Planting Seeds for the Future: Sustainability, Theory U, and Youth

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2018
Abstract:
Youth will be dealing with the global sustainability challenge that our world is currently facing. They are considered to play a crucial role as future leaders in the transition towards a more sustainable society. These leaders need an inherent understanding of the sustainability challenge that they are confronted with. This research explores how sustainability practitioners can use Theory U in order to help younger generations approach sustainability. Both the Framework for Strategic Sustainable Development (FSSD) and Theory U informed this research as they use a systems thinking approach to deal with complexity. A qualitative research approach was chosen, and sixteen semi-structured interviews were conducted. The results revealed seven overarching themes around youth, youth and sustainability, and using Theory U with youth. The findings suggest that Theory U can support sustainability practitioners in working with youth as it offers a strong systems thinking approach, personal development, and connectedness for youth. Complementary with the FSSD’s rigorous approach to sustainability, Theory U offers great potential to youth and sustainability that is yet untapped. In equipping youth at an early age with leadership skills, capacities and a wider awareness, Theory U can plant the seeds for future sustainability leaders to grow.

Keywords: Theory U, youth, sustainability, systems thinking, personal development, youth leadership
Statement of Contribution

This thesis represents a topic we are all passionate about. We are a team of three members and come from different cultural, educational, and national backgrounds each holding different worldviews. However, we have a shared perception that youth hold an opportunity for potential as they can see, understand and feel things differently. Each one of us has experience working with youth and we all agree that we need young leaders who can be positive change agents to create a brighter and better future. While studying sustainable development and leadership, this perception grew stronger and this thesis is the result of our shared belief.

Each member contributed equally to the process and made the end result possible. We all possess our individual strengths and by combining these all together we became stronger both as a team and also as individuals. All phases of this research were approached as a team with each team member contributing in an equal way. This includes the research design, the methods, writing and presenting the report as well as project management, and communications with the interviews and advisors.

Sara Hoy, brought her organizing and administrative capacity into our process along with her expertise in information technology. Her understanding of language, formatting and editing skills helped the group to shape our passion in a sophisticated way. She held an unshaken optimism and trust in the group which was crucial for us in being stable and not panicking when we faced deadlines. Her previous experience of working with youth in Moldova gave us a new perspective in our way of thinking. Her calm voice, innovative check-ins and energizers brought a positive and joyful energy to the atmosphere and to the team.

During the thesis process, the team had the great opportunity to observe Christina Swarna Sarker grow from a seed into a strong and mighty tree. Christina was the person that helped slow the team down when our minds were jumbled. She radiated a calmness that even in the strongest ‘groan zones’ kept us centered and our tempers calm. She was our expert in asking the crucial and critical questions. Christina brought a valuable perspective as well as helped us in clarifying and simplifying our processes and information. Our team greatly valued her “B.S indicator” especially when things may have been too abstract, given our topic of research. We are honored that Christina has been willing to trust our team, and dive in and try new things, which has been inspiring and motivating for us all.

Eike Niclas Schmidt was the one who brought his passion and curiosity about Theory U into our research topic. His valuable insights helped us to keep going and find our way in a continuous forward direction. He used his amazing and creative graphic facilitation skills in order to help our team in understanding concepts (like our research process) much easier. Eike’s continuous asking for an overview helped us to clarify some challenging points in our process to help us move past those ‘roadblocks’. He helped keep us motivated and amplified our productivity with healthy boundaries of time we spent working together on our topic and also ensured we were taking care of ourselves in the process. He was a valuable team member by empowering us to our fullest potential, created an inviting atmosphere, and kept us light hearted with laughter.

While writing this thesis we realized that we are all very diverse in our way of thinking and our way of working. However, as the time passed that diversity became a strength and helped us to build the arguments in our thesis as we looked through it from different lenses from each of our
team members. It has been a wonderful and enjoyable journey together and we are truly grateful for the precious time that we spent together, for the stormy phases that we have gone through, and for the moments of trust, appreciation, gratefulness, and friendship that we will carry for the rest of our lives.
Acknowledgements

First and foremost, we want to thank our sixteen interview partners. You were the crucial part in our research, without you it would not have been possible to write this thesis. Thank you for your valuable time and for all the information, stories, and experiences that you shared with us. We are especially grateful for the stories, as we will carry those powerful stories of impact and transformation with us going forward. You are doing great work in the world and we look forward to meeting you all (again) at one point in our lives.

Secondly, and most importantly we want to thank our advisors, Yannick Wassmer von Langenstein as a first advisor and Dr. Edith Callaghan as a second advisor. Thank you, Yannick, for being such a great part of our team. Thank you for the constructive feedback, the wise questions you asked, and for constantly empowering us. It was a pleasure having you as a fourth team member and checking in with you every other week in such a welcoming atmosphere. Thank you, Edith for showing up surprisingly on the stairs of the library when we most needed you, for your brilliance and fierceness in science and for the great questions that set us back on track. Thank you for always pushing us more and gently reminding us to never get bored during the thesis process.

We also want to thank Karl Henrik Robért for your constructive and direct feedback which helped us in refining our process. Many thanks to Göran Broman for being the humble father of MSLS, telling us we were a dream coming true, thank you for holding us from a distance. A huge thanks to the whole staff team of MSLS. You all are amazing. Thank you all for making this journey possible and for enabling us to experience this incredible community.

Also a big thanks goes to the developers of Theory U, the U.Lab team and in particular to Otto Scharmer. The seed to this thesis topic emerged during a guided meditation, led by Otto Scharmer during the U.Lab in September 2017 and was refined during a case clinic session a few weeks later. Without this, the connection between sustainability, youth, and Theory U would have not been visible for us.

We also want to thank our dear friends and families for your support, here in sunny Karlskrona and in all the places we call home around the world. Especially a big appreciation to Debbie Hoy for going through our thesis with a fresh lens and perspective since it was so easy for us to get lost in the abstractness of our topic. Last but not least, many thanks to our classmates, fellow learners, and friends. We are deeply grateful for your critical feedback, encouragement, and insights. This is a time we will not forget!
Executive Summary

Purpose and relevance of this research

This thesis explores how Theory U can be a useful tool for sustainability practitioners to prepare young future leaders in dealing with the complex sustainability challenge. This research was started with the belief that there is a need for strong leaders to take innovative initiatives when approaching sustainability. Broman and Robèrt (2018) state: “The question of reaching sustainability is not about if we will have enough energy, enough food, or other tangible resources – those we have. The question is: will there be enough leaders in time?” The current generation of youth will have to take that leadership role as they inherit a world full of complex sustainability challenges. These young leaders need encouragement and guidance in order to help them in discovering their direction during this crucial stage of their life. Sustainability practitioners who work with youth can guide and assist them in that process. The purpose of this research is to provide insight as to how Theory U can support sustainability practitioners in their work which could help the younger generations in shaping a brighter future.

Introduction

Humanity is currently facing a world full of global challenges. The population continues to grow in number and simultaneously this growth is causing an increased use of resources such as energy, food, water and land (Steffen et al. 2015; Steffen, Crutzen, and McNeill 2007). To cope with this continuous growth, exploitation of the surroundings is impacting both the environment as well as society (Raworth 2012; Rockström et al. 2009). The sustainability challenge humanity is currently facing therefore plays out both socially and environmentally. As the world faces the reality of the sustainability challenge it can be considered as complex. The characteristics of complexity includes no direct link between the cause and the effect and no predictability to what results an action might cause (Snowden and Boone 2007). Scharmer (2009) names the current challenges hyper-complex, as different dimensions of complexity (dynamic, social and emergent complexity) come together. To understand the underlying complexity of the sustainability challenge, system thinking is an appropriate approach that helps to navigate the relationships and connections of the system’s elements and the resulting behaviour of the system (Meadows and Wright 2009). A system’s perspective allows us to see the complexity of the current unsustainable situation and therefore understand the underlying causes of it (Broman and Robèrt 2017; Scharmer and Kaufer 2013).

Two frameworks that are used by sustainability practitioners to address these complex challenges include the Framework for Strategic Sustainable Development (FSSD) and Theory U. The FSSD was developed by the Natural Step network and Blekinge Institute of Technology in Sweden (BTH) and Theory U was developed by Otto Scharmer and colleagues the Massachusetts Institute of Technology (MIT) and many practitioners around the world (Scharmer 2018b; Broman and Robèrt 2017; Scharmer 2009). Both frameworks are based upon a systems thinking approach and therefore a systemic understanding of the current challenges around sustainability. While the FSSD is a framework designed to help understand and make change within organizational systems, Theory U was designed to focus on the individual within the system. Theory U takes a strong approach to systems thinking in which not only the external system is approached and understood in a systemic way but also the individual’s involvement within the system through their beliefs and mental models. Scharmer describes this as the “essence of systems thinking” (Scharmer 2018b, 63). Furthermore, a broad range of open source
tools are provided, which can be used in leadership in complexity (Presencing Institute n.d.). Together with the FSSD, Theory U builds the conceptual foundation of this research.

As Theory U is mostly used in a business context, it also stresses necessary transformations within education and civil society (Scharmer 2018a; Scharmer and Kaufer 2013). However, there is only little evidence that Theory U is being used with youth (Pillay 2014). Youth are in a formative stage of their lives, forming their values and identity (Arnold 2017). The questions “Who is my Self? and What is my Work?” (Ray in Scharmer 2009, 162) are not only a key element of Theory U and the ‘U process’, but also the questions youth are asking themselves at that stage of their lives (Arnold 2017; Kress 2006). It is important to also bring in sustainability at this stage of their lives as the complexity of the sustainability challenge impacts youth even now.

The United Nations name youth as one of the crucial stakeholders of sustainability challenges like climate change (UN 2010). Currently, the largest generation of youth inhabits the earth (UNDP 2014). This young generation has to live with the consequences of the current unsustainable society throughout their lives. It is crucial for young people to play a role when it comes to shifting a global society towards a sustainable version and participating in a cultural shift towards a sustainable culture (Dittmer and Riemer 2016; UNDP 2014). Therefore, youth participation and youth leadership are widely acknowledged to play a vital role in the transitions towards a more sustainable future society (Hickman, Riemer, and the YLEC Collaborative 2016; United Nations 2016). Kress (2006) states that leadership is a possible outcome of positive youth development. Therefore, positive youth development is needed as they will face the complex sustainability challenges.

This research addresses sustainability practitioners that work with youth. These practitioners can facilitate young people to be involved in sustainability and equip them with the necessary leadership skills and capacities. As Theory U also focuses on leadership development, there is a strong connection and potential of Theory U being used to equip the next generation of sustainability leaders. Therefore, this research asks the question:

**In what ways does Theory U support sustainability practitioners to equip the next generation of sustainability leaders?**

**Methods**

To approach this research question, a qualitative research approach was chosen. The data was collected through semi-structured interviews in order to collect stories and experiences from practitioners. In addition, a literature review was conducted around the topics of youth, sustainability and Theory U to gain a deeper understanding of the overall research field. Sixteen semi-structured interviews with open ended question were conducted. This allowed the interviewees to share their perspective and also stories from their fields of work. In order to get a balance on gender and nationality, sixteen practitioners were interviewed in the end, which were clustered into four categories:

1. those who use Theory U with youth,
2. those who work with Theory U and sustainability,
3. those who works with youth and sustainability and,
4. those who work with Theory U, youth, and sustainability.
The data analysis was based on a thematic analysis. Starting with seventeen initial codes, then by the end of the coding process there were twenty-four codes and seven themes. These seven themes are listed below:

1. Youth and Sustainability – Challenges
2. Youth and Sustainability – Approaches
3. Youth – Characteristics
4. Youth – Challenges
5. Utilizing Theory U with Youth
6. Theory U and Youth – Outcomes
7. Theory U – Challenges

Results

The data analysis resulted in seven themes and twenty-four codes. The first theme showed the findings of some challenges of sustainability and youth. These different challenges were named by the interviewees such as distance, complexity, burn-out, and empowerment. These codes describe that youth feel distant from the sustainability challenges and feel that sustainability itself is complex and can be overwhelming. Another code shared how some young people engaged in sustainability may overwork even until the point of burnout. In addition, another code showed how young people need to be empowered in order to take action. The second theme also formed around youth and sustainability looks at the approaches that the interviewees took in order to address sustainability with youth. Among those were a positive approach, a participatory approach, using different media like games, art and creative methods as well as videos and music. Also, systems thinking was named as one approach practitioners took. The third theme that resulted from the research was the characteristics of youth. These characteristics included a natural capacity to systems thinking, youth being open, willing and flexible as well as youth being in a formative stage of their lives by forming their values and identity. The fourth theme describes different challenges of youth. These challenges shared how interviewees observed an unfocused energy with youth. Also, that youth need a social context and yet, are highly affected by their peers. The last three themes made Theory U the subject of the discussion. The fifth theme is formed around how to utilize Theory U with youth. The interviewees mainly used Theory U as a framework for their design and used several tools of Theory U like ‘sensing journey’, ‘social presencing theatre’, ‘case clinic’ or ‘empathy walk’. Also, the role of the facilitator was emphasized by the interviewees as an important role when working with Theory U and youth. Many interviewees did not teach Theory U to youth, but if they did, they used an experiential learning approach to do so. The sixth theme described the outcomes of Theory U when working in a youth context. These outcomes are a shift in the participant’s awareness which is strongly connected to the personal development of youth. A third code in this theme was that Theory U enhances connectedness on multiple levels among the participants. The last theme described the challenges of Theory U, which were seen both with youth and adult participants. One challenge is the terminology that Theory U uses which can be vague and abstract. Another challenge is that enough time needs to be allocated for both the ‘U process’ as well as explaining Theory U. Also, Theory U was seen as a practice by several interviewees. The last challenge is around the topics of openness and depth. The participants need to be open and willing to go into a ‘deep’ or intense process such as the ‘U process’.
Discussion and Conclusion

This research suggests some important elements in how practitioners can use a framework like Theory U in order to engage youth within sustainability. Some challenges were identified with Theory U as it can be challenging to understand for a lot of people since it is abstract. It was identified that in order for people to experience the potential that Theory U offers, they need to be open and willing to go through the ‘U process’. However, there is an opportunity to use Theory U with youth since they are in a formative time in their lives and tend to be more open-minded at a young age. This could prepare them at an early point in their life with key leadership skills that Theory U provides.

Sustainability is complex and therefore can be overwhelming, especially when presented in a negative way. Therefore, it is important to take a positive approach, focusing on the opportunity when trying to engage people within sustainability (Stoknes 2015). This counts particularly when working with youth (Interviewee 6; Interviewee 7). Theory U takes a positive approach towards sustainability by focusing on finding innovative solutions and engaging the individual with those solutions. In addition, Theory U can be complemented by the FSSD in a positive approach. Within the ABCD process, a strong vision for a desired sustainable future is created, bounded by the eight SP’s. This may add a more concrete future possibility for youth and a more rigorous definition of sustainability to Theory U’s perception.

Young people need to learn how to deal with the overall complexity of sustainability, therefore a systems thinking approach is needed (Interviewsee 6; Sayal et al. 2016). As sustainability can be overwhelming especially for youth, systems thinking helps to understand that from a higher-level perspective. While Theory U itself is based on a systems perspective, the approach it takes is unique as it includes the individual’s own awareness within the systems perspective (Scharmer 2009). Realizing their own involvement in a system creates a shift in people’s awareness about the issue and themselves. This shift can be referred to as a paradigm shift within the individual. Meadows (2010) named these shifting mindsets or paradigms as one of the best leverage points to create change in systems. This paradigm shift enables the individual to see their own role in the challenge and enables them to act accordingly. This action might range from a subtle shift in perspective on the issue to taking individual or collective action to change the issue. As youth may experience this individual shift in awareness or paradigm shift, several interviewees noticed this transformative shift in their participants awareness within a group context. While youth go through such a transformative experience within a group, it creates a strong bond which is especially important for youth. Arnold, Warner and Cohen (2009) and Interviewee 6 highlighted the importance of youth being connected to their peers. The ‘U process’ enables youth to connect deeper and at the same time being able to co-create and act together on issues related to sustainability.

It is necessary that young people gain action competence (Dittmer et al. 2018; Hickman, Riemer, and the YLEC Collaborative 2016). Action competence is described as making “present and future citizens capable of acting on a societal as well as a personal level.” (Jensen and Schnack 2006, 472). This strongly relates to youth empowerment for sustainability, which was also found to be needed through the research. Theory U provides some answers to the challenges and characteristics of youth described in the results section in addition to addressing the challenges that had been identified when it comes to working with sustainability and youth. While youth need to be empowered and encouraged to take action, Theory U offers an empowering process (Interviewee 2). In addition, Theory U uses prototyping, which describes acting quick in order to get instant feedback (Kelley 2010; Scharmer 2009). This feedback can
then be implemented in order to create better solutions. By taking this approach, Theory U holds the possibility to build action competence for youth.

As it was assumed in the beginning, this research suggests that Theory U can be a helpful tool especially for young people as they are in a formative stage of their lives (Arnold 2017). Almost all interviewees related Theory U to personal development. This personal development might help youth channel their high motivation and energy in a constructive way. This could also prevent them from overworking and burning out in the face of complex and urgent challenges (Interviewee 12). The strength of Theory U lies in combining personal development within their approach of transforming business, society and self. Young people who are already engaged in sustainability issues can further develop their personalities and therefore prevent burnout. However, youth who are not yet engaged in sustainability can develop their personalities as well as leadership skills in the context of sustainability through Theory U.

While Theory U offers a higher level of awareness and personal development for individuals, the FSSD offers a robust definition of sustainability and helps navigate with a positive vision toward a desirable and sustainable future. Both frameworks offer potential to complement each other, especially as society looks toward the future by preparing leaders to innovate new solutions. While these frameworks offer great opportunities for youth to address sustainability as future leaders, it was also recognized that it takes an experienced facilitator, especially with Theory U, to be able to provide such an experience. This research mainly focused on the use of Theory U in relation to youth and sustainability, it is suggested that further research needs to be done on how the FSSD could be used with youth.

In conclusion, this research began questioning the ways that Theory U can support sustainability practitioners to equip the next generation of sustainability leaders. As there are challenges with Theory U being used with youth, it still holds great potential for youth and sustainability. However, this calls for an experienced facilitator that is authentic, can relate to young people and enables them to experience Theory U. It can be concluded that the benefits of Theory U are mainly focused on leadership, equipping young leaders with the right mindset and leadership capacities for being the next generation of sustainability leaders.
Glossary

**ABCD Process for strategic planning** - The FSSD provides a process for strategic planning for sustainability. This process includes four steps. The A-step consists of building a shared understanding about the sustainability challenge and related opportunities as well as crafting a vision of success, framed by the eight sustainability principles. The B-step describes a baseline assessment of the current reality of the organization using the eight sustainability principles. In the C-step creative measures are created. This step is about creatively brainstorming lots of ideas of which then will be chosen in the next step. In the D-step these brainstormed ideas are evaluated using the prioritization questions.

**Action competence** - Action competence is described by Jensen and Schnack (2006, 472) as making “present and future citizens capable of acting on a societal as well as a personal level.” Action competence describes a person's capacity to take individual and/or collective action.

**Awareness** - Theory U describes awareness as the source or starting point of our actions and decisions. This is not the awareness of something, but more describes the state of an individual’s mindset. Decision and actions arise out of this mindset which have a specific outcome.

**Backcasting** - Backcasting describes a process that is opposed to forecasting. Instead of planning from the current state and forecasting what might happen in the future, backcasting starts with defining a vision of success based either on scenarios or guiding principles. Planning can then happen from the vision of success. The vision serves as a guidepost that leads the planner in the overall right direction. The ABCD planning process for example is based on backcasting.

**Blind Spot of Leadership** - Theory U describes a phenomenon of the traditional leadership and management practices. Meaning, leaders tend to look at the results (what?) and also at the process (how?) but rarely at the source of an action (who?). This source is known as the inner state, the leader’s own awareness. Therefore, Theory U quotes Bill O’Brian: “The success of an intervention depends on the interior condition of the intervener.” (Scharmer 2018b, 7). This means that both the result and the process of an action depends on the underlying awareness of the leader (see description of Levels of awareness in Theory U below).

**Complexity** - Complexity describes the state of a system. In complex systems the elements of a system interact in a way that is not predictable (emergence) and non-linear. This means that the elements of the system are connected in many ways, changing one connection might have unforeseen consequences at another end of the system.

**Deep / depth** - A term that is used by practitioners working with Theory U is ‘deep’ or ‘depth’. According to the ‘iceberg-model’ of Theory U the underlying structures and mindsets of people lie under the water. The analogy of ‘diving deep’ refers to this model. In order to get a nuanced understanding of the challenges and the root causes, one has to engage into a profound analysis with the systemic structures and beliefs that are underlying an issue. This needs to happen both on an external level looking at the system from the outside as well as on an internal level, looking at the system or issue from within. The capacity to ‘go deep’ or to have ‘deep conversations’ therefore refers to the capacity of being vulnerable and facing one’s own structures and limiting beliefs, mental models, and fears.
**Framework for Strategic Sustainable Development (FSSD)** - The FSSD is a framework designed to help move organizations strategically toward sustainable development. It contains different elements such as the five-level framework which includes the levels of 1) system, 2) success, 3) strategic guidelines, 4) actions, and 5) tools. The FSSD also describes the sustainability challenge using a funnel metaphor. In addition, other elements of the FSSD include the ABCD process (described in the glossary above) and the sustainability principles (described in the glossary below).

**Levels of awareness in Theory U** - Theory U describes the four levels of awareness, as different states of ‘being’ for a leader. The first level, ‘traditional awareness’, is characterized by habitual patterns that were adapted throughout socialization. The second level, ‘egosystem awareness’, is driven by self-interest and factual conversations. Theory U states that most of current leadership arises from this level. On the third level, ‘stakeholder awareness’, the leader takes the interests of all important stakeholders into account and is empathetic. On the last level, ‘ecosystem awareness’, the leader takes the whole system into account, being willing to serve the wellbeing of the whole system. (for more detailed descriptions see Scharmer and Kaufer 2013)

**Presencing** – ‘Presencing’ is a word that was created by Otto Scharmer combining the words *present* and *sensing*. In order to presence, one must be present and sense into the highest future possibilities of oneself and the system one is operating in. By doing so, one can ‘lead from the emerging future’.

**Prioritization Questions** - In order to provide strategic guidelines, the FSSD defined three prioritization questions. These are framed around the topics of (1) the overall right direction towards the stated vision of success of an action, (2) if an action will serve as a flexible platform for future actions and (3) if an action will bring sufficient return on investment. These questions help to strategically guide actions that are taken in order to lead towards a more sustainable direction.

**Prototyping** - Prototyping describes an approach of quick, iterative and innovative problem solving and design. It is based on ‘design thinking’, developed by Tom Kelley and his colleagues at the design and innovation company IDEO. Prototyping contains three steps which then are iterated: In the first step a prototype (1.0) is developed. In the second step this prototype it is presented to key stakeholders in order to get immediate feedback. In the third step this feedback is used to design a new prototype (2.0). This process can be iterated until a final product or project is developed.

**(Complex) Sustainability Challenge** - Humanity is facing pressing challenges both on an environmental as well as on a societal level. These challenges are of complex and systemic nature and indicate that the global society is currently on an unsustainable path. In order to solve these challenges, the symptoms as well as the upstream root causes, have to be addressed. The sustainability challenge includes both solving the root causes as well as fixing the symptoms and developing new opportunities for society to thrive.

**Sustainability Practitioners** - In this research sustainability practitioners are defined as both professionals and volunteers that dedicate their time and work to approach the sustainability challenge.
Sustainability Principles (SP’s) - The FSSD defines sustainability using eight principles. These principles then serve as a vision of success and are a core part of the ABCD process for strategic planning. These principles define both the natural and the social dimension of sustainability and frame the boundary conditions for a sustainable society. The sustainability principles are defined as followed: “In a sustainable society, nature is not subject to systematically increasing... 1. concentrations of substances extracted from the Earth’s crust. 2. concentrations of substances produced by society. 3. degradation by physical means and [in a sustainable society] people are not subject to structural obstacles to... 4. health. 5. influence. 6. competence. 7. impartiality. 8. meaning-making.” (Broman and Robért 2017, 23).

System – A system is “A set of elements or parts that is coherently organized and interconnected in a pattern or structure that produces a characteristic set of behaviors, often classified as its ‘function’ or ‘purpose.’” (Meadows and Wright 2009, 188).

Systems thinking - Systems thinking describes an approach of looking at the interactions of the different elements within a system. Instead of reducing complexity, systems thinking acknowledges complex interrelations and unpredictable outcomes of complex systems.

U Process - The ‘U process’ is the process that is used in Theory U. The name is based on the movement in which Theory U addresses complex issues. Instead of going linear from a problem to a solution, people try to understand the underlying systemic structures and mental models underlying the issue in order to come up with innovative solutions. The ‘U-process’ is described as a journey with five different phases: 1. Co-Initiating, 2. Co-Sensing, 3. Presencing, 4. Co-Creating and 5. Co-Evolving. There are different descriptions of the U process according to where and how it is used (for more detailed descriptions see Scharmer and Kaufer 2013; Scharmer 2009; or Hassan 2006).

“Will” in Theory U - In the ‘U process’ an individual needs to open their mind (cognitive sphere) to see new facts, open their heart (emotional sphere) and their will to see oneself as a part of the system, take responsibility and take action if needed. This last sphere describes the realm of the willpower.

Youth - In this thesis the terms ‘youth’ and ‘young people’ are used as synonyms. According to the United Nations youth are defined as the age group between 15 and 24 years. However, it is important to note that no clear distinction can be simply made by age. Youth rather can be defined as the transition from childhood into adulthood (UNESCO 2017).
List of Abbreviations

**BTH** - Blekinge Institute of Technology (in Swedish: Blekinge Tekniska Högskolan)

**FSSD** - Framework for Strategic Sustainability Development

**MIT** - Massachusetts Institute of Technology

**MSLS** - Master’s of Strategic Leadership towards Sustainability

**SP’s** - Sustainability Principles

**UNESCO** - The United Nations Educational, Scientific and Cultural Organization

**YLEC** - Youth Leading Environmental Change
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This research is dedicated to the many sustainability practitioners who dedicate their lives to the higher purpose of saving the planet for our children, grandchildren, and us.

Thank you!
1 Introduction

Youth have inherited a world full of sustainability issues. This thesis explores how Theory U (see section 1.2 for a more detailed explanation) can be a useful tool for sustainability practitioners to prepare young future leaders to deal with the complex sustainability challenge. This research was started with the belief that there is a need for strong leaders to take initiative when approaching sustainability. As Broman and Robért (2018) state: “The question of reaching sustainability is not about if we will have enough energy, enough food, or other tangible resources – those we have. The question is: will there be enough leaders in time?” As the next generation will take that leadership role, they need encouragement to guide them during this crucial stage of their life. Sustainability practitioners who work with youth can help them in that process. The purpose of this research is to provide insight as to how Theory U can assist sustainability practitioners in their work which could help the younger generations in shaping a brighter future.

1.1 Complexity in Sustainability

Humanity is currently facing a global challenge. Since the industrial revolution in the 18th century, the world’s population grew from about one billion to now about 7.6 billion people (World Population n.d.). While the population increased since the 18th century, so did the use of resources. Scientists refer to this as ‘the great acceleration’ (Steffen et al. 2015; Steffen, Crutzen and McNeill 2007). This rapid growth has caused many global challenges in what is known as the ‘sustainability challenge’ (Broman and Robért 2017) and can be illustrated by showing society moving through a funnel (fig. 1.1.) The declining walls of the funnel represents the decrease in available natural resources while the primary goal is to stop society in its current unsustainable path from hitting the declining wall shown in the image below. In order to stop society from reaching the wall, the goal is to see the wall of the funnel stop declining inward and instead even out into a tunnel. After this stable state is reached, there are realistic opportunities to reverse the funnel and to restore earth and humanities capacities and resources (Broman and Robért 2017).

Figure 1.1. The funnel-metaphor (by Prof. Karl-Henrik Robért)
The sustainability challenge has both an environmental and societal dimension (Raworth 2012; Rockström et al. 2009). In addition, it can be characterized as complex (Broman and Robért 2017). This complex domain is characterized as an unordered state or a state of emergence where the relationship of cause and effect is not linear and sometimes only visible in hindsight (Snowden and Boone 2007). Scharmer (2009) calls problems hyper-complex when different dimensions of complexity come together, including dynamic complexity, social complexity, and emergent complexity. Therefore, it is important for sustainability practitioners to be able to know how to approach this complexity.

One approach that helps to navigate in complexity is systems thinking. A systemic approach looks at the relationships and connections of the system’s elements and the resulting behavior of the system (Meadows and Wright 2009). Looking at the global sustainability challenge from a systems perspective allows us to see the complexity of the current unsustainable situation of the environment and society. This perspective is needed to address the root causes and therefore understand how some of the current problems are symptoms of the underlying systemic mechanisms or disconnects (Scharmer and Kaufer 2013). Meadows (2010) states different places to intervene in a system in order to change it, called leverage points. These places have different levels of leverage; some which are more effective than others. The most effective leverage points are changing the goals of the system, changing the paradigm or mindset from which the system arises, and having the power to transcend paradigms (Abson et al. 2017; Meadows 2010; Meadows and Wright 2009). These high leverage points fall into the realm of sustainability leadership. In order to make use of these leverage points and to address the root causes of the current challenges, our world needs leaders who can work with this complexity in sustainability.

1.2 Frameworks to Address Complexity

Many sustainability leaders address these complex challenges by using a variety of available frameworks and tools in the field. While there are many different types of frameworks and tools used in sustainability work, this research will focus on two specific frameworks both used to address complexity. These two frameworks include Theory U and the Framework for Strategic Sustainable Development (FSSD). While the FSSD is a framework designed to help us understand and make change within organizational systems, Theory U was designed to focus on the individual within the system. Both the FSSD and Theory U have been scientifically developed within the past two decades through collaboration in their respective fields. The FSSD was conceived by a collaborative effort of scientists and practitioners (Broman and Robért 2017; Robért 2002), while Theory U resulted in a collaboration of researchers and over 150 practitioners in the field of organizational development (Scharmer 2018b). As both the FSSD and Theory U aim to solve the root causes of current issues, there is a major difference between the two frameworks. Whereas, the FSSD focuses on shifting the outer systemic structures to a more sustainable operating system, Theory U addresses the root causes by addressing the underlying mental models of individuals and leaders. Theory U thereby is more focused on leadership while the FSSD focuses on sustainability.

The FSSD contains elements that help to address the root causes of the current sustainability challenge in the face of complexity. The first element of the FSSD is the funnel metaphor which was already shown in section 1.1 to describe the sustainability challenge (fig. 1.1). Another element of the FSSD used in this research includes the eight sustainability principles (SP’s) which define sustainability in a rigorous and comprehensive way. These principles define both
the environmental and social dimensions of sustainability and frame the boundary conditions of sustainability. The first three principles focus on the environment, whereas principles four to eight focus on society.

“In a sustainable society, nature is not subject to systematically increasing ...

1. ...concentrations of substances extracted from the Earth’s crust.
2. ...concentrations of substances produced by society.
3. ...degradation by physical means.

and [in a sustainable society] people are not subject to structural obstacles to...

4. health.
5. influence.
6. competence.
7. impartiality.
8. meaning-making.” (Broman and Robért 2017, 23).

Looking at today’s global challenges, Theory U uses an ‘iceberg-model’ (fig. 1.2., for a detailed description see Scharmer and Kaufer 2013). The symptoms of these global challenges sit above the waterline while the actual causes for these symptoms are below the waterline and are mostly invisible in daily life. The symptoms are described by the ‘three-divides’, the ecological divide, the social divide and the cultural-spiritual divide. Under the waterline, at the source level, there are eight systemic disconnects, which represent eight societal sustainability issues. For example, the missing link between the GDP and the well-being of people or the infinite growth paradigm of economics contrasted to an infinite planet (Scharmer and Kaufer 2013). While the ‘three divides’ and the ‘iceberg-model’ from Theory U gives a good overview of the sustainability issues our world is facing, however, the eight SP’s from the FSSD provide a more sustainable solution to address these issues. The eight SP’s define the challenge further and make it clearer as to what can be done, not only environmentally but also socially. Particularly, the social SP’s were developed based on the understanding of human systems as complex adaptive systems (Missimer 2015). These five social SP’s focus on the conditions needed for society to be a functioning complex adaptive system and therefore, allowing society to adapt to changes and flourish.
However, at the bottom of the ‘iceberg model’ (fig. 1.2.), known as the source-level, lies what Scharmer (2008) calls the ‘blind spot of leadership’, one’s own awareness. People tend to not see themselves as a part of the system they are interacting in and therefore their decisions are not based on the well-being of the system but on their own well-being. Theory U describes the ‘blind spot of leadership’ as the ‘four levels of awareness’ which are an important part of a leader’s behavior and decision-making. This awareness is relevant for sustainability leaders as they approach the complex sustainability challenge from a systems perspective but also help others to see themselves within the system (Baan, Long, Pearlman 2011).

The goal of Theory U is to address the root causes of the current challenges instead of fixing the symptoms. The fundamental assumption of Theory U is stated by Bill O’Brian: “The success of an intervention depends on the interior condition of the intervener.” (O’Brian in Scharmer 2009, 7). By recognizing their own role within a system, a leader can start to intervene from a different level of awareness and serve the system. Theory U describes this as a shift in awareness that needs to happen within a leader. This is a shift from an ‘ego-system awareness’ based on self-interest to an ‘eco-system awareness’ which serves the wellbeing of the whole system (Scharmer 2009). Brown (2012) calls this deeper understanding vertical learning contrasted to simply gaining more and more knowledge (horizontal learning). If a leader can lead from an ‘ecosystem-awareness’, it is possible to lead from the future as it emerges (Scharmer 2009). Kahane (2000, 88) describes this paradoxical statement that underlies Theory U as: “You have to be able to sense what is trying to be born in the world, to what you must commit yourself.” Instead of planning what needs to happen, the leader listens to what wants to change in the system.
While Theory U prepares leaders to lead from the emerging future, the FSSD prepares organizations to strategically plan toward a future vision. Another element of the FSSD used in relation to this research is the ABCD process (fig. 1.3.). This process is based on backcasting from a sustainable future vision. This vision is framed by the eight SP’s to ensure the vision is going in the right direction and contains a desired future as well as core values and a core purpose (Collins and Porras 1996). Backcasting from principles is described as an approach that starts with a future vision and then asks what it takes to reach that vision (Broman and Robért 2017). The ABCD process uses backcasting to move organizations and civil society towards a more sustainable operating system. This process contains four steps: 1) The A-step consists of gaining an overview of the sustainability challenge and related opportunities as well as defining a vision of success framed by the eight SP’s; 2) the B-step describes a baseline assessment of the current reality of the organization using the eight SP’s; 3) in the C-step creative solutions are created and brainstormed; and 4) the D-step decides on priorities by evaluating the actions using the prioritization questions. These three prioritization questions help to provide strategic guidelines for each action: 1) if an action will move the organization or topic in the right direction; 2) if an action will serve as a flexible platform for future actions; and 3) if an action will bring sufficient return on investment (Robért 2015).

![Figure 1.3. The ABCD process (The Natural Step Canada)](image)

While the FSSD is a framework designed to help understand and make changes within organizational systems, Theory U focuses on the individual within the system. The process that allows an individual leader to lead from the emerging future with Theory U is called the ‘U process’ (fig. 1.4.). Instead of a linear planning-based approach, the ‘U process’ aims for a deeper understanding of the problem and the hidden structures and mental models that cause the actual symptoms (Scharmer and Kaufer 2013). Theory U was formed specifically from the realm of organizational development, leadership, and change management to better understand the hidden sources of our social interactions, decisions, and actions (Scharmer 2009). However, both processes do not contradict, but hold the potential to complement each other.
The ‘U process’ is described as a journey with five phases: 1) Co-Initiating, 2) Co-Sensing, 3) Presencing, 4) Co-Creating and 5) Co-Evolving. The term ‘Co-’ describes that this action is taken as a collaborative effort. The first movement, ‘Co-Initiating’ and ‘Co-Sensing’, is going down the U in the ‘U process’. This phase is characterized by transforming one’s own perspective on the challenge, suspending the old mental model and redirecting awareness to see from new perspectives. At the bottom of the U, ‘presencing’, meaning being present while sensing “what is trying to be born in the world.” (Kahane 2000, 88). This is a point for stillness, retreat, and reflection. This is also where two main questions are important, which resulted from a conversation between Jaworski and Ray and are used within Theory U: “Who is my Self? and What is my Work?” (Ray in Scharmer 2009, 162) This part of the ‘U process’ is of crucial importance, as it holds opportunity for shifting one’s awareness from an outside observer to being part of the system (Koskela and Schuyler 2016; Scharmer and Kaufer 2013; Scharmer 2009). As Hassan (2006, 6) phrases it, “from this space of silence, a deep inner knowing emerges.” The third phase, ‘Co-Creating’ and ‘Co-Evolving’, moves up the right side of the U by clarifying, known as crystallizing, prototyping, and accelerating the new that wants to emerge. In the end, a new and innovative solution can be institutionalized and embedded in the system. It needs to be mentioned that there are different graphics depicting the ‘U process’, yet for this thesis the graphic above was most appropriate.

Theory U also comes with a wide range of tools that can be used in the context of systemic and individual change. First of all, the ‘U process’ described above can serve as a tool for designing a participatory process in order to create positive change. For each of the phases in the ‘U process’, specific tools or methods have been designed by the Presencing Institute (n.d.) in order to guide participants through the process. In the first phase of the U, which is about understanding the challenge, tools like ‘sensing journey’ and ‘dialogue interviews’ can be used. Also, the ‘four levels of listening’ can be used in this phase to help in developing a leader’s personal capacity to listen. At the bottom of the ‘U process’, where ‘presencing’ takes place, tools and methods used at this point include mindfulness, ‘guided journaling’, and walks in nature. In the last phase of the ‘U process’ ‘prototyping’ is an important element. This is based
on the idea of ‘design thinking’ which was developed by Kelley and his colleagues in order to design innovative solutions for their customers (Kelley 2010). ‘Prototyping’ is an iterative process in which prototypes are developed and tested in order to get fast feedback. In addition, another tool that was developed by the Presencing Institute (n.d.) is ‘social presencing theatre’ which uses the body’s intelligence to surface new knowledge and inner wisdom (see a description of these Theory U tools in Appendix A).

While Theory U provides a framework and tools for transformational change within systems and individuals, it is mostly used in organizational development and change management, both within business and civil society. The necessary transformational changes within education, health, finance, business, government, and civil society have been highlighted by Theory U (Scharmer and Kaufer 2013). More recently Scharmer has been stressing the importance of the transformation of higher education (Scharmer 2018a). The question this research is based on is why not starting at an earlier age? This has led the research team to look at how Theory U could be utilized with youth.

1.3 Youth Leadership in Complexity

The world inhabits the largest youth generation the world has ever known (UNDP 2014). Meanwhile, the UN (2010) names youth as a key stakeholder in the fight against climate change as they also face sustainability issues such as conflicts or disaster. As the growing youth population is facing these sustainability challenges in our world, there has been an increased recognition and acknowledgment of the value of their active participation to address these issues (UN 2016). Although there is recognition of the value of youth participating in global issues particularly at the policy and civic engagement level, young people face a reality that their participation is often limited to a superficial level (UNPY 2010). There is a sense that even though youth may be included in these discussions, often times their contributions of their voices and perspectives do not actually contribute to the core decisions (ibid.). Therefore, research has shown that young people are less likely to engage in collective activities due to their sense that their participation is not valued within society (UN 2016). It is important to provide support to young people through youth engagement in communities as they play key roles in development toward finding solutions to problems (UN 2016; Hickman, Riemer and the YLEC Collaborative 2016). If governments create environments for active partnership, inclusive policies, and decision-making processes to further engage youth, then perhaps solutions to some of these key issues they face can be further developed (UN 2016).

“A commitment to tackling the injustice of ignoring young people will yield results. Young people are the foundations for effective development, and if engaged they will improve many of the structural development challenges that we face today, including: enhancing the cohesion of families and communities, reducing health risks and advancing livelihood opportunities. They are the bridge between effective policy and valuable practical action on the ground” (UNPY 2010, 26).

Even in the midst of these challenges described, young people have proven to be positive change agents in their communities (UN 2016; UNDP 2014). However, in some places there is a gap between knowledge and youth taking action despite an increase in awareness of climate change (Narksompong and Limjirakan 2015; O’Brien 2013). For youth to be more engaged in these issues they need to understand and feel more connected to the experiences of people and the environment that are directly impacted (Hickman, Riemer and the YLEC Collaborative
Connecting youth to these issues through experiences and increasing their awareness and understanding may have a greater impact on how they act and respond to these issues.

When it comes to shifting a global society towards a more sustainable version and participating in a cultural shift towards a more sustainable culture, it is crucial for young people to play a role in that movement (ibid.). Youth are at a crucial stage in their lives where their identity is being formed and lasting the course of their lifetime (Riemer, Lynes and Hickman 2014). Hickman, Riemer and the YLEC Collaborative (2016) also stated that youth are more often willing to challenge the current status quo than adults. Due to these characteristics of youth, positive youth development is needed. In terms of youth development, the goal is to foster maturity and create an environment that takes individuals through challenging and supportive experiences through activities with other people (Kress 2006). In addition, when working with young people it is important to maintain flexibility and creativity as well as understanding the local context they come from (UNPY 2010). These experiences cannot be taught but supported by interacting with others and places that provide intellectual, spiritual, and emotional nurturing (Kress 2006). One possible outcome of positive youth development is leadership (ibid.).

There are many different programs that focus on leadership and positive youth development (Deane et al. 2017; Hickman, Riemer, and the YLEC Collaborative 2016; Shera and Murray 2016; Deane and Harré 2014; de Vreede, Warner, and Pitter 2014; Broberg and Krull 2010). One program to highlight that was found through this research is the Youth Leading Environmental Change (YLEC) program (see the program design in Appendix B). YLEC is an example of a positive youth leadership program which focuses on engaging youth into action for sustainability. The program takes a systems thinking approach and helps youth to engage within their local communities while expanding their overall perspective of the climate change (Hickam, Riemer and the YLEC Collaborative). Investing in youth and helping them reach their fullest potential as future leaders enables them to have the possibility to be positive change agents as they play a crucial role to help address and solve the global sustainability challenge (Riemer and Dittmer 2016; UNDP 2014).

Although there are many different youth initiatives around the world that focus on development of youth and engaging them within sustainability, there are not many who are using Theory U as part of their programs. Yet, there seems to be potential in using Theory U to equip young people with important leadership capacities like listening and a mindset that involves an understanding of the whole ecosystem (Pillay 2014). However, neither the Presencing Institute nor the Theory U community have a clear intention of using Theory U within the context of youth. Arnold (2017) states that in the phase of adolescence young people start developing their identity and “begin the process of answering the question of “who am I?”, a question critical to lifelong psycho-social well-being and thriving.” (Arnold 2017, 1). Theory U addresses these essential questions about identity and purpose by asking two questions, “Who is my Self? and What is my Work?” (Ray in Scharmer 2009, 162). Theory U focuses on creating leadership capacities by engaging awareness and personal development. Broman and Robért (2018) state that the most important question regarding the sustainability challenge is asking if there will be enough leaders in time. This highlights the importance and the need for more sustainability leaders to work with the complex challenges our world is facing.

There seems to be potential in connecting Theory U when working with young people at a crucial and formative point in their lives. This could possibly lead to a long-lasting impression toward a sustainable future as today’s youth will become tomorrow’s leaders. Riemer and Dittmer (2016, 163) also highlight the crucial role of youth in the transition towards a more
sustainable future, “Youth have the potential to play a key role in addressing the root causes of global climate change and in promoting a more sustainable local and global society.”

1.4 Research Question

In order to explore further how sustainability practitioners can address the complex sustainability challenge using Theory U when working with youth, the research team has focused on interviewing four different groups: 1) sustainability practitioners who work with Theory U, 2) sustainability practitioners who work with youth, 3) practitioners who work with youth and Theory U, and 4) all three groups combined. This research paper intends to provide a deeper understanding of how sustainability practitioners may be able to use Theory U with youth. It does so by asking the following research question:

*In what ways does Theory U support sustainability practitioners to equip the next generation of sustainability leaders?*

This research is addressed to sustainability practitioners working with youth. We call them sustainability practitioners as they dedicate their work to engage young people into sustainability and create awareness for the sustainability challenge. In order to have enough leaders in time, it is necessary to start planting the seeds for the future generation of sustainability leaders at an early age.
2 Research Methods

The purpose of this research is to explore the ways Theory U could support sustainability practitioners to equip the next generation of sustainability leaders. The target audience of this thesis is therefore sustainability practitioners. The main purpose of this research is to find out how Theory U could support sustainability practitioners that work with youth and how Theory U could foster these efforts towards a more sustainable society. Youth are defined in this research as the period of transition from childhood into adulthood as defined by UNESCO (UNESCO 2017). In addition, the target age groups of the collaborating practitioners based on how they defined the age of youth in their cultural context was taken into consideration.

The overall structure of this research is displayed by the image below (fig. 2.1.). The main three topics in this research are sustainability, Theory U and youth. There are practitioners working in each of the intersections between working with sustainability and youth, with Theory U and sustainability, with youth and Theory U, and with all three topics. Interviewing these different practitioners was an effort to enhance the overall validity of the research. The practitioners working with Theory U and youth gave specific information of how Theory U can be used with youth. The practitioners working with Theory U and sustainability provided information of how Theory U helps them approach sustainability. The practitioners working with sustainability and youth offered valuable information of how they approached sustainability with young people. By combining the information of these three groups conclusions were drawn in how Theory U can be used by sustainability practitioners working with youth. Lastly, the people working with all three topics provided information of how that has been done already. The goal of this research was to get an integrated picture how Theory U could support sustainability practitioners to help youth approach the complex sustainability challenge.

![Figure 2.1. Research Structure](image-url)


2.1 Research Approach

The method that was used in this research was qualitative as it allowed the research team to investigate the ways people make sense and understand their experiences (Savin-Baden and Major 2012). Qualitative research assumes that every research is subjective and is focused on understanding people's worldviews and stories (ibid.). This research aimed to investigate ways Theory U can support sustainability practitioners based on their experiences and stories working in the field. As it seems that the connection between Theory U and youth is not yet established, this research was done to help explore this topic further. It was unknown how many people were using Theory U in a youth context, but it was assumed that a quantitative research approach would not be as beneficial as a qualitative research approach. The hope from this research is that the stories and experiences gathered through this qualitative approach will help 1) start the conversation around this topic and 2) to inform further research.

To collect more in-depth information an initial start of this research began with a literature review. This was conducted to get an overview about of the topics of Theory U and youth within the general field of sustainability. For the initial literature review terms were used in an online database search such as: Theory U (including the synonyms presencing, Scharmer and mindfulness), youth (including the synonyms youth*, teen*, adole*, positive youth development, and PYD) and sustainability (including the synonyms sustainable development, social responsibility, social change and systems thinking). The databases used were mainly Scopus, DART, DIVA as well as Google Scholar, Mary Ann Liebert Publishers, and Taylor and Francis Online.

2.2 Data Collection

In order to answer the research question, data was collected through semi-structured interviews using ‘Zoom’, an online meeting program. These interviews were used in order to gather more in-depth information from the interviewees. The semi-structured manner allowed the interviewer to stray from preset questions in order to keep the interaction engaging and focused. Mainly open-ended questions were asked so that the participants were able to share their point of view and their perspectives and stories from the field. Asking similar questions enabled data collected to be compared across other interviewees (Savin-Bader and Major 2012). The questions were designed according to the research question, the research design, and knowledge from the literature review. The full interview guide and questions can be found in Appendix C.

2.2.1 Phase 1: Identifying Practitioners

In the first phase of the research, the team reached out to people through personal contacts, direct emails, Facebook groups, and LinkedIn. A questionnaire was sent through these contacts and groups where a total of twenty responses were received and through these contacts thirteen referrals were received. In addition, ten individuals were contacted through the research team’s own personal contacts and the literature reviewed by the researchers. Overall, invitations were sent to a total of forty-three individuals regarding the research topic. The practitioners were clustered in four different categories:

1. those who use Theory U with youth,
2. those who work with Theory U and sustainability,
3. those who work with youth and sustainability and,
4. those who work with Theory U, youth, and sustainability.

Of the forty-three practitioners twenty-three responded positively. In order to ensure the quality of the research, criteria were established to determine the final interviewees. Criteria was based on the following factors:

- At least two to three years of experience in their field.
- Practitioner works with at least two of the three topics of sustainability, Theory U, and/or youth.
- To have at least three people in each practitioner category to ensure validity.
- Diversity (gender and location).
- Language spoken is English.
- Availability for an interview.

From looking at the criteria, seventeen individuals were chosen for interviews which were categorized into the different groups so that at least four interviewees were in each group. After conducting the interviews, the interviewees needed to be regrouped as some of their descriptions did not match the reality in the interviews (see table 2.1.). One interviewee missed the interview and due to time constraints, the interview was not rescheduled. Due to that situation, only two people ended up being in category one about Theory U and youth.

<table>
<thead>
<tr>
<th>1. Theory U and Youth</th>
<th>2. Youth and Sustainability</th>
<th>3. Theory U and Sustainability</th>
<th>4. Theory U, Sustainability, and Youth</th>
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</table>

Ten interviewees were men and seven were women. They were located in thirteen different countries and had worked within a wide range of locations throughout the world including Columbia, St. Kitts & Nevis, Panama, Switzerland, Netherlands, Canada, Brazil, Taiwan, China, Vietnam, United States, Catalonia, Australia, New Zealand, Scotland, Latvia, South Africa, Germany, and Hungary. The ages of the interviewees covered a broad range between mid-twenties and mid-to-late sixties.

2.2.2 Phase 2: Conducting Interviews

Over a period of four weeks sixteen semi-structured interviews were conducted. In each interview one member of the research team was leading the interview while and another member was taking notes while supporting the interviewer. The interviewer also did the
transcription (verbatim), without taking into account pauses and filler words such as ‘hmm’, ‘ehmm’, and ‘you know’. The interviews were conducted online and recorded, although there were some technical difficulties with some of the interviews. During this transcription period, the first step of the data analysis was already included, which was to get familiar with the data.

2.3 Data Analysis

The data analysis was based on a thematic analysis. Terry et al. (2017, 24) describe a thematic analysis as “a process for ensuring rigorous and systematic engagement with data, to develop a robust and defensible analysis, that is independent of any predetermined particular theoretical framework or cluster of other design considerations.” This approach helped the research team to engage with the data in a thorough way. The analysis was based on the steps proposed by Savin-Bader and Major (2012):

1. Familiarize yourself with the data.
2. Generate initial codes.
3. Construct themes.
4. Review potential themes.
5. Define and name themes.
6. Produce final report.

This data analysis-method allowed the research team to get a feeling for the data by reviewing it in iterative steps. The team started with seventeen initial codes which were informed by the research question, the literature review, and a first understanding of the data through the transcriptions. During the coding process, other codes were added that were missing before and that emerged during the deeper data analysis. The coding was done in two steps. To begin the initial coding, it started with one researcher and then another researcher reviewed the first coding and added a second opinion on the applied codes. Each member of the research team engaged with all data. The member who was not part of the interview itself, did either the first or second coding. For the coding process, the online coding application ‘Dedoose’ was used.

Different themes and codes emerged during the coding-process. After the coding-process there were fifty codes and thirteen themes. Next, all codes were clustered, regrouped and recategorized as needed, and then filtered through the lens of the research question. This was done mainly offline by printing all codes, clustering and visualizing them. From this refining process, there were twenty-four codes and seven themes in the end. The seven final themes are listed below. A full list of the final codes can be found in Appendix D.

1. Youth and Sustainability – Challenges.
2. Youth and Sustainability – Approaches.
3. Youth – Characteristics.
4. Youth – Challenges.
5. Utilizing Theory U with Youth.
6. Theory U and Youth – Outcomes.
7. Theory U – Challenges.

From this point, the necessary data was included within the results in Chapter 3. The data collected from this research provided insightful information to share what was collected from the practitioners in the field. Their stories and experiences are intertwined to share how Theory U could be used with youth when approaching sustainability issues.
2.4 Ethics

The purpose of this research is driven for the betterment of youth. However, the target audience of the research is aimed at sustainability practitioners. All interviews were administered with adults. Therefore, there were no laws or regulations around how the interviews were conducted as they would have been if the research team would have interviewed youth. All interviewees verbally agreed to the recording of the interviews and to being transcribed. Also, all individual names were held confidential in the final research results. During this research, no one was harmed, and no other ethical consideration needed to be taken into account.

2.5 Strengths and Limitations of Research Design

A strength of this research is the overall diversity of the group of interviewees. Except for the Netherlands and Switzerland, all interviewees came from different countries. Also, all continents were represented. Although there were slightly more male interviewees than female interviewees, gender balance was not equally represented, but with the ratio being close (ten male and seven female), gender diversity can still be represented as it was not a large gap. The youngest interviewees were in their mid to late twenties, while the oldest interviewees were retired. The diversity of the interviewees provides different perspectives and therefore enhances the overall quality of the research.

Another factor of diversity is the research team since each person comes from different continents and brings experiences from different cultural contexts to this research. Also, within the data collection and data analysis the team included their own perspectives in the handling of the data. Every member of the research team was involved in the data processing, either during the interview as a notetaker or in the coding of the data. The research team constantly worked on their shared mental model in order to ensure different perspectives formed this research.

Triangulation was built in the design of this research. Fielding and Fielding (1986) describes triangulation as combining complementary methods or different sources of data. Four different groups of practitioners were interviewed in order to find out how Theory U could support sustainability practitioners to equip the next generation of sustainability leaders. By collecting results from these four groups, the data was expected to be robust. As a limitation, after conducting the interviews some interviewees and their categories had to be reordered. In category one with practitioners working with Theory U and youth remained only two interviewees and in category two only three remained who worked with youth and sustainability. In order to increase the quality of the research design more interviewees would have been needed in these two categories.

Due to time and logistical limitations, it was not possible to speak directly to youth that were participating in initiatives, workshops and other activities, including Theory U. Even though some of the interviewees were in their early twenties when they got to know Theory U, this research focused on their role as a practitioner and not as youth. Through these young practitioners, some stories were shared from their experiences which did not inform the results of this research but indicated potential for further research.

Another limitation of this research is that the topic of Theory U and youth does not seem to be explored in research so far. Only one article (Kriken 2014) was found that related Theory U to
a youth project, yet this article describes how the author intuitively used Theory U in a workshop design without knowing it before. Theory U itself was developed around the years 2004 and 2006. Twelve years later Theory U is well known in the context of organizational development, however the connection between youth and Theory U is not yet visible. Therefore, this research could not build on former research around this topic and is therefore explorative.
3 Results

The results of this research are shown in seven overarching themes that were found in the data collected through the interviews. Although the interviewees were categorized into groups (fig. 2.1.) between sustainability, Theory U, and youth based on their work experience, some of the interviewees also shared experiences that were beyond their ascribed category. Therefore, these results may not perfectly align in the specific interviewee categories, but instead are ordered by themes. These themes were informed by all the interviewees. If only one specific group mentioned a particular issue, and it was relevant for further discussion, it was specified in the results. Within this research, the interviewees are cited without giving the date as all interviews were conducted in the year 2018.

Each theme in this chapter is shown as a separate section (ex: 3.1, 3.2...) while the codes within each theme are listed beneath each section as a subsection (ex: 3.1.1, 3.1.2...). The first two themes in these results are related to the topics of sustainability and youth. The first theme describes the challenges within the realm of youth and sustainability. The second theme describes the approaches that were taken by sustainability practitioners that work with youth. The third and fourth themes in these results show the characteristics and challenges that youth are facing in their specific point in life. The fifth theme describes the experiences of the interviewees when utilizing Theory U with youth. Theme number six shows the outcomes of using Theory U in a youth context that were mentioned by the interviewees. Finally, the last theme shows the challenges of using Theory U. The last section contains challenges that are observed with both youth and adults.

3.1 Youth and Sustainability - Challenges

The data collected from the interviews identified some challenges when working with sustainability and youth. The subsections below share more details about these challenges which include distance, complexity, burnout, and empowerment.

3.1.1 Distance

It was shown in the data that one of the major challenges in addressing sustainability with youth was related to how an individual perceives the issue. It was shown many times that the interviewees felt that there is a disconnect between individuals and the sustainability issue. They expressed how these issues were too far away, too distant from the reality participants experienced on a day-to-day basis. There is a difference that happens when people are able to connect with the issue either by personally experiencing it or seeing it, such as the example one interviewee stated: “...seeing the polar ice melting with your own eyes on a ship is different than just hearing the story from someone else. Sometimes those create an urgency like we have to do something now.” (Interviewee 11). This interviewee points out the fact that in most European countries, issues related to climate change feel far away as people are not confronted with it in their daily lives. “The other thing that we know from psychology is that around risk-perception related to climate change is that it feels very distant for a lot of [people] in western [countries].” (Interviewee 6). This interviewee highlighted this distance and came up with a solution for that. In order to overcome that distance Interviewee 6 stated the necessity to “…creating this personal connection, linking it to fairness and bringing it home. So, with all of these environmental justice cases there was something close to home, it's not something just
“Either they have experience of themselves or of people very close to them have experienced the impact of climate change. For example, I remember the students talking about in Dhaka there is a lot of people that carry the food on their heads on these baskets [...] They are sleeping in those baskets overnight and with climate change - it wasn't an issue in the past - but with climate change those people are much more vulnerable because it actually gets colder at night now.” (Interviewee 6).

In that case the sustainability challenge did not feel far away, because it was right in front of the youth. They were personally involved in the issue or if not themselves they knew of people that were affected.

3.1.2 Complexity

When the interviewees were asked for their perspective or definition of sustainability, a wide range of explanations were received including environmental, social, economic, individual, and many other responses. It was also mentioned in their answers that sustainability is a big, complex challenge and at the same time it can be too overwhelming for young people. Part of the work that was especially important to many of the interviewees was to help young people deal with that complexity. One interviewee shared an experience where youth were sent out to interview different stakeholders about an issue around water pollution. By sending young participants out to interview key stakeholders like farmers and mining companies they could gain an understanding of the complexity of that situation (Interviewee 3). As also Interviewee 6 shared, it is very important to help youth understand the overall complexity of sustainability. So, despite being negative and depressed about the situation, it is better to prepare them to deal with the situation, “I think it's much more important that we help people deal with that complexity and not get overwhelmed by it, not get discouraged but actually learn how to deal with it and that youth are really well set up to do that.” (Interviewee 6). Although many of the interviewees did not spend a lot of time describing how sustainability can be so overwhelming, they rather shared their approach of systems thinking which is described below in 3.2.4. The underlying reason they took a systems thinking approach was due to the complexity in sustainability.

3.1.3 Burnout

Within the context of sustainability work, the interviewees reported that young people tend to overwork and burnout due to the amount of work there is to be done and the magnitude and urgency of the sustainability challenge. Some interviewees observed that these young people are taking action towards sustainability but are not taking care of themselves. Youth have the potential to feel so connected to the issues that they feel the urge to make it right on their own and as a result they burnout. “All young people have good sensing skills for the world around them and they feel everything that's going wrong and they want to contribute but they forget that they should actually connect with themselves as well. A lot of young people work in sustainability are experiencing burnout, overworked and it's a really big problem.” (Interviewee 12). As youth seem to have a lot of energy to direct toward sustainability, they may not be aware of how they are neglecting to take care of themselves. “I observe a lot of young activists or young adults who engage with loads of energy for the world there is not so
much consciousness about the sustainability of their own way of taking action, so there’s really high burnout rates or just being exhausted and leaving the whole thing and being fed up with it.” (Interviewee 4). Even a certain level of competition was mentioned by Interviewee 12, participating in a youth organization for sustainability: “...it's a network of young people who take huge responsibility for sustainability and I felt that people in that network were only challenging each other to actually increase the impact and to show off when it comes to -- so what is the biggest project you had done last week? -- and we should be doing better...” (Interviewee 12). This quote also showed a contradiction. While working together on challenges related to sustainability, people were competing with each other around who has the greatest impact. Another interviewee mentioned the importance of working together: “And we need to tackle those really complex issues from different perspectives and from different organizations. It is impossible to do it on your own. It doesn’t matter which subjects we are facing – sustainability or poverty.” (Interviewee 11). This quote highlighted the fact that a person cannot deal with the complexity of sustainability on their own. Interviewee 11 highlighted the importance to understand that it takes many different people, organizations, and perspectives.

3.1.4 Empowerment

Another challenge that was found in the data was the importance of empowering youth to take action to step into their capacity to lead change according to their values (Interviewee 7). Empowerment was described as developing self-esteem and a can-do-attitude. This also connects to what one interviewee called action competence: “'Oh wow! I can actually make a difference’ and that's really really important. I have seen that again and again in the projects we have done is that importance of learning the skills in terms of the action competence but then also experience yourself being skillful and effective as an agent.” (Interviewee 6). The interviewees also described that help from adults was needed in order to remove structural barriers which could keep young people from engagement. These barriers were particularly related to institutions and bureaucracy (Interviewee 2). Another thread is that it is necessary to create opportunities for young people to engage in activities, like environmental clubs in schools (Interviewee 6) or other opportunities within and outside of formal education (Interviewee 7). Besides adults creating the conditions for youth to step into action, interviewees stated the role of adults was important to empower youth and help them deal with failures by framing them in a way to learn from them (Interviewee 7).

3.2 Youth and Sustainability - Approaches

As challenges with youth and sustainability were identified in the previous section, the data also resulted in the approaches that the interviewees took in order to address sustainability with youth. These ways included a positive approach, a participatory approach, using different tools such as music and videos, as well as using systems thinking.

3.2.1 Positive Approach

It was mentioned by some of the interviewees that, if sustainability is communicated by showing negative and depressing images, videos or descriptions, participants might react in a negative way. Interviewee 7 shared her perspective and an alternative positive approach:

“I really think these negative communications like these films about climate change that just give you 90 minutes of terror, I don’t know what they do, and I don’t go to them. But I still see some people in environmental circles insisting the way to educate the public
is through these kinds of efforts. So when I come along and say, you know I never
depress people -- you don't walk away from one of my workshops depressed because it's
just not how I do it.” (Interviewee 7).

Just as Interviewee 7 shared about taking a positive approach to sustainability, other
interviewees also mentioned this especially when addressing sustainability with youth. Instead
of showing what is going wrong and possibly depressing people, they approached it in a positive
way. “I still think it’s very important to know the problems that we are facing and so when I
Teach on sustainability I start with that to some degree but then I very quickly move into all the
cool things that are happening.” (Interviewee 6). Several interviewees also shared the
importance of creating an atmosphere of possibility, hope and fun, where a possibility of a
happy and meaningful future is highlighted. “The psychological research on happiness is very
clear on once you have your basic needs in that money doesn't really matter that much anymore,
it's these other factors. [I tell my students:] Here is something you can do, [...] you create a
great sense of community, do something meaningful, having an impact... all of this that is gonna
make you more happy.” (Interviewee 6). This quote gives an example of how sustainability is
brought to youth, focusing on positive outcomes like meaning and personal happiness.

3.2.2 Participatory Approach

Almost everybody that worked with youth was using a participatory approach, letting the
participants shape the process and letting their values influence the direction. Overall ten
interviewees shared different experiences about this approach. One example was mentioned by
Interviewee 7: “My process is very rarely saying 'this is the issue' it's more about what do you
value the most? And how can we move that forward?” Another interviewee shared about the
design of their youth program which was based on a participatory approach, “...the focus [of
the youth program] is a little bit like MSLS [Master’s in Strategic Leadership towards
Sustainability]. To have young people to really get to see the big picture and within the big
picture: What is it that you care deeply and that you want to create or changing the world?
Where can you take action?” (Interviewee 3). Interviewee 8 shared another example of their
approach which is driven not by telling what the young people have to learn about the world,
but by allowing them to experience it and find out themselves.

“I think what we are doing is actually helping youth to see and evaluate and to make
their own decisions and to find their own answers. But we are giving impulses and we
are not teaching through the lectures as “lectures”, but we are teaching through very
interactive process, different games and different dialogues, role plays, that [are] really
initiating them to think about their lives and about their environment so that they can
see and find the answers by themselves.” (Interviewee 8).

The last example of this type of approach came from a ‘U process’ in the Caribbean with youth
around crime. Interviewee 2 shared from the process: “... so we proposed a very simple question
-- why don't we ask them how they would address violence from their perspective?”
(Interviewee 2). This was important not only for the participatory approach but also how
facilitators approached a process in the context in which it took place.

3.2.3 Games, Arts, Videos, etc.

In connection to communicating sustainability to youth in a positive way, some of our
interviewees who worked with youth and sustainability mentioned different ways in how they
engaged youth with sustainability. They used different kinds of media, for example using games that imitated real world situations and made youth experience a particular issue (Interviewee 8). In addition, different kinds of creative tools or activities were used. For example, fun energizers and icebreakers as well as singing, yoga, sculpting, and visualization (Interviewee 1, Interviewee 10, Interviewee 8, Interviewee 5, Interviewee 4, and Interviewee 3). Interviewee 6 elaborates on the importance of using different media, in this particular case, a song that youth can relate to: “It's a really good tool to get away from just the cognitive aspect, but also touch the heart. Like a song, just a simple song that in the end is very very powerful and moving you emotionally.” (Interviewee 6).

Other tools or methods that were used by seven interviewees included theatre, group modelling, and role playing (Interviewee 10, Interviewee 9, Interviewee 8, Interviewee 12, Interviewee 16, Interviewee 5, Interviewee 3). Especially theatre and role play were highlighted by many interviewees as being very suitable for youth (Interviewee 16).

### 3.2.4 Systems Thinking

As a response to the challenge mentioned above in subsection 3.1.2 about complexity, some interviewees mentioned the importance of taking a systems thinking approach. This was a big theme that was mentioned throughout all interview categories. One interviewee, working in the field of youth and sustainability, described the importance of systems thinking especially in regard to youth.

“I think it's much more important that we help the people deal with that complexity and not get overwhelmed by it, not get discouraged but actually learn how to deal with it and that youth are really well set up to do that. The one is system thinking. We really help youth with system thinking that is we talk a lot about the connection between environmental sustainability and poverty for example and inequality.” (Interviewee 6).

This interviewee also shared from their experience with an international youth program where systems thinking was used. In this example it was particularly powerful when the participants had personal contact with people that were affected by sustainability issues. The systemic relations that were usually unknown were discovered and experienced. One example was when they brought a person from a local indigenous tribe that was affected by environmental injustice to a class of students. The interviewee described what happened when this woman came to the class: “…I brought her to class to speak and she did not hold back, she was very emotional in the way that she talked about this situation and there is no way that you cannot be emotionally engaged listening to her.” (Interviewee 6).

Another example of how systems thinking was used with youth was from an example in China. Interviewee 3 used a Theory U method, ‘sensing journey’ to send young people out to interview different stakeholders around the issue of pollution through mining and pesticides. “...the youth don’t really get connected to that before they got there. They talked to the people and they see how everything is so interconnected…” (Interviewee 3).

### 3.3 Youth - Characteristics

While the last two sections focused on youth and sustainability. This section describes the characteristics of youth that resulted from the collected data. These characteristics include that
youth are natural systems thinkers, are willing to be open, and are in a formative stage of their life.

### 3.3.1 Natural Systems Thinkers

Many interviewees described a variety of positive characteristics and advantages of involving youth in their work or working with youth. Particularly of interest for this research is how the interviewees mentioned systems thinking being used in a context with youth and acknowledged that they are natural systems thinkers. They mentioned systems thinking in their interviews and attributed youth with a natural capacity to think in a systemic way (Interviewee 13). One interviewee elaborated on that statement:

“I think children are naturally very aware of the complexity and have a systems view of the world [...] I think we are all natural systems thinkers or sensors. It’s just our school system that tries to do the opposite -- it makes us unravel problems in small bits, so the large bulk of schools do not help children to maintain their natural talent when it comes to understanding systems...” (Interviewee 12).

One of the interviewees also mentioned a school in the Netherlands where children experience systems thinking from a very early age. The interviewee described:

“I worked with a Dutchman (Guus Geisen) who helps schools to really apply systems perspective and actually have very young children understand systems and to draw causal loop diagrams and understand the iceberg and be able to analyse - even very young kids - to understand dynamics in a classroom when a fight breaks out. So, from what mental model did this happen, what is the cause and with the causal diagram can you map it?” (Interviewee 12).

This example for a school integrating systems thinking already at an early age highlights and affirmed the assumption that youth are naturally capable to think in a systemic way.

### 3.3.2 Open, Willing, Flexible, etc.

In addition to young people’s capacity to systems thinking, several positive characteristics of youth were described by the interviewees including openness, open-mindedness or a willingness to change, and flexibility. Interviewee 8 said: “They are very open-minded, and they are ready to be connected to the rest of the world.” Youth are also open and willing to change as stated by Interviewee 5: “...the willingness or the openness or the interest to change.... in those people, young people.” When it came to addressing sustainability issues these characteristics were recognized as valuable by the interviewees. Interviewee 14 stated “And I also think that your age group are really open to looking for solutions, you are not stuck like my age group [in their fifties]” (Interviewee 14). This last quote refers to the fact that youth have not yet set their mind and are open to new influences. This relates to the next section Formative Stage.

### 3.3.3 Formative Stage

Another theme that came up in relation to youth was that they are in a formative stage in their lives and that they may not have as much responsibility and are not yet settled into life quite yet. As one interviewee said about youth, “One of the key things about that age range is that's
when you're still in a process of change, you're not really settled yet, you go through a lot of identity formation, you go through different settings: high school and university potentially or workplace. So that just leaves a lot of room for engagement and change." (Interviewee 6).

Youth are still in the process of developing their identities which leaves opportunities for positive change. They may not have as many responsibilities to worry about or life experiences they are carrying around with them. One interviewee said about youth regarding the stage of life they may be in:

“So, they actually -- they don’t even give a shit about things like money, not really, not most of them. High school students don't care about money [...] They just go home and somebody gives them food and they've got a shelter over their head. [...] Though it's like this incredible privilege to work with them because unlike older people who got all of these things like hopes for their children and disappointment and this money and not this money and this property and not this property and all these failures and they've got a boss and all of that stuff. Young people are just... they've got other stuff, but it's more direct and more fluid.” (Interviewee 7).

Connected to this fluid state of identity formation, another interviewee highlighted their potential as future leaders, as they still have their whole lives in front of them.

“They have a lot of opportunity of applying that and for this is really this connecting to your source and being clear of how you take decisions, on which ground you act and you take decisions, be more conscious about that, be more empathetic about your environment and having an increasing range of your keyboard or of your toolbox to apply and creating more innovative, more sustainable, better solutions for ourselves and for others.” (Interviewee 1)

This interviewee also gave some examples of what is important once young people step into their professional lives. The example above highlights the importance of decision making and having these decisions based on sustainability.

### 3.4 Youth - Challenges

The last section showed the characteristics of youth that came from the data collected. In this section, the different challenges of youth will be described that came from the data provided by the interviewees. The challenges of youth described in the following subsections show the results from unfocused energy of youth and a need for social context.

#### 3.4.1 Unfocused Energy

A theme that came up from the interviews was a characteristic that youth have lots of energy, but they may not know what to do with it or how to direct it in a constructive way. One interviewee shared how they saw the undirected energy and great potential when working with youth. “But the specific target group [exchange students] I'm working with I can see loads of potential and loads of scattering of energies as well.” (Interviewee 4). In addition, another interviewee described knowing young people from a previous location and how energized and motivated they were. One challenge these young people were particularly facing was questioning their role in the societal system. “...what I saw in Munich, the young ones are really really motivated, really full of energy. They don't want to go into the system, they want to find out 'how can I live without feeding the system of destruction?' And what I felt there was this
huge question mark: ‘How am I going to do that?’” (Interviewee 14). Supporting that, another interviewee stated that the education system does not help students work with their own perspectives and integrate them into their lives. “The piece that was missing was evaluating of one’s own inner perspectives and helping students to integrate that. I don't think education does that in most situations.” (Interviewee 16). This interviewee therefore highlighted the importance of including the development of young people’s personalities in higher education.

3.4.2 Social Context

Another characteristic that showed up from the data collected was around the importance for people to be connected socially, especially youth. One interviewee shared from their work with youth when they followed up with many of the young people after they left high school or university they found that they were less involved in sustainability activities as before because they were no longer part of the larger group or collective. “It is really important for people to have a social group that they are connected with that is also engaged. The power of the collective in engagement is not to be underestimated. Because we saw that across the interviews that whenever they left a social context like the high school club or they left university. That is when engagement dropped.” (Interviewee 6). Thereby, Interviewee 6 highlighted the importance for young people to have a social group context. Linked to that the data also showed that youth may be greatly influenced and affected by their peers and their social contexts. One interviewee shared how youth may be affected by their peers, especially depending on how powerful a leader may be in those peer groups. “I think that could make a big difference because at this stage they are very easy, switching to one group to another group. And it depends who will be more powerful, they just following the leaders and our goal is to make strong leaders, so they can follow the positive leadership. Not the one who abuses others or abuses the world.” (Interviewee 8). They also highlighted the importance in encouraging young leaders to be strong and positive leaders.

3.5 Utilizing Theory U with Youth

While challenges of youth were covered in the last section, this next section will share the results from how the interviewees utilized Theory U with youth. The subsections below explain the ways interviewees utilize Theory U in their work including how they use it in designing workshops and as an overall framework. Also, it describes which of the components and tools of Theory U are being used with youth. Lastly, the role of the facilitator as an important part is presented.

3.5.1 Framework for Design Process

A major part of the interviewees said they use Theory U as a framework and particularly as a tool for designing participatory process with youth (Interviewee 3). Interviewee 1 shared that in their youth organization they used Theory U as a framework when working with youth: “Theory U is one of the key methods, tools that we use.” In particular the ‘U process’ is the part of Theory U that was used by the interviewees. The framework was used mostly in a flexible way by adding other tools that fit in the particular phase of the ‘U process’. “So, we did use a sort of a Theory U arch and plug in different things for different phases of the U.” (Interviewee 13). This described how many of the interviewees used Theory U in their work, using the framework of Theory U and complementing it with other tools that are appropriate. Also, interviewees use it as part of the design process for their programs, curriculum, or organizations.
Several interviewees mentioned how they use Theory U as a framework in particular when working with youth. For example, with Interviewee 10, “It was a youth exchange and we used Theory U as a backbone for the ten days exchange.” Another interviewee shared that Theory U helps them to prepare for the process: “we don’t explicitly teach it but we use it as a framework for ourselves in the way we prepare.” (Interviewee 1). This is mainly how Theory U was used. One reason for that was shared by interviewee 10, who said that “it gives you a sense of control and a sense of security. More than control I would say security and safety. That's why we use frameworks, to frame reality in a way that feels inviting to play with. And I think Theory gives a very safe framework in that sense.” The interviewees used the framework of the ‘U process’ in a flexible way in order to design participatory processes for participants. This allowed them to adjust it accordingly to the group and context they were working with.

3.5.2 Tools used with Youth

In addition to providing an overall framework to design a process with youth, Theory U provides a wide range of tools as well. Many of these tools are being used by practitioners in different settings. One of the interviewees not working with Theory U, but who is very engaged with youth said:

“I think it [Theory U] could be applied, because one of the things that I found is really helpful for youth are specific tools. They have a lot of energy, they have a lot of motivation but if you give them a tool that makes their work more efficient, they eat that up and they use that so [I] think that Theory U could be one of those tools about how [to] think about, how to create change.” (Interviewee 6).

Several interviewees shared their experiences of working with deep listening or the ‘four levels of listening’ with youth. Interviewee 10 shared how important this has been in their work, “Always, always, always the listening model, like the four listenings as a framework. This is something that comes first always...that is something that’s a gold tool for me.” Other tools that were mentioned were the prototyping part of the U framework based on design thinking. Other interviewees commented how they used mindfulness and ‘presencing’ exercises as well as ‘sensing journey’, ‘empathy walk’, ‘stakeholder interviews’ or dialogue walks. Also, ‘social presencing theatre’ and ‘case clinics’ were favoured tools when working with youth. When using the ‘case clinics’ method one stated from their experience: “…they would use the case clinic as a way to share their insights from also their expertise. It was always personal because that’s the point, right. To transfer the expertise through the personal story or through their personal insight.” (Interviewee 10). For explanations of these tools, see Appendix A.

3.5.3 Facilitator Role

One overarching theme that was mentioned was the importance or the capacities of the facilitator. Several shared about the importance of the youth being able to trust the facilitator. Of these interviewees who shared about the importance of trust, all of them work with youth. As one interviewee shared:

“the key there is relatedness and authenticity. So, people - or the participants - they can relate to the person standing in front. They [the facilitator] establish a level of trust, an atmosphere of trust and then if you ask them anybody can open their hearts and will and mind, anyways. It's about speaking their language, understanding their problems, framing it the right way.” (Interviewee 1).
This depicts trust, authenticity and speaking the language of youth. When working with young people, being able to relate to them is one of the most important skills a facilitator needs to have. Three interviewees shared that they had learned through their own experience that the facilitator needs to go through a ‘U process’ themselves in order to utilize it. Interviewee 4 shared: “I think that’s a key point that it’s not just implementing a method but really having to experience it myself and also have a connection to it and really can feel authentic and grounded facilitating it...”. As a facilitator several interviewees stated the importance of being self-aware and vulnerable in that role. Interviewee 12 shared from their experience as a facilitator: “we ourselves as facilitators were very open, very vulnerable - so it’s not Theory U, it’s also who uses it and how you yourself, how deep is the work you’ve been doing? How well do I know myself? So how much do I know about my own shadows, can I really be very vulnerable in front of 50 people and still stay strong and hold the space?”. Several interviewees stressed the importance of being able to hold the space. This allows participants to experience with both joy and fear because there is an atmosphere of safety and trust. Therefore, the facilitator needs to be self-aware and vulnerable. In an experience shared by Interviewee 5, participants felt safe and secure to open up: “...it’s not just Theory U as it is more like the whole environment, people talk a lot about how safe the space feels.” In addition, the importance to leaving space for what can emerge from a group and being able to adapt was mentioned by interviewees working with youth. As shared by Interviewee 4: “...being mindful that I'm not doing too much thinking, journaling, debates or discussion stuff after each other. [...] And how I'm working with the group's emotional body as well, how do we take care of each other after a very intense social presencing theatre session? Or how deep you go could depend on the group's wellbeing?” By the expression ‘deep’ the interviewee meant the level of intensity working with personal issues during the process. This way of adapting the process to the needs of the group and even letting the group shape the process was reflected by several interviewees and represents a theme on its own, described in the participatory approach (section 3.2.2) above.

Lastly, the interviewees acknowledged that in order to practice or exercise and hold the space for the participants to experience Theory U, the facilitator needs some experience in using it. For example, Interviewee 1 said: “the fact that it allows the flexibility, the down side of that is it’s not very clear what steps to take there. You can use certain methods but there are no steps like A, B, C, D which for some makes it a little scary or they don't know how to apply it so it's not something that you can use as a complete beginner in my view.” Theory U therefore was seen as an advanced tool for facilitators or practitioners. A facilitator already needs to have experience with participatory processes.

3.5.4 Experiential Learning

Even though many interviewees stated that they were not teaching Theory U to youth (see section 3.5.1 and 3.7.1), some interviewees were teaching and explaining Theory U to their youth participants. All of these interviewees highlighted the importance of using an experiential learning approach, letting the participants experience through concrete exercises. One example was described by Interviewee 12: “I usually have people experience it and sometimes I refer back to it, explaining things. I feel that Theory U is the only way to really bring across by having people experience what is meant by it.” Another interviewee used illusion to explain concepts like mental models that are used within Theory U. Illusions helped people to understand mental models: “Many people say ‘Oh, I know what a mental model is’ but they don't know it until they experientially feel it. They actually see ‘oh, my god, I thought that it was real but now I realize it was just an assumption on my part’.” (Interviewee 9). This shows how letting participants
experience theoretical concepts helps them understand and anchor the concept to a felt experience. Interviewee 10 shared a story of teaching the ‘four levels of listening’ to participants in their early twenties using an exercise to fully experience these levels of listening:

“And they could totally connect to what the listenings were. So they said: ‘Ah, so that was downloading, the listening with the head, right? And oh that was the empathic listening, now I get it’... the generative is when you are just present and then something comes out of this presence. In that case the poem for example. It was just so easy. It was so easy for them to experience that, to understand what that meant and they could connect it to their lives.” (Interviewee 10).

This interviewee mentioned that the only times that it did not work to teach Theory U to youth was when it was not done in an experiential way or when time was too short to do an exercise (see section 3.7.2). The following example shows what happened when the interviewee tried to explain Theory U without having the participants experience it beforehand or afterwards.

“So, I wanted to use Theory U without practicing it first and I tried and it was a total disaster. ‘Case clinic’ was terrible, it didn't work. People were totally in debate mode and not listening to each other whatsoever and there was no experience so therefore they could not relate their experience to a previous event and then they were just operating from the same place they operate.” (Interviewee 10)

The experiences of the interviewees showed that they used an experiential learning approach when communicating, or teaching Theory U to youth. When Theory U was used with youth, certain outcomes were observed and reported by the interviewees. These will be shown in the next section.

3.6 Theory U and Youth - Outcomes

In the previous section the results determined how Theory U was utilized by the interviewees. In this section, the outcomes of using Theory U with youth will be described. These outcomes will be indicated in subsections about a shift in awareness, personal development, and a stronger level of connectedness among the participants.

3.6.1 Shift in Awareness

One of the major outcomes of using Theory U is that one's own individual awareness is addressed within a systems perspective. This shift in awareness is due to a certain level of depth that is created during a ‘U process’. Interviewee 1 reports that Theory U, “does create an altered way of seeing the world or identifying with yourself or building trust. If you really go into the presencing mode, connect deeper with your source, not only your source, but also the source of others or your peer group that does change you, that does transform you.” (Interviewee 1). Again, ‘presencing’ as a state of being in the present moment is described. Doing this was described as a transformational effect for participants themselves and experienced in a group enhanced that experience. This transformational effect was described by many interviewees. What interviewees spoke about was a shift in the individuals awareness about themselves or the system they were engaging in. Some interviewees described this shift happening while working with Theory U as their participants were understanding their own role within the system. One interviewee (Interviewee 12) shared how this allowed their participants to take an active role in a change process and it was perceived as a powerful experience both
for the people as well as for the group. A shift in participants awareness was described by nine of thirteen people working with Theory U. One example was described by Interviewee 3, working with youth in Asia: “I don't know exactly what it was, but there was a huge shift for one of them. A huge shift in how she behaved and how she showed up, how she spoke. She just got so much deeper from that conversation on.” (Interviewee 3). A similar example of an experience working with youth in the Caribbean was given by Interviewee 2:

“She is the definition of a rebel. And the U process I think helped her to come to terms with herself, with that inner-energy in terms of how she could transform that drive, that capacity to do anything possible from a less-confrontational way into a more mature way, more convening way, a more inviting way. And I think the process was kind of an inner-journey to explore that possibility and somehow to realize that she’s called for better things for brighter things than only organized jams with kids and to make parties and things like that. That she was ready for more but she had to come to realize the need of letting go of that role and to be a little bit more... more serene, more calm, more strategic. And that was a very beautiful process. And that is, as I said before it’s an inner-journey. It's an inner-reflection that I was witnessing that I could see inside it was evolving and right now she is quite a character in her city.” (Interviewee 2)

These shifts in awareness within participants reported by the interviewees also relates strongly to the theme of personal development. The two examples shared by Interviewee 2 and Interviewee 3 of a shift in a participant’s awareness also indicates personal development of participants, which will be described in the following section.

3.6.2 Personal Development

Personal development was a big theme that came up with eleven of thirteen interviewees working with Theory U. The interviewees reported both personal experiences with Theory U and the ‘U process’ as well as having observed it with their participants. One interviewee described this personal development as an “incredibly rewarding journey.” (Interviewee 1). This highlights the personal development that an interviewee experienced through Theory U. While working with Theory U in a group of adults one interviewee shared the experience of having regular coaching circles using the ‘case clinics’ tool from Theory U: “And it was incredibly powerful and it helped shift every person of the group, their lives into more positive direction or helped answer questions that [were] inexplicable. The answers came and you couldn't say why or how they came but they did. It was magical.” (Interviewee 14). Two interviewees described realizing the potential in one’s own body and self through Theory U. “I think it means people have realized that there is an intelligence in their body that they perhaps, beforehand had not realized was there...so we are all been so locked in our heads for so long.” (Interviewee 14). Summarizing this section, it can be said that Theory U was helping adults and young adults to develop their personality. However, personal development of the participants was observed, both with adults and youth (Interviewee 3, Interviewee 9, Interviewee 10, Interviewee 2, Interviewee 14). Examples of this personal development especially with youth were already mentioned in the section above talking about the shift in awareness. One of these examples was depicted by Interviewee 2, talking about a girl that developed from a rebel into a change agent:
“She is the definition of a rebel. And the U process I think helped her to come to terms with herself, with that inner-energy in terms of how she could transform that drive, that capacity to do anything possible from a less-confrontational way into a more mature way, more convening way, a more inviting way. [...] It’s an inner-reflection that I was witnessing that I could see inside it was evolving and right now she is quite a character in her city.” (Interviewee 2).

This example depicts both the shift in participants awareness which then included personal development at the same time. Another example was mentioned by Interviewee 3 within a process with young people in Asia were a ‘U process’ including ‘social presencing theatre’ was used.

“They sat together and one of the girls started to share what was going on with her and they started this super deep conversation. I had no idea what they were talking about, but I could just sense that there was something important happening there. [...] I don't know exactly what it was, but there was a huge shift for one of them. A huge shift in how she behaved and how she showed up, how she spoke. She just got so much deeper from that conversation on.” (Interviewee 3).

This example depicts a similar personal development of a participant which resulted from a ‘deep’ conversation. Using the word deep in that context related to an intense or important conversation about issues related to the participants personality. Another example was shared by interviewee 10. In the first example after explaining the ‘four levels of listening’ to a group of young entrepreneurs in the beginning of their twenties, this process led them to discovering new sides of their personalities. “And then one wrote some lines, one wrote like a poem, another one just some words and then they shared these. And the reactions were one of the guys, like the most kind of strong guy, he ended up crying.” (Interviewee 10). For this young man it was about showing himself as vulnerable for one of the first times.

Another thread of personal development in Theory U particularly related to youth is the notion of empowerment. This links back to the need for empowerment stated in section 3.1.4, whereas this section describes empowerment as a result of Theory U. Interviewee 2 described that, “the way the [U] process works empowers the people, it's not like you're a participant that is run by someone else, but you are the one who is in charge. It's amazing, that's really empowerment.” Empowerment was described as to “activate the potential of young people.” (Interviewee 5). Interviewee 2 described what exactly happened when young people went through a ‘U process’, “That they [youth] realize they have potential. That they can do... I mean that they are not victims of their circumstances. That they can do much better, that they can aim higher. I think that is a very strong way to awake leadership and a sense of agency.” Several interviewees talked about how they create conditions in their programs or when working with young people in order to develop skills and competence to take action. As an important element of Theory U prototyping was mentioned by several interviewees working with youth as helping participants to take action (Interviewee 10).

### 3.6.3 Connectedness

Several interviewees stated that Theory U brings connectedness in the form of connections between different stakeholders, social bond in a group, connection to nature, and to people’s own self. This was stated both with youth and with adult participants. In particular, seven interviewees stated that Theory U gives the opportunity to bring different stakeholders together,
youth being one of them. One example for that was given by Interviewee 3. After sending young people out on a ‘sensing journey’ to talk to different stakeholders, they invited all the stakeholders to a meeting, using the “world café” method. During that meeting they discovered that every stakeholder cared about health and they had an open dialogue regardless of the informal and formal hierarchies related to different ages and role in society. “For the first time they are actually having an authentic open heart conversation about something that they all care about and they [are] all concerned about [...] The energy that was there was amazing [...]” (Interviewee 3).

Additionally, Theory U connects people on a more personal level. Several interviewees mentioned seeing a deeper connection that happened during a ‘U process’. Interviewee 14 described this connection as “a quality of togetherness to the group. When you have done that really deep sharing like in a case clinic and you’ve really given of yourself and you have been around the group and everybody has done it, it brings a deep bond that is deeper than what normal social engagement is about. Much deeper.” These participants, both youth and adults, could connect more to themselves, which went hand-in-hand with connection within the group. One interviewee described this as a transformative experience: “So this is a way of also transforming the group and that transforms the people, having people understand more... or connecting more deeply with oneself and others.” (Interviewee 1). This interviewee adds from his own experience: “When you go through that process together it bonds people and many people that I meet now after 7 years when I was first exposed to that or later, there is a bond that you don't have with people you might have spent four years in school together.” (Interviewee 1). That highlights how a ‘U process’ creates a level of connection that is usually not created in formal education.

3.7 Theory U - Challenges

Even though Theory U is a useful tool as shared in the outcomes of using Theory U with youth in the last section, it was also indicated in the results that Theory U has some challenges. This section depicts the challenges with Theory U that were experienced by the interviewees both with adult and youth participants. The challenges that will be covered in the subsections include Theory U terminology, having enough time, Theory U as a practice, and the willingness to openness and depth from participants.

3.7.1 Theory U Terminology

Several interviewees who use Theory U mentioned that Theory U is vague, abstract and can be hard to grasp for participants. Especially one interviewee, who works with youth and sustainability said Theory U is appealing but cannot be understood in 15 minutes. That was described as the reason not to use Theory U. Interviewee 3 said that “I think this kind of knowledge that can be a bit overwhelming and scary”. Another interviewee said that “One of the main struggle[s] with Theory U is [that it is] theoretical, abstract” (Interviewee 5). Therefore, most of the interviewees using Theory U with youth do not teach it, but rather apply it in their process design as mentioned in section 3.5.1. Most of the interviewees who work with Theory U, sustainability, and youth mentioned that they do not explicitly teach Theory U, rather they use it as a framework or design for creating programs or workshops. “So, we don't explicitly teach it but we use it as a framework for ourselves in the way we prepare.” (Interviewee 1). When some of the interviewees described their feelings, they conveyed that if they try to teach or describe it more, people would be more confused, and they would not be
able to follow (Interviewee 15, Interviewee 3). One of them said that, “I don't think that [lecturing about Theory U] would be the most productive way to get to young people” (Interviewee 5). Moreover, the language and terminology that Theory U uses can sometimes be hard to grasp for those who are not very familiar with it before. One interviewee shared their experience while using Theory U language, “my experience is that anyone who is very good with concepts is like ‘this is great’ and anyone who is not at all who is very much practical is like ‘I can't relate to a word he [Otto Scharmer] is saying’” (Interviewee 5). One particular point that showed up from the data was being aware of the use of Theory U terminology and adapting the language to the group they are working with. One interviewee shared: “I also found that it was easier for people when I was not using wording that felt too airy. You know like source or... Things people may not have heard before especially youth. So, I would use ‘Okay, now we’re gonna see what is inside this’ I would use metaphors of what is under this. I think those are things that are helpful.” (Interviewee 10). This was mentioned by several interviewees that Theory U helps if one knows the specific terminology, but for participants it has to be translated. Also, Interviewee 1 referred to this effort that has to be done, “So, it's just about the language that you use, the translation work, in German you call it "Übersetzungsarbeit". That just needs to happen and then you need to dose it in a way that the group feels comfortable in doing that.” The interviewee highlights that the terminology of Theory U needs to be adjusted to the group.

3.7.2 Time

As a precondition, several interviewees highlighted that one of the key things that is also needed to implement Theory U is time. Interviewee 5 suggested that theoretical information can make people uncomfortable especially when there is not enough time to properly explain it. Adding to that, Interviewee 10 talked about several experiences when a process did not work when trying to deliver too much content in a short amount of time using Theory U. “And we wanted to squish a lot into one single session like we invited them to sing in the beginning then to do a little listening exercise and then to move into a very quick sensing journey and it was just like woah, they left the session kind of like: ‘woah, what is all of this?’ And I think you cannot rush. It was not a failure just one thing to do too much in too little time.” (Interviewee 10). This also links back to the difficulty of explaining Theory U. This is especially the case when not enough time is allocated to explain it properly. Another interviewee talked about the main challenges in the work with Theory U and sustainability was that it takes time and therefore is expensive (Interviewee 11).

3.7.3 Theory U as Practice

In addition to what was mentioned in the paragraph above about time, several interviewees shared their perception of Theory U being a practice rather than just a theory. “That’s it, it's not a theory it's not just a framework, it's a practice put into a framework to be comprehensive.” (Interviewee 10). This clearly describes most interviewees perception of Theory U being a practice instead of just a theory that one can consume only cognitively. Theory U was rather perceived as needed to be embodied. Interviewee 3 stated that, “I think there is a danger there, in making it [Theory U] to intellectual. If you are not practicing the practice, if you're not meditating, not journaling, not doing all the stuff, all those tools that should be coming with the knowledge, it can be even dangerous I think.” The interviewee relates this comment especially to the fact that one has to be authentic in using it. From that interviewee’s experience there were a lot of people especially in China that talk about Theory U but do not actually experience mindfulness and other aspects of Theory U. This is where the danger was referred to.
Authenticity only comes with practicing and embedding Theory U in more than a cognitive level. Related to that, several interviewees mentioned that it's about living by example instead of preaching a theory (Interviewee 14).

### 3.7.4 Openness and Depth

Another challenge that was mentioned by several interviewees is related to the fact that the ‘U process’ can be intense as people are confronted with their own beliefs. The interviewees called this intense confrontation ‘going deep’, which can be related to the ‘iceberg-model’. One must dive deep into cold water to reach the hidden systemic disconnects and mental models that need to be addressed. One key element mentioned by the interviewees was the participants’ willingness to be open and allow themselves to ‘go deep’, in order to experience the ‘U process’. One story that was shared by Interviewee 12 during a process based on Theory U involved one participant, a local fisherman, who was very closed and reserved in the beginning of the process. At one point he opened up and engaged actively in the process, which is described in more detail below:

“We asked all the tables to listen from a certain stakeholder perspective and to speak with their voice. At the fisherman's table there were only people who were not fishermen, but they were really expressing in a deep way what they felt the fishermen would have answered or what their response would be to the presentation. And this fisherman frontman again felt so heard I could see his physical reaction, his whole body changed and later that meeting he stood up and said "Well, I think this might be the place I'm going to work to create my own future, given the fact that there is a lot of wind power coming" [...] it was a very powerful step so it's a personal transformation given in the context of working on a bigger issue that really matters to people and that's the power of Theory U I think. I mean it's not necessarily Theory U, it's the power of getting the human into the -- that it matters who you are when you work on a systems issue.” (Interviewee 12)

This is an example of the effect of someone’s willingness and openness to go through the ‘U process.’ Interviewee 13 describes a reason for some people’s resistance in a very colloquial way: “I would say because shit hits the fan in this change work. [...] It's not easy stuff.” This relates to the work of systems change with Theory U where participants are confronted with their own mental models and beliefs about the system. Connected to that another interviewee mentioned the importance of the willingness, “there needs to be a real willingness to take a step and really connect to this thing and really ask myself the difficult questions.” (Interviewee 5). The willingness to engage with the ‘U process’ was perceived by the interviewees as a precondition for a successful ‘U process’.
4 Discussion

4.1 Framing of the Discussion

The results of this research were shown in chapter 3 which contained seven themes. The first two themes looked at how sustainability can be approached with youth and which challenges this might include. The third and fourth theme described positive characteristics of youth and also challenges related to the specific developmental stage of youth. The last three themes showed how the interviewees used Theory U in a youth context, as well as the outcomes and challenges of using Theory U with youth and adults.

In this chapter, the results of the research will be discussed. In section 4.2 the findings will be critically assessed and then related back to the two frameworks the FSSD and Theory U. Additional literature will be used to discuss the results as needed. This will help to answer the research question in the conclusion: In what ways does Theory U support sustainability practitioners to equip the next generation of sustainability leaders? It is important to mention that many of the subsections under section 4.2 relate to one another. In section 4.3 the implications of the findings will be named both for the FSSD and Theory U in order to help further develop both of these frameworks especially when working with youth. In the last section 4.4, recommendations will be given based on the research both for further research and also for practitioners. Section 4.4.2 will especially address the role of the sustainability practitioner when using Theory U with youth.

4.2 Critical Assessment of the Findings

The global challenge of sustainability is complex. However, going back to the question from Broman and Robért (2018) about having enough leaders in time is an important question that shows the urgency to prepare sustainability leaders. One question that is being asked in this research is: Why not start at an earlier age? Youth have the potential to be exceptional leaders through positive youth development, opportunities, and experiences (Kress 2006). However, as these young leaders are facing their future there are some challenges that emerged in the research as they approach the challenges of sustainability. In order to approach the complexity of the current challenges, leaders are needed who are aware of themselves and the consequences of their decisions. This section will discuss the findings of this research in order to help in answering the questions of how Theory U can support sustainability practitioners to equip youth as the next generation of sustainability leaders.

4.2.1 Systems Thinking and Youth

One of the key challenges with sustainability is that it is overwhelming due to its complexity. Systems thinking can help to understand the overall complexity of sustainability. One of the findings of this research highlights the importance of systems thinking when it comes to engaging youth with sustainability. The interviewees also attributed youth to have a natural capacity to think in a systemic way, seeing the world as an interconnected whole rather than separated parts (Interviewee 12). Therefore, an important starting point when addressing the sustainability challenge with youth is to understand the underlying complexity. Sayal et al. (2016) found that understanding the root causes and the interplay of different social, political and economic factors of climate change increased young people’s understanding of the
necessary solutions as well as the need to take action themselves. Also, Interviewee 6 stated it is necessary to help young people understand the overall complexity of sustainability rather than simplifying or reducing issues like climate change. Both the FSSD and Theory U take a systems thinking approach and try to address the root causes of the current sustainability issues with an understanding of the overall system in mind. Even though the FSSD was not the main subject of this research, it may help sustainability practitioners to address sustainability with youth by depicting the sustainability challenge in a very comprehensive way.

The findings showed that youth tend to feel disconnected from these issues (Interviewee 6). This issue was also seen and addressed by the YLEC program. Especially for countries like Germany, Canada and USA the consequences of, for example, climate change is not directly affecting young people’s daily lives. Therefore, in the YLEC program one key element of the program design is systems thinking (Riemer et al. 2016). Through connecting participants with people that are affected by climate change, youth were engaged both on a cognitive and on an emotional level (Sayal et al. 2016). Also, the participating students were encouraged to personally reflect on their learnings around climate change in other countries through journaling, facilitated discussions and exercises (Hickman, Riemer and the YLEC Collaborative 2016). This led the youth participants to have an “increased likelihood of engaging in environmental action.” (Sayal et al. 2016, 199). This way of approaching systems thinking is very similar to the systems thinking approach Theory U uses.

Theory U is based on a systems thinking approach that aims at addressing the underlying root causes of the current unsustainable state of society and the biosphere. The ‘U process’ provides a process where people are engaged both cognitively and emotionally with an issue. Furthermore, a personal connection to the issue is enabled by giving participants time to reflect on it. These moments of retreat and reflection help participants to connect to the topic on a personal level and relate it to their own life. In order to bring the issue on that personal level, Theory U asks the questions “Who is my Self? and What is my Work?” (Ray in Scharmer 2009, 162). Scharmer (2018b, XIV) calls this “bending the beam of observation back onto the observer”. In other words, it means including the individual as an inherent part of the system. Participants realize that they are part of the problem itself because they hold the same beliefs or mindset that created the problem. As Adam Kahane (2000, 89), one of the co-founders of Theory U, stated: “If you’re not part of the problem, you can’t be part of the solution”. Thereby, practitioners can give their participants an understanding of the sustainability challenge and even a sense of urgency may be created. This looking back at oneself involves the participants ‘will’. The ‘will’ describes a person's willpower or willingness to act, it empowers people to actively make the decision whether to act upon it or not. Realizing their own involvement in an issue allows a shift in awareness from just observing an issue to engaging with the issue. The ‘U process’ guides people from understanding the issue on a cognitive level (cognitive engagement) over establishing an empathic connection to the issue (emotional engagement) to realizing one’s own involvement in the issue (engaging people’s ‘will’). This last step is creating the shift from observing the issue to be an active participant in the issue and therefore being able to take action. This describes a strong systems thinking approach, not only understanding the external system but also the personal involvement in the issue and therefore enabling the individual to take action according to their values. “The essence of systems thinking is to help people close the feedback loop between the enactment of systems on a behavioral level and its source on the level of awareness and thought.” (Scharmer 2018b, 63). Scharmer thereby describes the necessity of involving people’s own awareness as an inherent part of the system.
The strong systems thinking approach taken by Theory U results in a shift in people’s awareness. This can be linked to the leverage points in systems change and sustainability (Abson et al. 2017; Meadows 2010). Meadows (2010; 2009) rated these leverage points from their effectiveness of creating change within systems. The leverage points with the highest potential to create effective change within a system are ‘shifting the mindset or paradigm’ on which the system is based (second best leverage point) and the ‘power to transcend paradigms’ (the best leverage point). Meadows emphasizes that these underlying mindsets or paradigms are the hardest to change and it happens only rarely. But when it happens, it has a way higher impact than other leverage points (Meadows 2010). The shift in awareness that interviewees described happening with their participants is such a paradigm shift. The participants saw themselves or the system in a new way. Some of them just on a personal level like the young girl in the Caribbean that developed from a rebel into a changemaker (Interviewee 2) or within a process like the fisherman seeing himself as part of the system (Interviewee 12). Theory U aims for creating this shift in people’s awareness with a strong systems thinking approach and therefore addresses the best leverage points (Scharmer 2018b; Meadows 2010). This research showed that this happened with the interviewees participants, not only with adults but also with youth. This indicated that the systems thinking approach of Theory U can be a highly useful approach to take with young people as it not only gives them an understanding of the system but meanwhile allows for a shift in their awareness to happen.

In the results of this research the shift in young people’s awareness and their personal development were strongly interlinked. The connection between Theory U and personal development will be discussed in the next section. The findings of this research indicated that the shift in young people’s awareness of their personal development was strongly connected.

4.2.2 Theory U used for Personal Development with Youth

Many of the challenges of young people that was identified in the research called for personal development of youth. This came up especially with the youth who engaged with sustainability issues and were overwhelmed by the magnitude of the challenge. That led young people to overwork, even to the point of burnout (Interviewee 5; Interviewee 12). Therefore Savage et al. (2015) highlight the importance of personal development especially for students and young professionals that are involved with sustainability. Another finding of this research is that youth are highly motivated and have a high level of energy. In order to channel this energy, they need to develop their values and find out what they want to achieve in the world. A key characteristic of youth is that they are in a formative stage of their life. The transition phase between childhood and adulthood is characterized by physical, emotional, social and cognitive changes, as young people form their identity (Arnold 2017). As Arnold (2017) states during this formative stage, youth ask the question “Who am I?” (Arnold 2017, 1). This point is a crucial moment in an individual’s life, as the values and mindset that are formed at this stage may last a lifetime (Riemer, Lynes and Hickman 2014). Furthermore, the interviewees reported youth having a high level of energy and motivation, but it is scattered and unfocused (Interviewee 4). In order to align this unfocused energy, young people need a goal to focus on that connects with their personal values. “Identity formation is arguably the most important outcome for youth programs across the adolescent years.” (Arnold 2017, 12). Creating engagements with young people therefore need some kind of personal or self-development.
One of the findings of this research is that Theory U can serve as a tool for personal development, not only with adults but also with youth. The results showed that the majority of the people working with Theory U see it as a tool for personal development. Using Theory U in a context of youth is therefore suggested to foster personal development of youth. One of the cornerstones of Theory U is mindfulness, including retreat, reflection and reflective journaling (Scharmer 2018b). Mindfulness can be described as a “mental training technique that promotes awareness and a more mindful way of living.” (Ericson, Kjønstad, and Barstad 2014, 74). For young people engaged in sustainability, Theory U offers the opportunity to gain a better understanding of themselves while staying engaged. Knowing themselves more is also connected to understanding others better (Böckler et al. 2017) and will therefore enhance their capacities as young leaders. For young people knowing themselves and their own strengths and capacities might also decrease the danger of being overwhelmed by the magnitude of the challenge and “being fed up with [sustainability]” (Interviewee 4) and rather maintaining their engagement on a healthy level. Also, youth having unfocused energy resulted from the interviews as there seemingly is a need to channel these energies in a constructive way. A question that might be helpful to guide young people’s motivation and energies is asked by Theory U: “Who is my Self? and What is my Work?” (Ray in Scharmer 2009, 162). These questions are also the question youth are asking themselves at this stage of life (Arnold 2017). Therefore, it seems that Theory U is suited for youth at their particular stage of life. Yet Theory U is not a classical tool for self-development. The power of Theory U lies in including personal development within its framework to create necessary change for a more sustainable future. Having personal development in a context of transforming society towards a more sustainable direction holds great potential. When youth develop their values around sustainability, these values may become an inherent part of their mind set. A precondition for this integration into one’s own values is to fully understand sustainability. In order for young people to understand sustainability in a nuanced way the FSSD and especially the eight SP’s can be of great help. By using the systems thinking approach of Theory U described above, youth can integrate their personality in the understanding of the system itself. This can set young people up to take decisions and choose a direction of their lives that already leads in a more sustainable direction. If these young people start their professional lives in that way this might enable a kind of leadership that has not existed before. Therefore, Theory U offers a potential for youth and sustainability that does not seem to be fully utilized yet.

4.2.3 Theory U Creates Connectedness for Youth

While the current challenges humanity is facing call for a new kind of leadership, these challenges cannot be solved alone. As the sustainability challenge is overwhelming, especially when it is understood in its inherent complexity, different stakeholders need to work together. As Interviewee 11 said, “It is impossible to do it on your own”. The findings of this research show that a social context and being surrounded by their peers is important for youth. Looking at the lives of young environmental leaders, Arnold, Cohen and Warner (2009) describe that one important factor of these young leaders were their friends and peers. These findings suggest that two levels of connection are needed. The first is the professional level, people need to work together in order to collaboratively create solutions, especially in complex issues like sustainability. The second dimension is the personal connections that are needed especially for youth by being surrounded by friends and like-minded peers. Montague and Eiroa-Orosa (2018) state that having strong personal connections is also strongly connected to psychological well-being. Therefore, this research also suggests that youth need a social context and a peer group that is engaged (Interviewee 6).
The ‘U process’ offers a collaborative process, bringing the relevant stakeholders together in order to find more sustainable and innovative solutions. The nature of this process is to facilitate participants into a deeper understanding of the situation and asking not only for the symptoms, but also analysing the underlying systemic disconnects and mental models (Scharmer 2009). This differentiates the ‘U process’ from other participatory processes. As this process is already used with adults, such an approach can also help young people not only address an issue collaboratively, but also connect with others on a more personal level as well as connecting to their own self. The results of this research showed that interviewees and their participants experienced this connecting process because of a level of ‘depth’ the ‘U process’ provided. This depth is created by looking at the underlying structures, patterns, and beliefs of a problem and how the individual may be involved. The interviewees described this as an extraordinary experience where people’s awareness of the problem shifted to a different perception. Experiencing this in a group setting created a strong bond within the group (Interviewee 1, Interviewee 14). One of the intents of Theory U is to bridge the ‘three divides’ in society, the ecological, the social, and the spiritual-cultural divide. The result of that is what Hüther and Spannbauer (2012) call connectedness. This can be described as an underlying understanding that the world is not an accumulation of separated parts but a living network including interrelated connections (Hüther and Spannbauer 2012). To summarize, Theory U creates not only a co-creative process to solve urgent issues, but this process also connects people in a profound way. As Interviewee 1 stated, this strong bond lasts long and connects people on a deeper level. Thus, it is important for youth, especially when being involved in sustainability.

4.2.4 Youth Empowerment

As young people are concerned about the current situation of the planet, the challenge they are facing is that their voice is heard but only on a superficial level (UNPY 2010). This leads youth to be disengaged and disempowered as their contribution does not seem to be valued (UN 2016). One of the challenges that was mentioned previously is that youth need to feel empowered to engage with sustainability. Dittmer et al. (2018) and Riemer, Dittmer and the YLEC Collaborative (2016) state it is important to build action competence with youth in order to help them collectively take action towards a more sustainable future. This action competence is described by Jensen and Schnack (2006) as making “present and future citizens capable of acting on a societal as well as a personal level.” (Jensen and Schnack 2006, 472). The interviewees in this research stated that it was an important piece of their work to empower youth to take action in their context.

Theory U can help to empower youth in two ways. First, this research suggests that the ‘U process’ is an empowering process itself and can be perceived in a way to empower participants to make them realize that they can do something (Interviewee 2). This necessity of educating youth as active citizens to take action was also stated by Hickman, Riemer and the YLEC Collaborative (2016). The ‘U process’ seems to act as a catalyst for empowerment. One of the reasons for that might be the use of ‘prototyping’ based on Brown and Kelley (Scharmer 2018b; Kelly 2010). The approach of prototyping used by Theory U is based on the principle of acting immediately and trying new solutions (Scharmer 2009). Participants first build a prototype and test it to get immediate feedback to build the next prototype. This iterative approach allows for quick and innovative acting, including multiple loops of building a prototype, asking for feedback and integrating this feedback into the new prototype. Many interviewees mentioned that they used prototyping with youth. As prototyping is a very playful and explorative approach (Kelley 2010) it is especially applicable for youth. This also matches with the need for a playful
approach using games and creative activities to involve youth with sustainability. Therefore, a prototyping approach seems to be particularly suitable for young people. Acting quick in order to get direct feedback might help remove barriers like a fear of failure and strengthen young people's competence to take action towards their values and their desired future.

4.2.5 Positive Approach to Sustainability with Youth

When sustainability is communicated it is oftentimes negative and depressing. Climate messages of disaster, destruction, uncertainty, high costs, and sacrifices have dominated for decades (Stoknes 2015). These messages can be depressing and add to the feeling of being overwhelmed when looking at sustainability issues. The results showed that sustainability practitioners working with youth also saw how this negative approach affected youth as well. Instead of focusing on the problems, the interviewees saw an opportunity to take a different, more positive approach. By taking a “positive opportunity framing” (Stoknes 2015, 119) to sustainability it is more likely to reach people than focusing only on the problems. The interviewees working with youth and sustainability all focused on a positive and proactive approach. Interviewee 6 and Interviewee 7 both highlighted the importance of taking this positive approach to sustainability with youth which makes them feel good and doing something meaningful. In order to address sustainability in a positive way with youth the FSSD could be helpful to use. The ABCD process is based on backcasting from a positive vision of success framed by the eight SP’s. The A-step of the ABCD process might be particularly suitable to use with a youth audience. This is because it seems to be a useful approach as it would help young people to get a better understanding of the system and then would allow them to create a positive vision for the future. Theory U also focuses on creating a positive and innovative solution for an issue, however, the FSSD can complement Theory U at this stage. In the first phase (co-initiating) of the ‘U process’ (fig. 1.4.) the framing of a common vision could be useful. This vision process can be based on the FSSD, particularly on the A-step of the ABCD process which tries to gain an understanding of the system and crafting a positive vision of a desired future framed by the eight SP’s. This combined within the ‘U process’ might help sustainability practitioners take a positive approach to sustainability which is needed when working with youth.

Another element of the Theory U framework is mindfulness (Scharmer 2018b). Ericson, Kjønstad, and Barstad (2014) concluded from their research on mindfulness and sustainability that mindfulness enhances people’s well-being while promoting a more sustainable ways of life. By including mindfulness Theory U offers both these positive outcomes not only to youth but also to adults. As mentioned above, Theory U also offers personal development to both youth and adult participants. Personal development and developing leadership skills and capacities may foster personal well-being as it gives people new opportunities for self-actualization. Therefore, Theory U takes a positive approach framed around opportunities by involving mindfulness and enhancing one’s leadership skills and capacities through personal development.

4.2.6 Challenges of Theory U and Youth

Most of the interviewees that used Theory U with youth did not teach Theory U but instead used it as a flexible framework to design their processes with youth. The ‘U process’ was suitable for practitioners because they could use it as an overall design frame by bringing in different tools and exercises depending on the context. Yet the reason why most interviewees did not teach Theory U to young people is because it is a very abstract concept. Theory U
introduces specific terms like ‘presencing’, ‘eco-system-awareness’ or ‘blind spot of leadership’ in order to create a new language for systems change work (Scharmer 2018b). However, this language and also the framework is abstract and therefore hard to grasp especially for people that are not familiar with Theory U. Therefore, it is important to be able to speak the language of the participants in order to not overwhelm them with abstract terms (Interviewee 1). Yet, if the interviewees did teach elements of Theory U to youth, they used an experiential learning approach. Experiential learning describes an approach of learning by doing and through experience (Kolb 2015). One positive example from this research was given by Interviewee 10, when teaching the ‘four levels of listening’ to youth. This interviewee shared a failure when trying to teach Theory U without including an exercise for the participants to practice. Interviewee 9 taught Theory U in different contexts with youth using illusions to show the functions of mental models. After the illusion was revealed they realized their own mental model that prevented them from realizing it in the first place. This research suggests that, if taught in an experiential way, it is possible to teach an abstract framework like Theory U to young people. Even if an experiential learning approach is used, the challenge of the Theory U being abstract remains. Therefore, this research suggests that Theory U is suitable for youth to be experienced rather than to be lectured (Interviewee 5). Theory U can be used by practitioners, but when it comes to teaching this has to be done with care as it might overwhelm or confuse the participants. Even though Theory U provides a comprehensive toolbox to be used both on an individual and a collective level, it is suggested that this toolbox may not be applicable to use for young people unless it is brought to them in an experiential way. This puts an emphasis on the role of the facilitator when working with youth and sustainability.

Another finding in the research was that in order to interact with Theory U the participants have to be willing to engage in the ‘U process’. This can be due to the fact that the ‘U process’ challenges the mental models and beliefs of participants as well as involves mindfulness and embodied exercises like social presencing theatre. Another challenge is described by Scharmer (2018b) at the bottom of the ‘U process’, the ‘presencing-phase’. There are two conditions to really get to this point and the see the highest future potential. The first is that people need to fully embrace themselves including their own fears and judgments about themselves. The second is that people have to be willing “to let go of fear—and take the leap into the unknown.” (Scharmer 2018b, 114). This might feel uncomfortable and even scary for some people and therefore taking this leap into the unknown is a conscious decision.

Yet there are two major challenges with Theory U that count for both youth and adults: One is that people have to be willing to go through the whole ‘U process’ and the second is, Theory U is an abstract and vague concept. Still, this research suggests that youth hold certain characteristics that make them particularly receptive to Theory U. These characteristics are their willingness to change and challenge the status quo (Hickman, Riemer and the YLEC Collaborative 2016; Riemer, Lynes and Hickman 2014; Blythe and Harré 2012) and their willingness to be open. Also contributing to this is their developmental stage as young people are in a formative stage of their lives and building their identity. In this identity formation phase young people can be particularly open (Arnold 2017). This openness of young people promises to make them more receptive and willing to engage in a process like the ‘U process’. Regarding the second challenge youth might be receptive to the new language that Theory U offers. This is also because of the above described openness. Still translation from the facilitator might be needed.
There are some significant challenges with applying an abstract framework like Theory U with youth, this might explain why this has not yet shown in research. However, there seems to be a lot of potential in using Theory U with a youth audience. Theory U might help to cultivate leadership skills and capacities that are needed to address sustainability now and in the future. As it is not a self-explanatory framework for youth, the role of the sustainability practitioner or facilitator is of crucial importance. This will be described in more detail in the next section.

4.2.7 Role of the Facilitator

From the sections above it can be concluded that there lies a strong potential for youth in using Theory U. Not only does Theory U offer a unique approach to systems thinking that youth can see themselves as a part of the system, this also offers personal development of young people at the same time. Therefore, Theory U offers two things within one framework: first, young people are involved in sustainability and second, young people can develop important leadership skills that are needed in order to become effective change agents. The ‘U process’ provides a process that connects young people and gives them encouragement as they are part of a peer group. By going through that process together it will build a sense of connectedness that can serve them not only personally but also in moving forward. Through the ‘U process’ and in particular the prototyping part, Theory U offers two things: First it may build action competence and second it empowers young people. Even though Theory U offers many benefits, there are also challenges with Theory U and youth. This is that the framework is abstract and even for adults hard to grasp. Also, young people have to be willing to go through that profound personal process.

In order to help young people in going through that process the role of the facilitator is of crucial importance. The facilitator has to be able to hold space for the ‘U process’. This is suggested both by the interviewees as well as by Scharmer (2018b). Another important thread is that the facilitator needs to be able to create an atmosphere of trust. This is connected to the first argument of holding space. People need to be able to trust the facilitator in order to open up and allow themselves to go through a ‘U process’ (Interviewee 1). One component for that is to be vulnerable in the first place to allow the participants to be vulnerable. As mentioned before in the ‘U process’ one has to be willing to let go of their fear and be willing to go into the unknown (Scharmer 2018b). This was also highlighted by Interviewee 12. In addition, the facilitator needs to be aware of the young people and able to translate the Theory U terminology into a language that is easily understood so youth can relate to it (Interviewee 1, Interviewee 10). Another characteristic of the facilitator that was mentioned by the interviewees working with youth was authenticity. Baan, Long and Pearlman (2011) conclude that authenticity and getting closer to one’s authentic self is key to lead and facilitate engagement processes. This may count in a similar manner when working with youth. When the facilitator is authentic and young people can relate to the facilitator, they are more open to experiment and trust the process (Interviewee 1). One finding of this research is also that Theory U is a practice rather than a theory. That means that the facilitator has to practice the tools and processes rather than just teaching it. Baan, Long and Pearlman (2011) also suggest that one authentic condition of developing leadership capacities is that leaders need a combination of personal and collective practices. Theory U could be one such practice. This also links back to authenticity and experiential learning as the facilitator has to know the practice when bring participants through the process. It is necessary that the facilitator has gone through a ‘U process’ before and knows the experience, otherwise it will not be possible to create the experience for the participants, in this case youth. Another characteristic of the ‘U process’ that the facilitator has
to take into account is that it takes time. On the contrast, if this time is not accounted for and too much is done in too little time, participants will feel overwhelmed and the process will not reach its desired outcome (Interviewee I0). To conclude, there are certain requirements for the facilitator or sustainability practitioner when working with youth.

The practitioner has to...

1. … create a safe holding space by creating an atmosphere of trust.
2. … be vulnerable in order to allow the participants to be vulnerable.
3. … speak the language of youth and translate Theory U specific terminology to youth.
4. … be authentic.
5. … practice Theory U actively in order to lead participants through the experience.
6. … be sure to take enough time for the ‘U process’.

4.3 Implications of the Findings for FSSD and Theory U

Two frameworks, the FSSD and Theory U, informed this research from the beginning. This research mainly focused on understanding how Theory U can be used in a context of sustainability and youth. Although the FSSD was not a subject of this research, there are important findings to discuss using the FSSD. In addition, there are insights for how the FSSD can complement Theory U and vice versa.

As the section above points out, Theory U can contribute to some challenges regarding youth and sustainability. While Theory U and the FSSD are both based on a systems perspective, they may equally be appropriate to approach the complexity of the sustainability challenge with youth. When looking at these two frameworks together, there is yet one important advantage of Theory U. As Theory U aims to close the feedback loop between the external system and the observers own awareness, it aims to bring the systems perspective down to a more personal level. During the ‘U process’ this can be done with the ‘presencing’ phase at the bottom of the U. This phase is characterized by stillness, retreat and reflection. The participants are led to reflect on the issue that is being addressed. This allows the participants to realize their own role and involvement in the issue and creates the possibility for a shift in awareness as it has been described previously. The result is that the participants of the ‘U process’ see the issue and/or themselves from a different perspective than before as ‘presencing’ allows for more innovative solutions to emerge. A step for the FSSD to incorporate this awareness would be to consciously allocate enough time in order to lead participants through a personal reflection within the ABCD process. This could help them to see their involvement in the issue addressed and therefore, could be a beneficial step for the FSSD in further developing its systems thinking approach.

While Theory U can offer to extend the systems thinking approach of the FSSD, the latter can support Theory U with a more rigorous definition and understanding of sustainability. Theory U explains the challenges humanity is facing right now by using the ‘iceberg model’ and the 'three divides' which provides an understanding of the sustainability systemic challenges. The funnel metaphor from the FSSD gives another comprehensive image for the overall challenge in order to complement Theory U and depict the challenge in a comprehensive way. This could be of importance to illustrate the urgency of the challenge, especially on the cognitive level. The funnel metaphor may also give youth a comprehensive metaphor on why it is important and inevitable to move towards sustainability. Also, the 'iceberg model' and the 'three divides' do not provide any guidance on how the solutions should look in order to fulfil the criteria of
being sustainable, but rather show what is not working. For this the eight SP’s may be useful as they define sustainability both in a clear and rigorous way.

The positive approach that can be offered by Theory U is based on creating innovative solutions by using prototyping while developing personal leadership capacities. As it is suggested that young people need a positive approach towards sustainability, the FSSD can offer a positive vision of a desirable future framed by a solid definition by the eight SP’s. This might complement Theory U in finding a shared intention in the first phase (co-initiating) of the ‘U process’. In the FSSD the vision is based on core values, core purpose and a desirable future state (Robért et al. 2015; Collins and Porras 1996). Creating such a vision at the beginning of a ‘U process’ might help to align the participants around a common goal.

Similar to a ‘U process’ the ABCD process for strategic planning offers a platform to bring different stakeholders together to move towards a more sustainable future state of a system. As Cretney, Cretney and Meisterheim (2011) state, dialogue-based methodologies can be used within the ABCD process. Theory U was mentioned to be useful for that purpose as well (Cretney, Cretney and Meisterheim 2011). By integrating other methodologies within a ‘U process’ the opportunity to connect participants might be facilitated. Still, the ABCD process itself is not designed to bring deeper connections between participants but to move an organization strategically towards a more sustainable direction. Missimer (2015) based the social sustainability principles on five adaptive capacities: diversity, learning, self-organization, trust and common meaning. The ‘U process’ aims to create a deeper connection for participants through the ‘U process’ in order to bridge divides and create innovations that are rooted in an ‘ecosystem-awareness’. This research showed that Theory U creates strong bonds between participants which are based on trust. Including this element of Theory U into the FSSD could therefore help the FSSD and particularly the ABCD process by enhancing social sustainability already during the process of going in a more sustainable direction. While an organization moves towards a more sustainable operating system, social sustainability could be fostered.

It can be concluded that Theory U and the FSSD can complement each other in positive ways. The FSSD focuses on the external systems of human society by focusing on shifting external systems like municipalities and organizations towards a more sustainable direction. This describes the external components of a society like institutions, their connections, and their tasks. On the other hand, Theory U is built around cultivating the awareness of leaders while providing a framework to address root causes on an individual level. In times of urgency, both approaches are of great value: Strategically shifting the existing systems and institutions towards more sustainable operations as well as addressing the individual awareness of the people working in these institutions. This research suggests that successful sustainability leaderships needs both to cultivate the individual’s awareness and a direction to move towards strategically. Especially for youth, this research showed that Theory U might offer appropriate tools to cultivate leadership skills as well as the overall mindset needed for the next generation of sustainability leaders. When it comes to sustainability, the FSSD can offer a definition and direction framed by the eight SP’s. Therefore, both frameworks hold the potential to be used with youth in a complementary way.

4.4 Recommendations

After the implications for both conceptual frameworks have been stated in the section above, this part looks at the recommendations that follow from this research. As this research is
exploratory in nature recommendations for further research can be given in subsection 4.4.1. Also, valuable findings for practitioners resulted from interviewing practitioners, which will be stated in subsection 4.4.2.

4.4.1 For Further Research

This research explored a topic that has rarely been covered by other research. Therefore, more research is needed to further explore the intersection of sustainability, youth and Theory U. The findings of this research suggest that Theory U holds great potential to empower youth to take action towards a more sustainable future. As it was also shown that Theory U is abstract and can be hard to grasp especially for youth, further research is needed in order to find how Theory U can be adapted to youth. One interviewee mentioned that systems thinking is already used with children in the Netherlands, and that it would be of interest if Theory U could be used not only with youth but also with children.

Furthermore, as this research focused on sustainability practitioners, research is needed to investigate which effects Theory U has had on young people that have gone through a ‘U process’. Some of the interviewees had already experienced Theory U at a young age and shared some of their experiences. By exploring the effects and outcomes Theory U has on young people itself can be of great interest for the sustainability and Theory U community.

Another finding of this research showed that especially the prototyping approach of Theory U may help young people to build action competence. As building action competence is one cornerstone of the YLEC program, further research is needed to investigate in what ways prototyping can help in building action competence. Furthermore, as the systems thinking approach of the YLEC program is already closely related to the approach taken by Theory U, it could be of interest if and how Theory U could inform the further development of the YLEC program and similar youth engagement programs.

Finally, as this research suggests, Theory U and the FSSD might go hand in hand in educating young sustainability leaders, further research is needed on this topic. Possible topics might look at if and how the FSSD can be used with young people. Similarly, to this research it is of interest which strengths and benefits the FSSD has when it is used in a youth context. The FSSD and Theory U are based on scientific evidence and were developed in collaboration with practitioners. Therefore, it needs to be further explored how the two frameworks can complement each other in order to fill the shortcomings and benefit from the strengths.

4.4.2 For Practice

To equip the younger generation to deal with the complex sustainability challenge, Theory U can prove to be a good tool for sustainability practitioners. This applies especially when it comes to equipping youth with leadership capacities and skills. In order to add a rigorous sustainability definition to Theory U, it is suggested that the FSSD could be complementary. According to the research data, sustainability practitioners or facilitators play a very important role in creating the conditions for their participants to realize their role in the system rather than addressing the negative issues of the world. Sustainability is a complex issue and can be overwhelming for youth. Trying to communicate sustainability issues with them by showing negative, depressing images, videos or information can influence them in a negative way. At this point of their life when they potentially realize the magnitude and urgency of the sustainability challenge, they can be easily overwhelmed. It is the role of the facilitator to take
an alternative positive approach to introduce them to the issues. The interviewees shared that taking a positive approach to sustainability and framing it around opportunities with youth can create an atmosphere of possibility, hope, fun, and meaning. Therefore, it is important for the sustainability practitioner to adapt to that when working with youth and to take a positive approach by using different methods like games, music, videos and art to involve youth with sustainability.

Theory U is a framework that awakens an individual’s awareness within a systems perspective. This awareness emerges during the ‘U process’ that creates a deep dive into one’s own mental models and belief systems. By having youth go through a ‘U process’, a sustainability practitioner can help young people find their role in the world in addressing the sustainability challenge. Therefore, Theory U can be used for personal development while addressing sustainability. This could especially help young people who tend to overwork in the urgency that the sustainability challenge creates. However, almost every interviewee agreed that it is better to not teach Theory U but instead to use it as a framework while designing the process or workshop for youth. Moreover, it is also a flexible framework that can be used by adding complementary tools. Explaining the whole concept of Theory U to the participants may be confusing for them. However, it was found that if an experiential learning approach is taken young people can relate better to Theory U. If Theory U is explained alongside exercises that allows young people to experience the concepts of Theory U, chances are high that youth “take it in very easy” (Interviewee 10). At the same time, it is very important to remember to adapt the language and terminology according to the group of participants.

It is also important to keep in mind that youth are in a formative stage of their lives and are greatly affected or influenced by their peers. Theory U includes many exercises to work in groups and build connection by ‘co-initiating’, ‘co-sensing’ and ‘co-creating’. It also tends to create a safe space for this young generation to exercise their leadership capacity and build their skills around that, which can be greatly supported by the practitioners. Connecting a group around the context of sustainability or systemic changes can be empowering for young people.

Finally, the results of this research suggest that Theory U is a practice, rather than pure theory. The implication for practitioners is that they not only teach Theory U but to practice the methodologies and tools by integrating it into their work. This can include for example the ‘four levels of listening’ and mindfulness. In order to create experiences for the participants the sustainability practitioner had to experience Theory U in the first place.

4.5 Quality and Validity of this Research

The overall quality and validity of this research depends mainly on three factors: first the research design (see section 2.5), second the results, and third the capacities of the researchers. The results of this research show the stories and experiences of sixteen interviewees and were discussed by the research team based on the available literature. Two limitations to the validity of this research can be shown. First, the availability of literature on the specific topic of Theory U, sustainability, and youth was very limited as the connection between these three topics have not yet been made in research. Another limitation is the number of interviewees. During the data collection, limited information saturation had been reached. More interviews would have been needed to increase the validity of this research.
Another bias according to Norris (1997) of this research is that the availability of the interviewees as a source of data was a guiding criterion. This was due to time restraints that the interviewees could not all be chosen based on the prior research in the field of practitioners. However, the overall diversity of the interviewees is a factor that increases the reliability of the results as it is informed by a variety of different perspectives. Also, the quality of the interviews and the data provided from the interviewees was of great density of information and offered a broad range of information to discuss. It was also acknowledged that the youth the interviewees worked with may be a typical group of youth that feels drawn to sustainability and innovative concepts like Theory U.

The research team tried to avoid biases like the researchers bias in holding one another accountable and allowed the data to speak to them instead of the researchers speaking to the data. The team constantly reminded one another to what the data showed and what the team interpreted. They built a shared mental model around the data and built their discussion around that shared mental model. Thereby, triangulation was not only used within the research design but was also assured by the research team itself.

Overall it can be concluded that this research does not try to generalize or show any form of absolute truth. This research is rather of explorative nature and shows new possibilities and connections of topics that were not connected before in the research fields. Characterized by a qualitative approach, this research shows the personal stories and experiences of practitioners. From these experiences, conclusions are drawn for the wider research and practitioner community. The overall design and process is described so that it can be replicated, yet the discussion relies on the personal interpretations of the researcher team. As mentioned above and in section 2.5, the connection between the topics Theory U, sustainability, and youth is largely unexplored. This research can answer the purpose of sparking the conversation around that topic and may inform further research as well as sustainability practitioners in their work.
5 Conclusion

In this research sixteen semi-structured interviews with practitioners of sustainability, Theory U, and youth were interviewed. This chapter sums up the main findings of the research and will answer the research question:

**In what ways does Theory U support sustainability practitioners to equip the next generation of sustainability leaders?**

In answering the research question, it has been identified how Theory U can further support sustainability practitioners to equip the next generation of sustainability leaders.

Even though there are challenges that were identified, it has been demonstrated that there is potential when using Theory U with youth. Theory U can be challenging to understand as it can be abstract and vague. Also, people need to be open and willing to go through the whole ‘U process’, facing their fears and beliefs. However, some particular characteristics that youth hold at this stage of life makes them more receptive to Theory U. Youth tend to be more open-minded as they are more likely willing to change and challenge the status quo since they are at a point in developing themselves. These characteristics of youth indicate there is an opportunity in using Theory U with youth as they are in a formative stage in their lives and could be prepared at an earlier age with leadership skills needed in order to address sustainability issues now and in the future.

Given the complexity of the sustainability challenge, youth need to understand complexity instead of getting overwhelmed by it. Systems thinking was shown to be the appropriate approach to do so, especially when addressing sustainability with youth. Frameworks like the FSSD and Theory U both take a systems thinking approach. Using these frameworks complementarily has the potential to provide a powerful perspective of sustainability beginning at a young age. In particular, the strong systems thinking approach provided by Theory U lets young people realize their own role in the system and enables them to act accordingly.

Especially when working with youth it is necessary to take a positive approach towards sustainability that focuses strongly on opportunities. The FSSD provides a positive approach and vision toward a desirable future based on the eight SP’s. This positive vision could complement Theory U. Meanwhile Theory U offers to enhance young people’s well-being by offering mindfulness and personal development. As being used complementarily both the FSSD and Theory U can provide a positive approach towards sustainability that is needed when working with youth. As the ‘U process’ allows youth to see their own role in the sustainability challenge, it can provide young sustainability leaders with a purpose connected to their personal and local context.

Since sustainability issues may not be evident in most young people's daily lives and may be perceived as far away, there is a need for a greater awareness and understanding. The approach to systems thinking of Theory U is unique as it includes a person’s own awareness by getting them to see their own mental models as a crucial part of the bigger system or challenge. There is a shift in awareness when this happens which shifts one’s mindset or paradigm. This can have an impact on the system and sustainability, as shifts in mindset or paradigms shifts are described as the second best leverage point in changing systems (Abson et al. 2017; Meadows 2010). This paradigm shift within individuals showed up in the research where practitioners described...
seeing a change or shift in young participants who saw their own self as well as themselves within the bigger system in a whole new way. Therefore, Theory U helps youth to see themselves as part of the problem and enables them to be part of the solution as well.

While Theory U can help young leaders find their own role in approaching the sustainability challenge, the ‘U process’ also creates a strong connection among young leaders. In order to solve a complex challenge like sustainability, people must work together and co-create solutions. Especially for youth it is important to be surrounded by like-minded peers and to have a strong social context. This research has shown that a ‘U process’ creates a strong, long-lasting bond based on trust between the participants. While providing connectedness to youth, Theory U provides a comprehensive framework to co-create, test and amplify new solutions together with others.

As new solutions are co-created and identified, Theory U also empowers youth and potentially builds action competence. One of the challenges that was recognized in this research is that youth feel disengaged and disempowered in global politics as their voices are not heard even though they are critical stakeholders of the sustainability challenge (UNPY 2010). This research has shown that youth need to be empowered and supported in order to take action. Through this research it has shown that the ‘U process’ itself is an empowering process for youth. During that process youth can act instantly by using a prototyping approach which engages young people into action and therefore holds the potential to build action competence.

While Theory U empowers youth to take action, it also provides an opportunity for personal development for young people. Due to the urgency and the magnitude of the sustainability challenge, young people that engage with sustainability tend to overwork even to the point of burnout. This calls for more awareness of one’s own capacities, strengths and weaknesses, in short, it calls for personal development. Mindfulness and reflection are a crucial element of the ‘U process’. This research showed that Theory U is a powerful tool for personal development for both youth and adults. Especially for young people working in sustainability already it holds potential as it combines personal development with strengthening their ability to be effective change agents.

However, this research indicated that a trained and experienced practitioner or facilitator is needed in order to use Theory U with youth. The practitioner should have experienced Theory U themselves and also actively practices it in order to lead participants through a ‘U process’ and other Theory U methods. Also, the practitioner needs to create a safe space by creating an atmosphere of trust. By doing so, the practitioner should be authentic and willing to be vulnerable with their participants. The research also showed the importance for the practitioner being able to translate the specific Theory U terminology to their audience, especially when working with youth. In addition, it is important to have enough time for participants to experience Theory U. Not having enough time to experience the ‘U process’ may result in confusion and misunderstanding.

The two conceptual frameworks of this research were the FSSD and Theory U. Both frameworks offer potential to complement each other. The FSSD can complement Theory U with a robust definition of sustainability using the eight SP’s and a positive vision for a desirable future. Yet, Theory U can complement the systems thinking approach of the FSSD by including the individual within the system and thereby creating the possibility for a paradigm shift to happen. Also, the ‘U process’ offers a process that generates trust among the participants.
Even though this was an exploratory research and the first attempt to connect Theory U to youth, it is suggested that more research needs to be conducted on the topics of Theory U, youth and sustainability. Further research needs to investigate if and how Theory U can be adapted in a youth context as well as how the FSSD can be or is being used with a youth audience.

It can be concluded that Theory U holds potential for youth and sustainability practitioners that work with youth. Yet, it needs an experienced and skillful facilitator in order to bring Theory U to a youth audience. It is also suggested that using Theory U with youth is not only powerful for youth, but also extremely rewarding for the person who is facilitating these processes. This research concludes that Theory U can be of great value in a youth context and could help in planting the seeds for the next generation of sustainability leaders.
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Appendices

Appendix A: Theory U Tools

Case Clinics (Presencing Institute n.d.)

Overview

Case Clinics guide a team or a group of peers through a process in which a case giver presents a case, and a group of 3-4 peers or team members help as consultants based on the principles of the U-Process and process consultation. Case Clinics allow participants to:

- Generate new ways to look at a challenge or question
- Develop new approaches for responding to the challenge or question

Purpose

To access the wisdom and experience of peers and to help a peer respond to an important and immediate leadership challenge in a better and more innovative way.

Principles

- The case should be a leadership challenge that is current and concrete.
- The case giver needs to be a key player in the case.
- The participants in the case clinics are peers, so there is no hierarchical relationship among them.
- Don’t give advice; instead listen deeply.

Uses and Outcomes

- Concrete and innovative ideas for how to respond to a pressing leadership challenge
- High level of trust and positive energy among the peer group
- Use with: Mindfulness and listening practices

An Example

Participants of a master class program form peer learning groups. They do their first case clinic while they are in the program, and then use the process for monthly phone calls that allow each participant to present a case.

Set Up

People & Place

- Groups of 4-5 peers
- Sufficient space so that groups can work without distractions

Time

- A minimum of 70 minutes is required

Materials

- Chairs for each group to sit in a circle or around a table
- The handout of the process

Source: https://www.presencing.org/#/resource/tools/case-clinic-related-doc
Levels of Listening (Presencing Institute 2016)

One of the core ideas of Theory U is that form follows attention or consciousness. We can change reality by changing the inner place from which we operate. The first step in understanding the impact of attention on reality is to look at our own individual practice of listening. The image below introduces four levels of listening, representing four distinct places from where our listening can originate.
Dialogue Interviews (Presencing Institute n.d.)

Overview

Dialogue interviews engage the interviewee in a reflective and generative conversation. This tool can be used to prepare for projects, workshops, or capacity building programs. Dialogue Interviews:

- Provide insights into questions and challenges that the interviewees face
- May help you to find partners for a project
- Prepare participants for an upcoming event
- Begin to build a generative field for the initiative you want to co-create

Purpose

To initiate a generative dialogue that allows for reflection, thinking together and some sparks of collective creativity to happen.

Principles

- Create transparency and trust about the purpose and the process of the interview.
- Practice deep listening.
- Suspend your “Voice of Judgment”: look at the situation through the eyes of the interviewee, don’t judge.
- Access your ignorance: As the conversation unfolds, pay attention to and trust the questions that occur to you.
- Access your appreciative listening: Thoroughly appreciate and enjoy the story that you hear unfolding. Put yourself in your interviewee’s shoes.
- Access your generative listening: Try to focus on the best future possibility for your interviewee and the situation at hand.
- Go with the flow: Don’t interrupt. Ask questions spontaneously. Always feel free to deviate from your questionnaire if important questions occur to you.
- Leverage the power of presence and silence: One of the most effective “interventions” as an interviewer is to be fully present with the interviewee – and not to interrupt a brief moment of silence.

Uses and Outcome

Dialogue Interviews are used to prepare for projects, workshops, capacity building programs or change initiatives. Dialogue interviews:

- Provide data on the participants’ current challenges, questions, and expectations or on the organizational current challenges
- Create increased awareness among participants or within an organization about the upcoming process and how it might serve their needs and intentions
- Increase the level of trust between facilitators and participants that helps to create a generative field of connections
- Use with...Mindfulness Practice, Stakeholder Interviews

Example

Ursula Versteegen, who co-developed this method with Otto, describes one of her experiences:
“A while ago, I had a dialogue interview with Walter H. For me the toughest challenge in a dialogue interview is when I have “to jump off of the bridge.” The moment of pushing myself off the safe ground into a total “presence” is the most laborious moment of the interview, and I am really scared when I sense it building up. But once I have dared to jump and have overcome my inner reluctance and clumsiness, it’s the most effortless, beautiful way of being.

“Walter is an engineer in a global car company. ‘I knew at age ten,’ Walter started off, ‘that I wanted to become an engineer, working with cars. As a kid, I spent more time in junkyards than on playgrounds.’ For more than a decade he had been working as a quality expert in different positions and plants. When Walter spoke about cars he was enthusiastic: I enjoyed listening: ‘Everyone linked arms with me right from the beginning. I was given responsibility early on.’ I could almost touch his pride about building good-quality cars.

“‘For a few weeks now,’ he continued, ‘I’ve been in HR/Industrial Relations. It’s an exotic country for me. There is a huge list of things’—and he started reading the list—‘that I am responsible for now: work organization; reorganization; leadership organization in plants; unions; health management; sick-list reports; health maintenance; occupational safety; aging workforce... My challenge is: How do I convince people in the plant to participate in health management? How do I negotiate with the unions, sell them our concepts? How can I make decisions without formal authority about the people who need to comply with all of these rules?’

“After he had read that list to me, I felt funny. It took me a moment to realize that my energy level had dropped from one hundred to zero. Why was that? What had happened? Listening to him while he was continuing to speak about his challenge, I noticed that he had changed as well. His voice had become more formal, he was talking much faster, the manner in which he was talking felt more distant, closing up and maybe even more decisive and resolute. My listening was dropping off. It sounded as if he had shifted from the nice, enthusiastic hands-on production guy into the role of a formal bureaucrat who knew exactly what all these plant people needed to do. I felt distant, too. I asked him about his stakeholders: ‘Who would be the most critical people to talk to and get different perspectives from on your new job?’ I was silently hoping that the stakeholders would tell him what I felt I couldn’t. ‘Oh, I have done these already,’ Walter quickly said, ‘I told my stakeholders what my responsibilities were and asked them for comments.’

“I saw myself standing on the bridge, and I knew I had to jump to make a difference. But an incredible inner gravity was holding me back. Part of me said, ‘Tell him why his way of doing stakeholder interviews is useless.’ The other, the scary part, said, ‘Open your heart. Allow him to change you.’ In that moment a memory was welling up in me: not long ago, when I was working at the headquarters of a pharmaceutical company, I had been in exactly the same situation as Walter. I had to convince business units and production sites of lots of conceptual positions, statements, and ‘to-dos’ that didn’t relate to my own experience. The more useless I felt, the more my communication style changed from learning to teaching or instructing them.

“I jumped: ‘While I’m listening to you, I’m starting to wonder about the difference between working for a plant and working at headquarters.’ I heard him nodding. Our distance started melting. I slowed down, speaking out of the inner place of the lost and useless person I felt to be at the time: ‘I don’t know whether and how this experience may be relating to you at all.’ I talked as if I were walking on tiptoes, waiting for the right words to come, not knowing what the next word would be. ‘When I, in my case, asked people from production what they needed me for, their answer was ‘Honestly, Ms. Versteegen, we don’t need you at all for the things you’re doing right now, we’re sorry to tell you.’

“Silence. I could hear a pin drop. But the silence was pure energy. I heard a sound of very deep relief, and then Walter said, ‘That is exactly what they told me.’ In that moment, the whole conversation shifted. I asked him, ‘Before, you had mentioned that one of your key learnings in production was that
things always appear to be different when you look at them from the outside, as compared to when you’re looking from within. How does that learning apply to your situation now?”

“Time slowed down. Finally he said, ‘Well, one interview was different. It was the one where I spoke to a production head who I know well and respect a lot. I wasn’t talking to him as an industrial relations person, I spoke to him as if I still was a peer, in my former role of also being a production head. He said, ‘Walter, as a corporate person you’re bringing answers to questions I don’t have. But I have a lot of questions and issues that I need your help on as a peer practitioner, to help me find new and innovative answers.’”

Then Ursula asked him, “Why could he say that to you?” Walter replied, “I guess I put myself into the shoes of my colleague, looking from production to corporate. In the other interviews, I was looking from the outside, corporate, into production.”

**Set up**

**People and Place**

- Dialogue interviews work best face-to-face. If not possible, use phone interviews.

**Time**

- 30-60 minutes for a phone interview.
- 30-90 minutes for a face-to-face interview.
- Both figures are estimates and need to be adjusted to the specific context.

**Materials**

- Use the interview guideline (questionnaire), but feel free to deviate when necessary.
- Use a paper and pen to take notes. Sometimes use a tape recorder.

Source: https://www.presencing.org/#/resource/tools/dialogue-interview-related-doc
Sensing Journeys (Presencing Institute n.d.)

Overview

Sensing Journeys pull participants out of their daily routine and allow them to experience the organization, challenge, or system through the lens of different stakeholders. Sensing journeys bring participants to places, people, and experiences that are most relevant for the respective question they are working on. These Learning Journeys allow participants to:

- Move into unfamiliar environments
- Immerse themselves in different contexts
- Step into relevant experiences

Purpose

To allow participants to break-through patterns of seeing and listening by stepping into a different and relevant perspective and experience. Sensing Journeys can also help build relationships with key stakeholders, and gain a system perspective.

Principles

A deep-dive sensing journey requires engaging in three types of listening:

- Listening to others: to what the people you meet are offering to you.
- Listening to yourself: to what you feel emerging from within.
- Listening to the emerging whole: to what emerges from the collective and community settings that you have connected with.

Go to the places of most potential. Meet your interviewees in their context: in their workplace or where they live, not in a hotel or conference room. When you meet people in their own context you learn a lot by simply observing what is going on. Take whatever you observe as a starting point to improvise questions that allow you to learn more about the real-life context of your interviewee.

Observe, observe, observe: Suspend your voices of judgment (VOJ) and cynicism (VOC) and connect with your sense of appreciation and wonder.

Without the capacity to suspend judgment and cynicism, all efforts to conduct an effective inquiry process will be in vain. Suspending your VOJ means shutting down the habit of judging and opening up a new space of exploration, inquiry, and wonder.

Uses and Outcome

- Increased awareness of the different aspects of a system and their relationships
- Enhanced awareness of the different perspectives of the stakeholders and participants in the system
- Connections between stakeholders and participants
- Ideas for prototypes
- Use with... Listening tools

Example

An automobile manufacturing firm’s product development team decided to use Sensing Journeys to broaden their thinking and to generate new ideas. Their task was to build the self-repair capacity of their
cars’ engines. The team visited a broad selection of other companies, research centers, and even experts in traditional Chinese medicine (TCM).

As it turned out, the visits with TCM experts generated the most innovative ideas for this project (including the idea to design self-repair functions for the “dream state” of the car—that is, for those periods when the car is not in use).

**Set up**

**People & Place**

The group splits up into sub-teams of about 5 participants. The group composition matters because a mix of perspectives enhances the impact of the sensing journeys. Define places of high potential for the sensing journeys. The whole group of participants should go to several places that can provide insights into:

- The different perspectives of the system’s key stakeholders
- The different aspects of that system
- The ‘voiceless’: people in the system, those who usually are not heard or seen.

A good way to get a sense of the system is to take the perspective of its “extreme users”: these can be customers who use services or products more than others or in different ways, or on a societal level, those with special requirements, such as a person living in a remote area needing access to a health system.

**Time**

The length of a sensing journey depends on the size of the geographic area being covered. It is recommended to allocate at least 1 day to sensing journeys in a workshop context and several days or weeks (sometimes spread over a period of months) in a larger project setting.

**Materials**

If the hosts agree, it is advised to take pictures and/or videos during the journey. These can be useful during reviews with the other groups and as a reminder for the participants. Other materials may be collected as well, after seeking permission from the hosts. A pen and journal are required for taking notes during and after the journey.

Source: https://www.presencing.org/#/resource/tools/sensing-journeys-related-document
Guided Journaling (Presencing Institute n.d.)

Overview

Guided journaling leads participants through a self-reflective process following the different phases of the U. This practice allows participants to access deeper levels of self-knowledge, and to connect this knowledge to concrete actions.

Purpose

Guided journaling leads practitioners through a process of self-reflection that moves through the U-process. This process allows participants to step into a deeper level of reflection than in an unguided journaling process, and identify concrete action steps.

Principles

- Journaling is a personal process. Never ask participants to share their journaling notes in public.
- After completing a journaling practice you may create an opportunity to reflect on the experience of journaling. Again: emphasize that participants decide what they want to share.
- Journaling means that you think through the writing not to think and reflect, and then write up the reflection. With the instruction emphasize that participants should just start writing and see what emerges.

Uses and Outcomes

- Access deeper levels of self-reflection & knowledge
- Learn how to use Journaling as a reflective tool
- Connect self-reflection to concrete action steps
- Use with...Awareness or embodiment practices

Example

Alan Webber recalled what kept him going on his journey to co-create Fast Company despite all the obstacles he encountered:

“People who have genuinely been taken over by an idea or a belief usually can’t answer the question ‘Why are you doing this?’ in rational terms. Years ago my father bought me a collection of interviews of great fiction writers. The interviewer was George Plimpton. He’d say, ‘Why did you become a writer? Why do you get up in the morning and write?’ The answer invariably was ‘Well, I can’t not.’

People would ask me ‘Why are you doing Fast Company?’ At first, the answer was very rational: ‘Well, you know, it’s a magazine about this and that, and the world doesn’t have one.’ But I soon realized that those reasons weren’t the real ones. The reason you do it is because you can’t not do it. But it’s hard to explain that to people without sounding like a lunatic.”

Set up

People & Place

- Journaling Practice can be used in groups of any size. The exercise follows the co-sensing phase meaning that participants have already moved through the left side of the U-Process.
- It is important that the room is quiet and no noises or other distractions in the environment interrupt the participants.
Time

- A minimum of 45 minutes is required. Depending on the context this process can take up to 60-90 min.

Materials

- Pen and paper for each participant

Source: https://www.presencing.org/#!/resource/tools/guided-journaling-related-doc
Prototyping (Presencing Institute n.d.)

Overview

Prototyping translates an idea or a concept into experimental action. Having established a connection to the source (presencing) and clarified a sense of the future that wants to emerge (crystallizing), prototyping allows an individual or group to explore the future by doing.

Purpose

So far, we have presented tools and explained the principles that make them work. At this point, the process gets inverted. Use the following principles to determine what you need to do to stay connected to the future that stands in need of you to come into reality and translate this idea, concept, or sense of possibility into action.

Principles

1. Crystallize vision and intention: stay connected to the future that stands in need of you to come into reality (Martin Buber).
2. Create a place of silence for yourself every day. Clarify core questions that you want to explore with your prototype.
3. Form a core team: five people can change the world. Find a small group of fully committed people and cultivate your shared commitment.
4. 0.8: Iterate, Iterate, Iterate: “Fail fast to succeed sooner”, as David Kelley from IDEO says. Do something rough, rapid, and then iterate. Design a tight review structure that accelerates fast feedback.
5. Platforms and spaces: create “landing strips” for the future that is wanting to emerge. The quality of the holding space determines the quality of the results.
6. Listen to the universe: always be in dialogue with the Universe. It is a helpful place. Listen to what is emerging from others, from the collective, and from yourself. Take a few minutes each day to review your quality of listening.
7. Integrate head, heart, and hand: when we prototype living examples by integrating different types of intelligence, we always navigate the process between two major dangers and pitfalls: mindless action and actionless minds.

Uses and Outcome

Prototypes are an early draft of what the final result might look like, which means that they often go through several iterations based on the feedback generated from stakeholders. This feedback is then the basis for refining the concept and its underlying assumptions. A prototype is a practical and tested mini version of what later could become a pilot project that can be shared and eventually scaled.

Example

At Cisco Systems, a leader in networking equipment, the prototyping imperative begins with what that company calls principle 0.8: regardless of how long-term the project, engineers are expected to come up with a first prototype within three months—otherwise the project is dead. The first prototype is not expected to work like a 1.0 prototype—it is a quick-and-dirty iteration that generates feedback from all key stakeholders and leads to the 1.0 version.

In the context of social innovation, Social Presencing Theater is a very effective tool that we often use to explore emerging ideas through collective experimentation; that is, through co-sensing and co-creating (see the Social Presencing Theater part of the Presencing website).
Set up

The tools you use for prototyping depend on the nature of your idea or insight, as well as the needs and context in which you’re operating. Prototyping is a “mini U” process and is specific to each idea and context. Some prototypes are concrete products; others are meetings, processes, services or experiments. Timing will depend on the context and differ depending on the project: a prototype can take a few days, weeks, months or years.

You might find it helpful to use one or several of the tools from other parts of the U process (dialogue interviews, sensing journeys, case clinics, etc.) while prototyping.

You might also find the following exercises helpful to align your prototype with the principles outlined above. Worksheet 1 includes questions to help you determine the what (clarify intention). Worksheet 2 includes questions that focus on how (moving intention to prototyped reality)

Source: https://www.presencing.org/#/resource/tools/prototyping-related-document
Social Presencing Theatre (Presencing Institute n.d.)

Seeing the wisdom in every situation and moving towards healthier futures.

Social Presencing Theater (SPT) is a methodology, developed under the leadership of Arawana Hayashi, for understanding current reality and exploring emerging future possibilities. SPT can be practiced at the individual, group, organization, and larger social systems level. It is one of the most important and effective methods developed by the Presencing Institute and has been used effectively for over ten years in business, government, and civil society settings, in places including Brazil, Indonesia, China, Europe and the United States.

This is not "theater" in the conventional sense but uses simple body postures and movements to dissolve limiting concepts, to communicate directly, to access intuition, and to make visible both current reality, and the deeper – often invisible – leverage points for creating profound change.

About Social Presencing Theater

“A new social art form I call Social Presencing Theater that stages media events and productions to connect different communities and their transformational stories by blending social action research, theater, contemplative practices, intentional silence, generative dialogue, and open space.” Theory U: Leading from the Future as it Emerges, by C. Otto Scharmer, pp 452

Otto Scharmer says in a letter dated Dec 22, 2008, “The question comes up how to communicate the essence of these projects in a way that transforms and heightens the quality of collective awareness and action, which is why we have started to experiment with a new synthesis between theater, embodied presence, dialogue, stillness and presencing it’s called Social Presencing Theater.

Social Presencing Theater is one arm of the Presencing Institute. It is an emerging art form that explores the creative potential of Theory U and presencing. The word theater comes from the Greek thea, which means “the act of seeing.” The word, theater, can be defined as a “place of enactment of significant events or actions.” Social Presencing Theater emerges from the community to enable that community to collectively see itself and enact its emerging future.

Process

This is a fluid and emerging process. No doubt it will continue to change and develop as different people become involved and different client situations present themselves. The first step has been to identify clients or communities and to interview members of that organization or group. Over a 3-5-day period, using the embodied presence techniques from Art of Making a True Move and an interviewing method based upon the work of Tectonic theater project, Arawana Hayashi, Greg Pierotti and colleagues create a performance of no more than 20 minutes.

The performance can also include members of the client system. The entire client community then gathers for a two-hour Social Presencing Theater event that begins with the performance. The performance creates a field shift or a gap in the habitual way the social system regards itself. It enhances that client’s capacity to see its own qualities, patterns and potential. The community sees itself embodied and enacted in a respectful way. The performance is followed by reflection and dialogue using World Café or other social technologies, out of which seed of action for the future can emerge.
Appendix B: YLEC Theory of Engagement

Youth Leading Environmental Change (YLEC) Theory of Engagement Model (Hickman, Riemer, and the YLEC Collaborative 2016)
Appendix C: Interview Guide and Questions

Interview Guide

Overview and framing.

Introduction of the interviewers.

We will use the data we collect today to answer our research question along with many other interviews that we are doing with people located all around the globe. And we are especially interested in your experiences and stories, they will help us understand the most.

The purpose of our research is to find a deeper understanding of the connection between using the framework of Theory U and youth in particular by sustainability practitioners. In our interview with you today, we want to focus on… [purpose of this specific interview group].

Categories:

**Category 1: Theory U and Youth**

**Purpose:**

- Understand why practitioners are using Theory U with youth
- Understand how practitioners use Theory U with youth
- Understand challenges and benefits of using Theory U with youth
- We want to hear their stories and experiences as well as in-depth information of them using Theory U

**Category 2: Theory U and sustainability**

**Purpose:**

- To understand the effect of using Theory U when working with sustainability.
- Understand the challenges and benefits of using Theory U in their work.
- Understand how Theory U and Sustainability is connected.
- We want to hear their stories and experiences as well as in-depth information of them using Theory U

**Category 3: Youth and sustainability**

**Purpose:**

- To understand how practitioners help youth address the complex sustainability challenges

**Category 4: Theory U, sustainability and youth**

**Purpose:**

- To understand how Theory U can be used by sustainability practitioners to help youth address the complex sustainability challenge
- We want to hear their stories and experiences as well as in-depth information of them using Theory U
Confidentiality/Recording…

Is it okay with you if we record our interview session today?

We will record this interview, transcribe it and then we will send it back to you for a final confirmation on the text. You will have the final authority to approve the information. In our final research paper, everything you say will be anonymous, even direct quotes.

Now we will test the sound to make sure it’s working… (test the sound)

Do you have any questions before we start the interview?

**Interview questions**

**Background questions**

Confirm job title/responsibilities…

Confirm this information or ask… Is there a typical type of person or group of people that you work with in terms of age, or (also socio-economic) background? If you work with youth, what are the age ranges of the youth?

Confirm: We understand that you specifically work with [fill in category]

**Interview questions category 1: Theory U & youth**

- Why are you using Theory U with youth? What is your goal and purpose in doing so?
- Which tools, methods, and aspects of Theory U do you use? And why?

Now we are very curious about your specific stories.

- What do you notice about your participants when you use Theory U? (give concrete examples, please)
  - What do you observe? How does the U process affect them?
  - What do you think would be different if you would not use Theory U?
- Based on your experiences what are some benefits of using Theory U in your work?
  - Can you tell us some specific examples from your experience?
- Based on your experiences what are some challenges of using Theory U in your work?
  - Can you tell us an example of when things did not work out well?
- Do you also address social and/or environmental challenges in your work? If yes, how?
  - RELATE TO SUSTAINABILITY PRINCIPLES

**Interview questions category 2: Theory U and sustainability**

We would like to ask you some in-depth questions about your perception of sustainability and Theory U:

- Briefly describe what sustainability means for you - both personally and in your work?
- How does Theory U relate to that perception/ understanding of sustainability?
- Which tools, methods, and aspects of Theory U do you use? And why?
- What do you notice about your participants when you use Theory U?
  - What do you observe? How does the U process affect them?
  - What do you think would be different if you would not use Theory U?
- Based on your experiences what are some benefits of using Theory U in your work?
• Can you tell us some specific examples from your experience?
  • Based on your experiences what are some challenges of using Theory U in your work?
    o Can you tell us an example of when things did not work out well?
  • What if you would use Theory U with youth? Would you use it differently?

Interview questions category 3: Youth & Sustainability

We would like to ask you some in-depth questions about your perception of sustainability

• Briefly describe what sustainability means for you - both personally and in your work?
• What are the sustainability challenges you are addressing with youth?
• What are some methods or ways in your approach to get youth to see the challenge? (give concrete examples, please)
• What are some methods or ways you may have youth really hear/really listen and feel to what’s going on in the challenge? (give concrete examples, please)
• Do you find/see/observe that the youth have an “ownership” of the challenge? If so, how do you lead/help them to that? (give concrete examples, please)
• Do you give space for moments of retreat or reflection to make sense of what they just heard and/or felt? (give concrete examples, please)
• What are some methods or ways that you may assist youth in actually doing something about that challenge? (give concrete examples, please)
• Do you think we forgot an important question in this realm?
• If you have heard about Theory U...
  o Have you ever considered using it with youth? // If yes, why and how? // If no, then why not?

Interview questions category 4: Theory U, sustainability and youth

We would like to ask you some in-depth questions about your perception of sustainability and Theory U:

• Briefly describe what sustainability means for you - both personally and in your work?
• What are the particular sustainability challenges that you are addressing with youth?
  o (How does Theory U help you approach complex sustainability challenges with youth?)
  o How does Theory U relate to that perception/ understanding of sustainability?
  o Why are you using Theory U with youth? What is your goal and purpose in doing so?
• Which tools, methods, and aspects of Theory U do you use? And why?
• What do you notice about your participants when you use Theory U? (give concrete examples, please)
  o What do you observe? How does the U process affect them?
  o What do you think would be different if you would not use Theory U?
• Based on your experiences what are some benefits of using Theory U in your work?
  o Can you tell us some specific examples from your experience?
• Based on your experiences what are some challenges of using Theory U in your work?
  o Can you tell us an example of when things did not work out well?

Wrap up:

• Is there anything else you would like to add?
• May we contact you again later if needed?
• Are there any additional information or resources you would like to share with us?
## Appendix D: Themes and Codes

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<th>Tools being used with youth</th>
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**Theme 6: Theory U and youth - outcomes**

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<td>Personal development</td>
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**Theme 7: Theory U - challenges**

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<td>Time</td>
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<td>Theory U as a practice</td>
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<td>24</td>
<td>Openness and depth</td>
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