified in terms of the sets of rules and resources that help [individuals] to organise social practices" (p. 109). The system of provision is not a stand-alone entity; instead, citizen-consumers make use of it and interact with it (Spaargaren et al., 2006). Grassroots innovations, such as CSA, can be seen as agents of social change because of its focus on changing the conventional supply chain in the agricultural system (Grin et al., 2010; Spaargaren et al., 2006). CSA could provide the set of rules and resources that may empower shareholders to engage more in sustainable practices, following the framework on psychological empowerment by Avelino et al. (2019). Psychological empowerment is conceived as a resource encouraging sustainable behaviour, in addition to the lifestyle of the individual citizen-consumer. Therefore, psychological empowerment by CSA can be seen as a system of provision, influencing social practices.
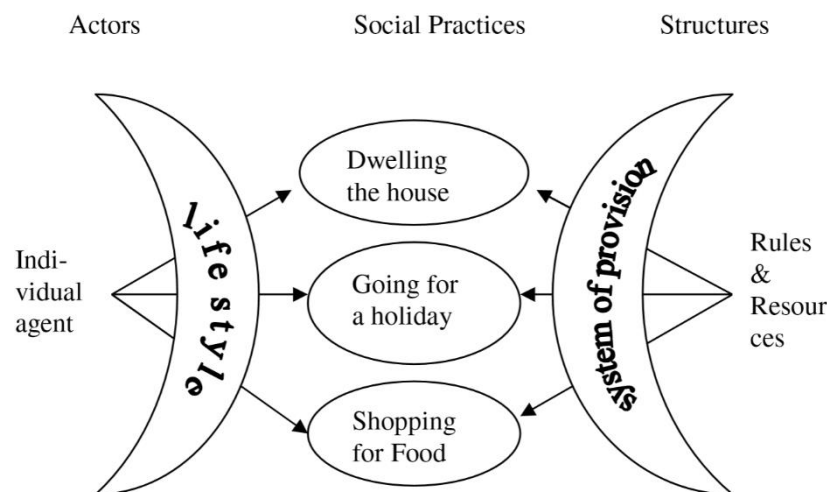

Figure 1: Everyday social practices are set in motion by rules and resources forming the system of provision, and by the individual compound of lifestyle. Altogether, composing social processes of change (Spaargaren et al., 2006).

2.1.3 SUSTAINABLE PRACTICES

The social practices in the social change framework by Spaargaren et al. (2006) are specified towards sustainable practices in this research. Regarding the social practices theory, sustainable practices can be defined as decisions on sustainability that are embedded in everyday life (Spaargaren, 2003; Seyfang et al., 2010). Decisions on sustainability are discursive resources that shareholders consider

crucial for environmentally sustainable practices, according to Kurz et al. (2005). Interpretations of sustainable practices are ambivalent (Shove & Walker, 2010), and therefore vary per person. Sustainable practices are embedded in social practices such as shopping for food, as is presented in figure 1 (Seyfang et al., 2010). Examples of sustainable practices are waste prevention, and buying according to eco-labels (Spaargaren, 2003).

2.1.4 EMPOWERMENT

Avelino & Wittmayer (2015) understood empowerment as the process of gaining power, for instance to change social practices. Hölscher et al. (2019) elaborated this definition by making a division between the concept as a process as well as an outcome. The process of empowerment consists of interventions, conditions, or actions that enhance or develop the abilities of actors to achieve desired outcomes. When these abilities to take up roles to influence sustainability transitions are set, empowerment is conceived as an outcome (Hölscher et al., 2019).

Building further upon the individual experience of empowerment, Avelino et al. (2019) elaborated a so-called social psychology perspective. Psychological empowerment is defined as the process in which actors gain the capacity to put resources into operation to achieve a goal (Avelino et al., 2019). This capacity could be provided by CSA; in figure 1 functioning as a structure of rules and resources. The intrinsic motivation, presented in table 1, can be considered as one of the two key elements of psychological empowerment. Psychological empowerment in this research is conceptualised as the process by which individuals gain a sense of intrinsic motivation to engage with sustainable practices (Avelino & Wittmayer, 2015). Avelino et al. (2019) aim to examine psychological empowerment by six dimensions, consisting of autonomy, competence, relatedness, meaning, impact, and resilience; presented in table 1. The dimensions are featured on the individual level, however constituted by the collective (Avelino et al., 2019).

Table 1: The six dimensions of psychological empowerment, reflecting the willingness and capacity to contribute to the sustainability transition (Avelino et al., 2019).

Source of dimensions	Six dimensions of psychological empowerment
Self-determination theory (Ryan & Deci, 2000)	Autonomy
	Competence
	Relatedness
Intrinsic motivation research (Thomas & Velthouse, 1990)	Meaning
	Impact
	Resilience

The six dimensions are conditions allowing individuals to preserve and cultivate the psychological resources to set and strive for their goals (Avelino et al., 2019). The dimensions elaborate on the idea of psychological empowerment originated by a greater context, CSA in this case. The self-determination theory, posed by Ryan & Deci (2000) reflects the three basic psychological needs of autonomy, competence and relatedness; constituting the first three dimensions of psychological empowerment. When these dimensions are satisfied, it brings along mental health and self-motivation; however, if they are lacking, a sense of diminished well-being and motivation can appear (Ryan & Deci, 2000). Within the framework of Avelino et al. (2019), the self-determination theory merges with elements of the intrinsic motivation research mentioned by Thomas and Velthouse (1990). The intrinsic motivation theory strives "… for values and goals that are perceived to be one's own, even if they originated from a social context or collective" (Avelino et al., 2019). The ability to recover from set-backs implies the last condition for empowerment (Avelino et al., 2019).

Since CSA indicates the broader social context or collective for the individual to strive for values and goals that could be perceived to be one's own, the six dimensions of empowerment determine to what extent CSA could induce psychological empowerment. Figure 2 represents the focus of the research. The research elaborates on the demarcated part of the figure, the influence of empowerment through CSA on sustainable practices. Empowerment by CSA is not a stand-alone structure, rather it interplays with the individual (Spaargaren, 2006).
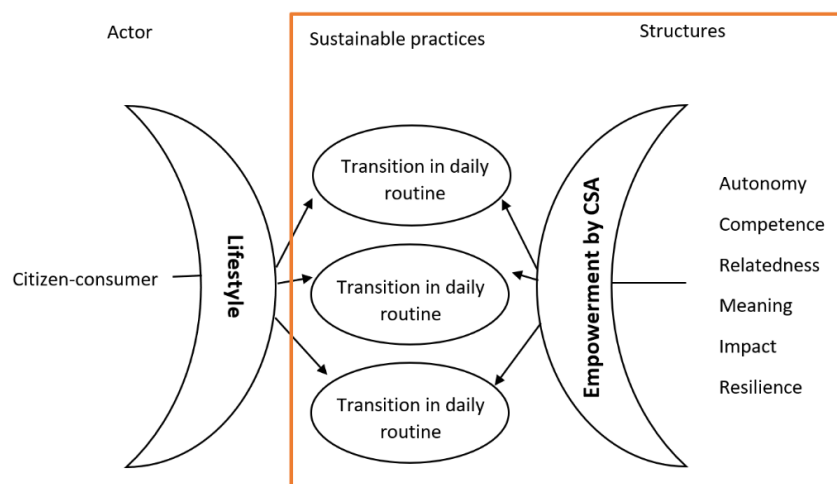

Figure 2: The six dimensions of psychological empowerment (Avelino et al., 2019) integrated in the framework of social processes of change (Spaargaren et al., 2006).

2.2 ANALYTICAL FRAMEWORK

Table 1 forms the baseline for the analytical framework, which is presented in table 2. The six dimensions of psychological empowerment according to Avelino et al. (2019) assembled the foundation for the interviews. The indicators clarify how each dimension is demarcated and analysed.

Table 2: The meaning and indicators of the six dimensions of psychological empowerment, reflecting the willingness and capacity of the involved actors to engage with sustainable practices (Avelino et al., 2019).

Dimensions	Meaning	Indicators
Autonomy	*To what extent is the actor able to choose one's own deed and to act in line with personal values and identity?*	- Contexts that facilitate doing things differently in line with one's values (Ibrahim & Alkire, 2007) - Actions motivated by own values or interests (Avelino et al., 2019)
Competence	*To what extent does the actor develop mastery and perceive to be effective in carrying out actions?*	- Development of knowledge and skills - Confidence of one's own knowledge and skills (Kramer & Schmalenberg, 1993)
Relatedness	*To what extent does the actor feel connected and part of the social group?*	- Collective action - Sharing experiences (Hölscher et al., 2019) - Social support (Hagerty et al., 1996) - Sense of belongingness (Vallerand, 2000)
Meaning	*To what extent experiences the actor sense-making?*	- Satisfaction (Locke, 1975) - Finding value in the activities and the purpose - Care and commitment about given task (Thomas & Velthouse, 1990)
Impact	*To what extent experiences the actor the possibility to change local circumstances and expand ideas to a wider area?*	- Making a difference - Knowledge of results - Contribution (Avelino et al., 2019)
Resilience	*To what extent has the actor the capacity to overcome obstacles and transform them into opportunities?*	- Support - Sharing and learning from each other's failures - Drawing on resources of a larger movement (Avelino et al., 2019)

3. METHODS

3.1 DATA COLLECTION

The focus on one CSA case study aims to lead to a deeper understanding of the diverse experiences of empowerment by different actors within one CSA. The case study of this research, Tuinderij De Volle Grond (TVG), is located in Bunnik. It has been derived from De Aardvlo, which was one of the three pioneer CSAs settled down in the Netherlands in 1985, that split up in two in 2010 (Tuinderij De Volle Grond, 2020). TVG cultivates produce for about 170 households on one hectares of land (Tuinderij De Volle Grond, 2020). In a yearly meeting, shareholders have the opportunity to bring in their own ideas.

The annual survey also aims to involve the shareholders in the decision-making process. Notwithstanding, the farmer herself decides what vegetables will be cultivated. Since the CSA has been existing for 35 years now, TVG constitutes an interesting case to study for documenting and examining diversity and multiplicity within a rather sustainable grassroots innovation.

The interview questions are derived from the analytical framework in 2.2. The interviews were set-up semi-structured. This means that pre-determined interview questions form the common thread from where the interviewer can conduct the interview interacting with the interviewee. The interviewee is able to reply freely and the interviewer can pick up on things that are said by the interviewee (Bryman, 2012). This method aims to provide room for a deeper understanding of personal experiences and thoughts (McIntosh & Morse, 2015). Besides allowing the interviewees to share their own experiences, a semi-structured interview also contributes on the assumption that little research is done explicitly about individual experience on empowerment through CSA.

The interviews are meant to investigate the personal experience of different actors within the CSA of this case study. The actors of this case study are categorised in volunteers, trainees, and shareholders. However, there are no closed boundaries between these sub-categories. For instance, one participant volunteers while being a shareholder, and another participant began as a volunteer but is a trainee now; merging the distinction posed by Chen (2013). Since I am volunteering at TVG myself, I had the possibility to reach the shareholders by a request in the weekly newsletter, sent by the farmer. The shareholders that participated replied on the request themselves. Twelve participants have been interviewed in total, of which eight have a share in the CSA. Two participants are involved for their internship, being the only trainees working on the farm for longer than this season. The five volunteers, varying in time and practices of involvement, have been asked to participate deliberately to get a varied selection of participants. Apart from one interview that was conducted using Microsoft Teams, every interview took place in person. Table 3 gives a general overview of the interviewees.

Table 3: Overview of the interviewees. Note that there are twelve participants, but that some interviewees fit in two categories.

Category	# interviewed	Expectancies	Receiving
Shareholders	8	Payment	Vegetable box
Volunteers	5	Working ± 7 hours/week	Left-over vegetables
Trainees	2	Working ± 18 hours/week	Left-over vegetables, no money

The semi-structured component of the research provides the possibility of a combination of deductive and inductive research, so called abductive research (Ligurgo et al., 2018). The questions that supported the

interviews were based on the analytical framework that provided categorised pre-determined concepts deductively. Nevertheless, the interviewees were able to determine the concepts 'sustainability' and 'sustainable practices' themselves in order to meet the different approaches in examining empowerment. This opened up the possibility to elaborate on personal interpretations.

The extent to which the interviewees experience, or do not experience, the presence of the six dimensions of psychological empowerment within CSA is examined in the interviews. The interview-questions are categorised into one of the six dimensions presented by Avelino et al. (2019). The dimensions are contemplated for CSA and for sustainable practices. The interview questions are outlined in appendix 8.1.

3.2 DATA ANALYSIS

After transcribing, the interviews were analysed using NVivo, a program in which common patterns can be found, and relations can be created through the process of coding (Hutchison et al., 2010). By analysing these patterns, the similarities and differences among the interviewees regarding the dimensions of the analytical framework could be documented. The relations in section 4.2 had been developed in two phases. Firstly, in the coding process, where interview sections were coded in diverse dimensions. Secondly, during the analysis process, when new relations were observed.

The method of data analysis has been based on the report of Owen (2014), who coded according to a conceptual framework on which he elaborated in a second round of coding. According to this method, the interviews were coded deductively based on the six dimensions of the analytical framework. These dimensions were grouped as parent nodes. The coding process consisted of two rounds, corresponding to Owen (2014). In the first round, the conceptual child nodes were elaborated, however these would possibly change afterwards. In the second round of coding, the nodes were revised to make sure the interviews would be coded correctly regarding the framework. Some parts of the interviews have been coded in multiple nodes, because the content could be related to more than one node. The transcripts have been read through a second time to make sure all relevant parts would be coded. Child nodes were changed in this round by constantly comparing the data and the nodes. The final coding scheme with an explanation is presented in appendix 8.3.

Coding is not an objective science, rather it is an interpretive operation between data collection and data analysis (Owen, 2014). By having outlined the steps that have been taken during the coding process, and conveying the codes with an interpretation, reliability is aimed to be met. The interviews were conducted in Dutch, so the quotes that are used are translated to English as accurate as possible.

3.3 ETHICS

Bryman (2012) outlines four main areas in which ethical principles can be default; being harm to participants, lack of informed consent, invasion of privacy, and deception. The ethical considerations were taken into account by informing the participants about the object of study and about their rights before conducting the interviews. They were asked to sign the informed consent, which is attached in appendix 8.2.

4. RESULTS & DISCUSSION

Literature demonstrates that empowerment of individuals is needed for a sustainability transition (Hölscher et al, 2019). To elaborate on that need, the six dimensions of psychological empowerment function as a measure to analyse the access to resources, and the capacity and willingness to mobilise them to engage in sustainable practices (Avelino et al., 2019). In this section, the main results for each dimension are briefly depicted and connected to the theory; followed by an examination of the observed relations between the dimensions.

4.1 THE SIX DIMENSIONS

4.1.1. AUTONOMY

The results about the dimension 'autonomy' are summarised in table 4.

Table 4: Definition, codes & main findings for autonomy.

Autonomy		
Definition	The interviewee's ability to choose one's own deed and to act in line with personal values and identity	
Codes	**Child nodes I**	**Child nodes II**
	- Regarding CSA - Regarding sustainable practices	- Acting according to own values - Autonomous action
Main findings	• Interviewees joined TVG themselves, implying the alignment of TVG to their values • Within TVG, interviewees don't feel the urge to have an influence, so no relation to sustainable practices can be made	

The autonomy dimension indicates the extent to which a CSA actor can choose their own deed and act in line with personal values (Avelino et al., 2019). Shareholders of TVG get the opportunity to have an influence during a yearly meeting and a questionnaire. The annual questionnaire is aimed to evaluate shareholders opinions about the CSA. Examples of themes are pricing, crop variation, and quality and

quantity of the produce (Tuinderij De Volle Grond, 2020). The meeting elaborates on the questionnaire in that shareholders are able to come up with personal considerations. These meetings are attended by approximately seven people, as mentioned by one shareholder; however, around 250 people have a share in the CSA (Tuinderij De Volle Grond, 2020). A diversity of reasons is pointed out by the shareholders for not visiting the meetings; for instance, the CSA is considered to align to the values of most interviewees, what decreases the necessity to change. Also expertise constraints are mentioned, just as the limited interest to have an influence in the CSA. A couple of shareholders explained that they are pleased with TVG as it is and therefore do not feel the need to change its practices. Furthermore, when shareholders are not completely satisfied by the vegetables, they indicate not to intervene, since this is considered to be part of the deal. Although autonomy among shareholders is not clearly visible within CSA, choosing to participate in the CSA is an autonomous action, as it implies that the interviewees act in accordance to their own values regarding ecological sustainability. Therefore, being involved in CSA contributes to their sustainable practices, because of the environmental benefits of CSA (Paul, 2018).

Differences can be observed when looking at volunteers and trainees. Since volunteers do not have a share in the yield, they are not concerned about the produce, rather about their role in the farming practices. However, corresponding to shareholders, the restrained willingness to have an influence in practices of TVG is present among volunteers. They indicate to be content by not performing autonomously. Just as the shareholders, volunteers chose to be involved in TVG themselves, indicating an autonomous action.

Trainees experience a wider sense of autonomous actions within TVG, since they actively think about their own input in the farming practices. For instance, one trainee set up his own chicory cultivation on one piece of the CSA land. When feeling satisfied about this autonomous action, one feels motivated to take up on action according to one's values (Vallerand, 2000); this motivation could be translated in sustainable practices since satisfaction is always linked to altruistic acts (Verdugo, 2012).

4.1.2. COMPETENCE

The results about the dimension 'competence' are summarised in table 5.

Table 5: Definition, codes & main findings for competence.

Competence		
Definition	The extent to which the interviewee develops mastery and perceives to be effective in carrying out practices	
Codes	**Child nodes I**	**Child nodes II**

	- Regarding CSA - Regarding sustainable practices	- Knowledge and skills - Confidence of that knowledge and skills
Main findings	• Increased knowledge about the produce • Shareholders: Putting effort themselves in expanding knowledge • Volunteers/trainees: Knowledge is more comprehensive, and leads to more sustainable practices	

The extent to which the interviewee develops mastery and perceives to be effective in carrying out actions is indicated by the development of knowledge and skills (Avelino et al., 2019), and the confidence thereof (Kramer & Schmalenberg, 1993). Almost all interviewees mentioned increased knowledge resulting from CSA about the produce, such as kinds of vegetables and seasonality. One shareholder that indicated not to learn anything by TVG argued he already knows the information that goes along with the CSA by his own vegetable garden. Some shareholders pointed out that they put effort in learning about the (produce of) CSA themselves, which causes increased knowledge, rather than CSA being the source of knowledge provision. Without their active investment in learning about the produce or other elements of CSA, these shareholders seem not to learn a lot from CSA. Literature confirms that citizen-consumers that want to make a change integrate knowledge themselves to realize such change (Musch & von Streit, 2020). Therefore, shareholders might not experience a great role of CSA in providing knowledge, but still may engage in sustainable practices. This point has not emerged by any volunteers nor trainees. Since the knowledge of shareholders generated by TVG seems to stick to produce-related topics, shareholders do not seem to relate this knowledge to sustainable practices in daily life, outside the context of TVG. Sustainable practices are conceived as decisions on sustainability that are embedded in everyday life (Spaargaren, 2003; Seyfang et al, 2010), differing per person. Therefore, produce-related knowledge is not perceived to support sustainable practices besides the produce.

Despite the lacking diffusion of competence from CSA to sustainable practices in daily life of shareholders, competence among volunteers and trainees does seem to diffuse to other areas of daily life; such as personal values that could add to sustainable practices. One volunteer told that due to the evolved knowledge regarding organic farming practices, "… [y]ou become more aware of the need to treat the Earth with respect". Luttrell et al. (2009) mentioned that knowledge helps to provide possibilities for taking actions; as the volunteer pointed out: "I try to meet that knowledge by changing my banking …". Spaargaren (2003) argues that knowledge provides citizen-agents with the possibility to reduce environmental impacts of consumption in daily practices. Since volunteers and trainees experience a wider sense of knowledge by TVG than shareholders, the dimension of competence has

a greater contribution in the empowerment to take up more sustainable practices among volunteers and trainees than among shareholders.

4.1.3. RELATEDNESS

The results about the dimension 'relatedness' are summarised in table 6.

Table 6: Definition, codes & main findings for relatedness.

Relatedness		
Definition	The extent to which the interviewee feels connected and part of a social group	
Codes	**Child nodes I**	**Child nodes II**
	- To CSA - To people associated by CSA - Exterior to CSA	- Collective action - Sense of connectedness - Sharing experiences
Main findings	• Shareholders: Connected to CSA and location • Trainees/volunteers: Connected to CSA, location, and each other • Trainees/volunteers more empowered than shareholders to engage in sustainable practices	

Relatedness is the extent to which the interviewees feel connected and part of a social group. The concept is categorised into: 1) the location of TVG or its surroundings, 2) the people associated with TVG, and 3) the principles of CSA; being the share of risks and benefits, and transparency (Tuinderij De Volle Grond, 2020). Generally, all interviewees indicated to experience some sort of relatedness according to one or more categorisations.

Specifying the categorisations among shareholders, direct contact with other actors within CSA is indicated to be scarce, except for the contact with the farmer. Striking is that shareholders commonly feel related, even if they do not attend organised meetings, or hardly visit the CSA: "It feels like I am part of the community, even though that isn't because of the other shareholders". Rather, this shareholder argued that picking up the vegetable box at the farm induces a feeling of relatedness regarding the location and the concept of CSA. In the weekly e-mails the farmer points out the fundamentals of the shareholders regularly, which is appreciated a lot: "I feel really privileged that I am allowed to open the fence and to walk around". The e-mails also contribute to a feeling of relatedness: "Every time I get this e-mail [the farmer] feels like a friend, because of the personal tone. It is like I am part of a group. I feel very much involved". By participating collectively and sharing experiences, people can empower each other (Hölscher et al., 2019). Since shareholders feel related to TVG, but hardly participate collectively nor sharing experiences, empowerment as an outcome (Hölscher et al., 2019) seems not to apply according to the dimension of relatedness. Moreover, the experience of support and recognition in relation to other shareholders is not explicitly present.

Rather, shareholders experience of relatedness refers to other elements of CSA, such as its location and the e-mails. Nevertheless, collective sharing among other shareholders is not actively present, holding back empowerment to engage in more sustainable practices through each other.

An interviewee that has a share in the CSA, but also volunteers, said: "About being part of the association, I can't really tell, it's just that I am a shareholder", whereas she points out to feel related with other volunteers. This feeling of relatedness seems to be present among the volunteers and trainees: "You feel like you are on a similar level of thinking with most of the other volunteers. … you get to know each other quite well. When you work together, a good conversation easily emerges; or you stay quiet, it is all fine". People can be motivated by each other to engage more in sustainable practices (Vallerand, 2000), and could feel supported in taking up sustainable actions. "Some people outside De Volle Grond aren't positive about buying clothing second-hand, whereas here they buy these as well. That's really supportive. I think I won't be buying second-hand anymore if I was surrounded by people that despise it only". Therefore, having contact with other actors that have similar values, mentioned to open up when working together, can be stimulating to take up actions the actor considers to be more sustainable ones. Consequently, volunteers and trainees turn out to feel more empowered to engage in sustainable practices by the dimension of relatedness than shareholders do.

4.1.4. MEANING

The results about the dimension 'meaning' are summarised in table 7.

Table 7: Definition, codes & main findings for meaning.

Meaning		
Definition	The interviewee's experience of making sense	
Codes	**Child nodes I**	**Child nodes II**
	- Regarding CSA - Regarding sustainable practices	- Value - Care & commitment - Satisfaction
Main findings	• Volunteers/trainees: more satisfied by involvement than shareholders • In general: committed to TVG and to make sustainable choices in everyday life	

The level of satisfaction, finding value in the activities and purpose, and the experienced care and commitment regarding CSA are the indicators of meaning (Thomas & Velthouse, 1990), the fourth dimension of psychological empowerment. These indicators have been experienced differently among the interviewees. A proud feeling is mentioned by a lot of volunteers and trainees, and in a lesser sense by shareholders. For volunteers, this proud feeling seems to go along with satisfaction: "Being proud

of the product …; [the plant] started to grow all the way to where it is now because you planted it and took care of it ….". Shareholders indicated to be proud in that they contribute to the existence of the CSA by their committed payments, and that they receive fresh, organic produce, which is considered a sustainable practice. In addition, volunteers and trainees commit themselves to TVG by the weekly, voluntary labour. This commitment can be linked to a sense of meaning, which is required for the belief in the ability to reach a goal (Avelino et al., 2019). Almost all interviewees considered TVG as meaningful to them, thus implying psychological empowerment regarding this dimension.

Despite this broadly indicated sense of meaning regarding TVG, not every interviewee was interested to take other sustainability considerations into account in daily life, yet they are involved in an activity that science tends to refer as a sustainable agricultural practice (Stevens & Morris, 2001; Tregear, 2011). Nevertheless, most interviewees aimed to meet sustainability issues by trying to implement practices they considered sustainable through interweaving them in everyday life; for instance by separating waste.

4.1.5. IMPACT

The results about the dimension 'impact' are summarised in table 8.

Table 8: Definition, codes & main findings for impact.

Impact		
Definition	The interviewee's perceived possibility to change local circumstances and expand ideas to a wider area	
Codes	**Child nodes I**	**Child nodes II**
	- Regarding CSA - Regarding sustainable practices	- Possibility to change - Expand ideas
Main findings	• No urge to influence the CSA • Large-scale impact of CSA is doubted, smaller scale more convincing • Expanding ideas considered possible, making a change considered limited	

The dimension of impact relates to the possibility to change local circumstances and expand ideas to a wider area. The local circumstances in this context refer to the possibility to change TVG, and one's own surroundings. The yearly questionnaire, referred to in the autonomy dimension, is filled in by most of the shareholders; however, they are doubtful to what extent their opinion has an impact.

The interviewees have a diverse opinion regarding the impact of CSA on a larger scale. There is an agreement that CSA can't solve world problems, but most of the participants agree on a contribution on a somewhat larger scale. However, not every interviewee is convinced by CSA's

contribution: "I think good things happen on a smaller scale, but in the wider context… the bigger companies need to make the decisions".

Besides the contribution of CSA on the larger scale, the possibility to expand one's own ideas to a wider area by everyday sustainable practices is explored. No different patterns can be discovered between the diverse groups of interviewees; however, CSA seems to align to sustainable choices shareholders make: "I believe that your choices do matter for the world, so being a shareholder will matter as well, I think". In general, interviewees believe to have a contribution to a certain extent, however limited and not without doubt: "I separate waste, and then I hope that it will be recycled, but you'll never know for sure".

4.1.6. RESILIENCE

The results about the dimension 'resilience' are summarised in table 9.

Table 9: Definition, codes & main findings for resilience.

Resilience		
Definition	The interviewee's experienced capacity to learn, adapt, and overcome obstacles	
Codes	**Child nodes I**	**Child nodes II**
	- Regarding CSA - Regarding sustainable practices	- Experienced support - Sharing and learning from failures
Main findings	• Direct learning from CSA's pitfalls: limited	

The capacity to overcome obstacles and transform them into opportunities is indicated by the level of support the interviewees experience by (actors within) CSA, and by sharing and learning from each other's failures (Avelino et al., 2019). The latter indicator can be led back to the weekly newsletter. Therein, the farmer gives an overview of practices that went well and difficulties that occurred. By sharing the failures, people learn how to adapt and recover from them, leading to a sense of resilience (Avelino et al., 2019). One shareholder said that "they act ingenious when there are difficulties. One can learn a lot of them". However, since shareholders do not engage in the same farming practices and therefore do not face the same pitfalls as the farmer, the direct learning regarding their own practices seems to be limited. However, CSA can be a supportive factor in overcoming obstacles and transforming them in opportunities regarding more sustainable choices in everyday life, as did another shareholder tell that "it really motivates to engage in more sustainable practices when you discover that [acting sustainable according to ones values] is not only giving up on things I like, but that it can be exciting as well"; indicating the locally grown, organic vegetable box as an exciting choice in making sustainable choices. This motivation to act environmentally-conscious is in line with Verdugo (2012),

who pointed out the causal effect for this motivation as the capacity to solve problems and respond effectively to environmental-conservation challenges.

Additional to shareholders, volunteers and trainees have a more frequent and deeper communication, as elaborated on by the dimension of relatedness. Therefore, garden-related concerns seem to expand to other areas as well among them:

> [The farmer] knows by her expertise that every year there will be a crop failure that you cannot influence. … That sucks, but it is a good learning process … . Things come as they are, and that is how you need to deal with them; you shouldn't make problems bigger. … Thinking in possibilities rather than in problems … I learn a lot from that.

The influence of these learning points are not directly related to sustainable practices, but possibly go further to lessons for life. Also, this trainee is present more than three times a week and therefore has a lot of contact with others. It is questionable if these learning moments would be likely to occur when contact with others is less frequent, as is the case for the majority of the participants.

SUMMARY OF THE DIMENSIONS

Altogether, the influence of the dimensions to take up sustainable practices in daily life have been observed to different extent. The dimension of autonomy was not widely present. Although, the decision to be involved in TVG was. However, this does not imply a motivation to take up sustainable practices. Competence has been recognised to a larger extent than autonomy, although more extensive among volunteers and trainees, since their knowledge by TVG is more elaborated, leading to take up sustainable practices. This adds on the observation that a sense of connectedness to other involved actors, especially identified among volunteers, empowers to engage in sustainable practices. Furthermore, the dimension of meaning regarding CSA was experienced to be present among all interviewees; most interviewees felt committed to take up sustainable practices in daily life, however the causal relation of this dimension is rather tenuous. Having an impact by daily practices is considered possible, however limited to a smaller scale. Lastly, direct learning from TVG's pitfalls is rather limited, however, when the interviewees were more engaged, they felt more powerful overcoming obstacles regarding sustainable decisions. Moreover, not all the dimensions were evenly met. Avelino et al. (2019) perceive the six dimensions as conditional factors for psychological empowerment. Nevertheless, several interviewees took up more sustainable practices.

The six dimensions of empowerment appeared to interrelate among each other regularly. Understanding these relations can open up balancing effects when certain dimensions outweigh dimensions that are less present, and can therefore nuance the evaluation of the dimensions in section 4.1. Referring to the self-determination theory of Ryan & Deci (2000) (see table 1), Vallerand (2000) already asked: "Should it be expected that all [dimensions] are equally important … ?". Some dimensions could be more important for psychological empowerment than others (Vallerand, 2000). Therefore, potential compensational factors that make up the overall experience of empowerment to engage more in sustainable practices are considered. The observed relations are outlined in Figure 3. The black arrows indicate a stronger relation, and the grey arrows indicate a weaker relation.
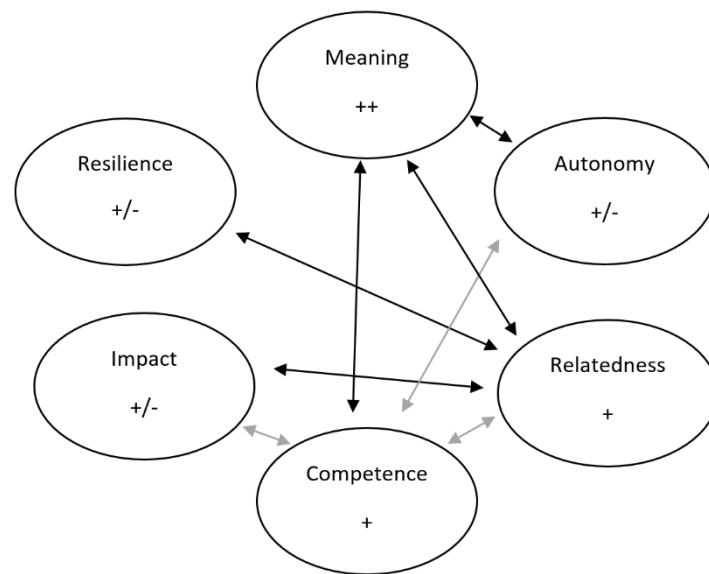

Figure 3: Relations between the six dimensions of empowerment. The black arrows indicate stronger relations, the grey arrows indicate weaker relations. The extent to which each dimension is experienced to be present, is indicated by: (++), very present; (+), present; (+/-), moderately present.

As indicated by a grey arrow, the relation between autonomy and competence is observed to be rather weak; limited by expertise constraints, some volunteers argued to not take up on autonomous action. Continuing on autonomy, the interviewees mentioned to choose to be involved in TVG themselves because the CSA aligns to their values. This autonomous choice is mentioned by the interviewees to entail a sense of care regarding TVG; relating autonomy to meaning. A rather strong relation is observed between meaning and competence. Acquiring knowledge, an indicator for competence, is observed to lead to a greater sense of awareness and value, implying meaning, which could influence sustainable practices. This relation between competence and meaning can be illustrated by one shareholder who said:

> I had this kind of missionary drive because I thought people should know more about this [that high-tech solutions in the agricultural sector are not the only way to make agricultural practices more sustainable] … I know from here that there are different solutions.

Having knowledge about farming methods and the influence thereof, thus increased the sense of meaning regarding the CSA. In addition, one seems to feel more confident of the possibility to change local circumstances and expand ideas to a wider area, when feeling knowledgeable about the agricultural practices and methodologies in CSA, pointing out the relation between impact and competence. Furthermore, competence is observed to link to relatedness; people experienced to gain more knowledge when they shared experiences or realised collective action. The last relation implies a feeling of resilience, encouraged by sharing and learning from each other's failures, caused by a sense of relatedness.

It is striking to see that relations occurred between dimensions that were experienced in different extent among the interviewees, such as competence (+/-) and meaning (++). This could imply an influencing potential among the dimensions. Potential causal effects could open up possibilities to ensure psychological empowerment as Avelino et al. (2019) perceived it, although some dimensions are lacking. Initiatives aiming for psychological empowerment would likely be more realistic and achievable to implement.

4.3 LIMITATIONS & IMPLICATIONS

Having outlined the relations in section 4.2, this section addresses the limitations and potentials for future research. The implications of the relations for the overall experience of empowerment to engage more in sustainable practices in daily life is still doubtful, because it is not clear how the relations influence each other. It would be reasonable that dimensions with the same level of empowerment are related to each other; however, relations occurring between the dimensions represent a diverse extent of empowerment. A missing component in the framework on psychological empowerment to examine the influence of CSA on sustainable practices, is an analysis over time. The influence and potential balancing factor of the relations can be better determined by comparing current relations and the extent of empowerment regarding the dimensions with future situations.

Another recommendation for future research is the elaboration of the six dimension to more case studies. The validity of this research lays in the aim of a deeper understanding of how and where processes of psychological empowerment can evolve within CSAs. The research gives an indication of elements present in other grassroots similar to this case study that could empower actors within these initiatives to engage with sustainable practices. Therefore, policymakers can facilitate resources for

such grassroots. However, the outcomes are not directly applicable to other CSAs. The interviewees may not be representative for all CSA participants, because the shareholders replied on a request to participate in this research themselves. Shareholders that were not interested in the subject could have been less likely to reply. In order to extend the applicability, future research could compare psychological empowerment to engage more in sustainable practices to more citizen-involved agricultural initiatives. These differences in impact and initiatives could open up new relations and experiences of psychological empowerment.

The last recommendation for future research is the extension to a quantitative analysis. The interviews in current research can be helpful in developing questionnaires by open up entries for further research. For instance, the questionnaires could discover generalisable relations between the level of involvement in agricultural practices and sustainable choices in everyday life.

5. CONCLUSION

The risk of feeling disempowered to employ sustainable practices among citizen-consumers may hamper sustainability transitions. This research opened up tools for policymakers on how to support and guide sustainability transitions by understanding the influence of grassroots innovations, such as community supported agriculture (CSA), on the empowerment of citizen-consumers. A case study provided further insight in the research question, *whether and how do CSAs in the Netherlands empower citizen-consumers to engage with more sustainable practices in daily life?* The possibility to be involved within sustainable agricultural practices via CSA turned out to contribute to the experience of psychological empowerment to take up sustainable practices in everyday life, to a certain extent. The six dimensions of psychological empowerment were observed in different degrees. While the recognition of meaning, relatedness, and competence in CSA were noticed to influence sustainable practices in some way, the dimensions of impact, autonomy, and resilience remained superficial. Either these dimensions were not experienced at all, or they did not influence sustainability practices. According to the findings of this research, facilitating resources for innovations where the dimensions of meaning, relatedness, and competence are present, encourages citizen-consumers to engage with sustainable practices in daily life. This research adds to the knowledge gap posed by Avelino et al. (2019) in exploring observed relations between the dimensions. It was striking to see several causal relations between the dimensions, also when these were experienced in different degrees. A longitudinal study could open up the compensational potential of these relations for the overall sense of psychological empowerment.

6. ACKNOWLEDGEMENTS

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8. APPENDICES

8.1 INTERVIEW QUESTIONS

Table 10: The interview questions categorised into the six dimensions of psychological empowerment, according to Avelino et al. (2019).

	Autonomy	Competence	Relatedness	Meaning	Impact	Resilience
Related to CSA	Are you able to choose where you want to play a role in the farming process? (e.g. voluntary work, be part of decision-making processes)	Do you develop certain skills on the farm? What kind of skills? (e.g. weeding, know-how)	Do you feel connected and part of the farm and/or community?	To what extent do you experience meaning in having the ability to influence the farming process?	To what extent do you experience impact in having the ability to influence the farming process?	Do you experience setbacks in CSA? (e.g. disappointing yield, disagreements among the community about decisions)
	To what extent are you able to apply your own personal values and identity in the contribution on the CSA?	To what extent do you develop certain expertise about farming practices?	To what extent do you receive support and recognition from the community?			To what extent do you have the capacity to learn, adapt and recover from setbacks in CSA?
		Do you experience to be effective in CSA in carrying out actions?				
Related to sustainable practices in daily life	How does the possibility of applying your own personal contributions in the CSA effect your sustainable practices in daily life?	How do the skills/expertise you developed on the CSA helps you with sustainable practices in daily life?	How does the connection / community of the farm helps you with sustainable practices in daily life?	How does the perception of meaning by CSA affects your sustainable practices in daily life?	How does the perception of impact by CSA affects your sustainable practices in daily life?	How does the capacity to learn, adapt and recover from setbacks in CSA effects your sustainability practices?

Informed Consent

In this thesis I investigate whether and how community supported agriculture in the Netherlands empowers shareholders, volunteers, and trainees, to engage with more sustainable practices in daily life.

Bachelor thesis
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Participating in this interview is on voluntary basis and you can chose to stop the interview at any moment, without giving a reason.

The interview will be recorded with your permission, so it can be transcribed afterwards. The interview and the transcription will be stored on a laptop locked by a password and will be accessible to me only. The interview and transcription will be deleted after the assessment of the thesis.

Parts of the interview can possibly be quoted.

No publication of this thesis will hold your name or any other information that could lead to you as a person.

If you have questions or other considerations regarding this thesis, you can contact me any time via the contact details provided at the top of this form.

By signing this form, you agree to be informed sufficiently to decide to participate in this research.

Yours sincerely,

Sofie Postma

Name interviewee:

Signature:

8.3 CODING SCHEME

Table 11: Coding scheme for NVivo. The parent nodes are identical to the six dimensions. The child node shows where the parent nodes occur. The indicators demonstrate how the coding conducted.

Parent node	Child node	Indicators
Autonomy	Regarding CSA	Acting according to personal values, and autonomous action regarding CSA
	Regarding sustainable practices	Acting according to personal values, and autonomous action regarding sustainable practices
Competence	Regarding CSA	Knowledge and skills regarding CSA, and confidence of that knowledge and skills
	Regarding sustainable practices	Knowledge and skills regarding sustainable practices, and confidence of that knowledge and skills
Relatedness	To CSA	Description of experiencing a sense of connectedness with the CSA for its practices and/or organisation
	To people associated by CSA	Description of experiencing a sense of being part of a group, or being connected with other actors within the CSA, by collective action, sense of connectedness, or sharing experiences
	Exterior to CSA	Experience a sense of connectedness with elements beyond CSA
Meaning	Regarding CSA	Importance of actions or choices by experiencing satisfaction, care or commitment, or value regarding CSA
	Regarding sustainable practices	Importance of actions or choices by experiencing satisfaction, care or commitment, or value regarding sustainable practices
Impact	Regarding CSA	Experience some sort of success or contribution due to a possibility to change and expand ideas regarding CSA
	Regarding sustainable practices	Experience some sort of success or contribution due to a possibility to change and expand ideas regarding sustainable practices
Resilience	Regarding CSA	Feeling supported to overcome an obstacle or to recover after failure, and sharing and learning from each other's failures regarding CSA
	Regarding sustainable practices	Feeling supported to overcome an obstacle or to recover after failure, and sharing and learning from each other's failures regarding sustainable practices