

Leadership Development Laboratory

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Introduction

The popularity of the acronym VUCA is emblematic of how turbulent conditions in today's society are perceived. In the face of this there is a need for developing better leadership capable of transforming volatility, uncertainty, complexity and ambiguity into vision, understanding, clarity and agility. This shift is required for leadership in all contexts, whether political, civic, societal, or organizational.

While in the past leadership was considered to be the domain of great men who were born to lead (Northouse, 2001), today "there is little doubt that leadership education and development has become a big business" (Pfeffer, 2011. p. 220) with more than \$170 billion being spent on leadership curriculum in US businesses alone (from the ASTD, in Myatt, 2012). Despite all these resources being spent, building leadership talent was identified as a significant challenge in the 2008 IBM Global Business services report (in Day, Harrison & Halpin, 2009) and there are no signs that this has changed significantly today.

While there are many approaches to this issue, most of these appear insufficient for addressing it. In line with the theme of this book, we will propose an approach that can better address more aspects of an integrative model (see Roux's chapter), focusing on development from two main angles. One involves helping leaders 'clean up' their limiting beliefs and assumptions through developmentally informed processes. The other involves applying developmental theory to the acquisition of more robust skills relevant to their work.

This chapter will; describe the context for a specific program that allowed for the application of these ideas, provide a theoretical background for the integration of approaches to supporting developmental leader development, describe the design of the leadership program based on the integration of multiple approaches and describe outcomes from the program based on focus group research. We will then briefly discuss our findings and share reflections on our experience and note implications for leadership development.

Context for the Program

Trondheim is the third largest city in Norway, with a population of about 190,000. Serving this population, there are 14,000 employees in Trondheim Municipality. Among these 14,000, there are 800 leaders, many of whom, after a large reorganization in 2016/17, were new to their leadership roles. To support this, the city designed a two-year development program called Holistic Leadership, aimed to ensure that all of these leaders had a chance to improve their professional competence, be surrounded by a network of likeminded leaders and have the ability to reflect on their leadership roles.

The holistic leadership program was described by the city official behind its design as an attempt to join structures and norms in practice, in a way which would enable the organization to learn, innovate and create better community development.

We will create leadership capacity in the municipality which can improve and implement good processes. On a higher level, the project is nevertheless about three main priorities in the municipality:

- Performance and realization of democracy.
- The municipality as a professional employer.
- Lay down the main principles of leadership in a complex unit. (Kristian Mjøen, personal communication, January 2018)

As part of the design preparations, a pilot “accelerator” program was conducted in 2017/18 for 16 leaders. A few of the participants in this program were also part of the design and facilitation team for the larger program and used their experience in the accelerator program to gain experience, inspiration and ideas for implementing in the Holistic Leadership program. The design and facilitation of the accelerator program was fueled by the main author’s two decades of action research on applying ideas about adult development to leadership.

Theoretical Background

Day & Dragoni’s (2015) review of leadership development research identifies four key indicators necessary for leadership development; leadership self-efficacy, self-awareness, leader identity and leadership knowledge, skills and competencies. Work over time in these areas can lead to outcomes such as having more dynamic skills (proximal effects) as well as more adequate levels of complexity of meaning making structures and processes (distal effects). In the approach presented here, work towards both proximal and distal effects are taken as an integrated set. Work on dynamic skills is addressed from a developmentally oriented framework that provides short term, visible growth in domain specific areas and at the same time feeds into a cumulative set of long-term effects on cognitive growth and longer-term increased complexity of meaning making structures.

McCauley et al. (2006) reviewed the use of adult constructivist developmental theory in relation to various leadership phenomena. They focus on theories that follow the line of Piaget’s (1954) seminal work in this area, extending his ideas both into adult life and the areas of emotion, processes of transformation, interior or subjective development and social context. They noted that the process of development is driven by limitations in current meaning making structures encountering levels of complexity in the environment beyond those current levels. They found initial support for the notion that order of development (or stages, levels etc. See numerous descriptions of these models in other chapters in this book) has an influence on a leader’s approach to managerial tasks. They also note that this growing body of research supports the view that there is a relationship between order of development and leadership effectiveness.

To better understand these orders of development (that relate to the long-term distal effects mentioned by Day & Dragoni) and short-term skill development, (short-term proximal effects), the following will elaborate on how two main theoretical approaches to adult development, ego development theory (Loevinger, Torbert, Kegan) and dynamic skill theory (Fischer), were applied in this program.

Ego Development Theory and Leadership

In recent years, some researchers have begun to apply constructive developmental theory to management and leadership research. (See Reams, 2016 for a more extensive overview of this). Much of the work in this area was pioneered by Torbert (2004) as well as the work of Kegan (1994; 2009, 2016) and Kuhnert (Harris & Kuhnert, 2008; Kuhnert & Lewis, 1987; Lucius & Kuhnert, 1999; Strang & Kuhnert, 2009). Day (Day, Harrison, & Halpin, 2009; Day & Zaccaro, 2004), Joiner & Josephs (2007), Vincent (2014) and others have also contributed to understanding the relationship between leadership development and ego development as structural orders of consciousness.

The key principle in the development process is the transformation involved in subject object theory (Kegan, 1982, 1994), where subject refers to what a person is embedded in, that which is unobservable, the lens through which one sees but one cannot see the lens itself. Object refers to what one can 'hold' and observe, reflect upon, and be aware of. Movement from being subject to a belief, feeling, or impulse to having a perspective on it enables a degree of freedom and choice.

This process is also understood in terms of Mezirow's (1990) notion of transformative learning, as it involves a fundamental change in the form or structure by which we organize meaning making processes. Mezirow outlines ten steps for transformative learning. Combining these with Kegan and Lahey's (2009) Immunity to Change (ITC) process, major steps along the developmental journey between stages can be described as including; encountering disorienting dilemmas, being able to reflect on and inquire into their underlying sources, exploring options for testing the validity of assumptions, gathering data on such tests, building new frames of reference and enabling new orientations, attitudes and behaviors.

In a similar vein, Bennis and Thomas (2004) describe the kinds of experiences that foster this transformation. The leaders they studied went through a crucible, or "transformative experience through which an individual comes to a new or an altered sense of identity" (p. 155). This indicates the depth of work required to successfully transform the structure, or level of complexity of meaning making, and even identity, of leaders. Argyris (2004) notes that leaders may know what they want conceptually but are not able or ready to embody the leadership behavior it takes to really create such a culture. He adds that effective learning is not a matter of the right attitudes or motivation, it is a product of *the way people reason* about their own behavior, or their structure of consciousness.

The way people reason is driven to a large degree by tacit processes, or well-honed and deeply ingrained patterns of logic. Torbert (2004) speaks of these as action logics, while Kahneman (2011) describes fast thinking, or automatic habits of thought. Changing such habits requires more than the application of will power. Drawing on Heifetz's (1994) distinction between technical and adaptive challenges, we can see that technical problems only require that we use will power to apply known resources or straightforward solutions to solve them. We can rely on existing ways of thinking.

On the other hand, adaptive problems require us to adapt the way we think about problems in order to solve them. Kegan and Lahey (2009) show that the best way to accomplish this is actually to allow these problems to *solve us*. Simply trying harder to solve external problems with will power draws attention to our inability to close the gap between what we genuinely, even passionately, want and what we are actually able to do given our existing structure of meaning making. To close this gap and facilitate the kinds of change we want, we need to suspend our normal habits of thinking to allow for new patterns to come into view. These new patterns are not simple matters of turning our attention to them. They require new lenses of perception that only come through transformative processes.

All of this highlights the significant challenge for leadership development to actually support leaders through such transformations. In terms of such ego development processes, there are two components that are seen as essential; self-awareness and emotion regulation. Axelrod (2012) examined self-awareness in relation to psychotherapy and coaching, noting the critical role of emotional awareness. Self-awareness is linked to emotional intelligence competencies of "accurate self-assessment, emotional awareness and self-confidence" (p. 345). He distinguished between self-awareness, self-reflection and self-observation. The term 'self-awareness' is also used extensively in relation to 360 feedback (e.g. looking at self-other agreement).

Further, Goleman (2006) notes the importance of emotional awareness and social intelligence, citing recent neuroscience research into mirror neurons saying that “whatever the supposed business at hand, we continually transmit emotions, making another feel better or worse” (p. 78). McCraty, Atkinson, Tomasino, and Bradley (2009) describe extensive research in the field of neurocardiology that substantiates this and describes our ability to sense the electromagnetic field produced by the heart at up to three meters. This ongoing transmission of emotions contributes to what Kegan and colleagues (Kegan, Lahey, Fleming, & Miller, 2014) describe as our ‘second job’ where we spend a great deal of time and effort to wrestle with the daily implications of how this social-emotional environment plays into our personal growth. Thus, awareness of our own state at an emotional level and the capacity to regulate these emotions contribute to the ability to take a perspective on another and to enhance social intelligence. These are critical capacities for leaders and need to be addressed in any kind of leadership development endeavors and become a focal point for the next section.

Dynamic Skill Theory

Returning to Day & Dragoni’s (2015) four key indicators, leader identity has been described above in terms of ego development while self-awareness has also been highlighted. To adequately address issues of ego and identity development in leaders is a long-term effort and is noted as distal outcome. The patience and perseverance required for this work, as well as the skill to create holding environments adequate to such work over time, are challenging to say the least, and often beyond the scope of many leadership development efforts.

Proximal outcomes, or short-term gains that can give a more immediate return on investments in leadership development are also of great importance. In regard to this, leadership knowledge, skills and competencies are another key domain Day and Dragoni identified, where the smaller steps of this work can be addressed. Typically, this domain of leadership development is approached as simply training or knowledge transfer. In order to approach this domain from an adult development orientation, it is important to find an approach that can work with micro-development in short term contexts. For this, we now turn to a different strand of adult development; dynamic skill theory.

Dynamic skill theory (DST) was developed by Fischer (1980; Fischer & Bidell, 2006; Mascolo & Fischer, 2010; Rose, Rouhani, & Fischer, 2013) to better understanding the dynamic relationship between organism and environment. This helped to integrate many cognitive development theories’ emphasis on the self with behaviorists’ (Skinner, 1938, 1969) understanding of the role of operant conditioning from the environment on development. In order to do this, Fischer began with the core concept of skill. “Skill theory provides an abstract representation of the structures of skills that emerge in cognitive development, together with a set of transformation rules that relate these structures to each other” (Fischer, 1980, p. 479).

Fischer’s conception of skills is that they are “the capacity to act in an organized way in a specific context. Skills are thus action-based and context specific” (Mascolo & Fischer, 2010, p. 321). Fischer (1980) links this to his definition of cognition within skill theory as “the process by which the organism exercises operant control ... over sources of variation in its own behavior. More specifically, a person can modulate or govern sources of variation in what he or she does or thinks” (p. 481). Exercising control is an action, always acting on an object, or set. Fischer links thought with action or behavior by showing how representational or abstract thought is built on complex sets of sensory motor cognitions. He then builds a model of four repeating processes that move in iterative tiers, from reflexes, to sensory-motor, to representational, to abstractions, to principles.

Another important aspect is that the development of psychological structures is significantly influenced by context. “Psychological structures are the products of individual adaptation to particular social and environmental demands” (Mascolo & Fischer, 2010, p. 159). As well, they “consist of dynamic integrations of motive-relevant meaning, feeling, and motor action as they emerge within particular behavioral domains and contexts” (p. 150). Thus, the development of skills is contextual and dynamically variable.

This key point of the centrality of variability is illustrated in the notion of development as a constructive web with layers of; automatic, functional, optimal and scaffolded levels. A person performing a given task can function at range of skill levels. Under conditions of stress, high fatigue or interference, a person might only be capable of the automatic level of functioning. Under normal conditions they can operate at a functional level, which is a well-established level of skill organization, but not yet automatic, so it requires a degree of attention. Modest contextual support such as modeling or prompting, or ideal internal conditions such as peak alertness, confidence etc., can generate an optimal level of performance. Scaffolded levels of skill performance require direct assistance such as co-participation from someone with more skill.

The sequence of skill acquisition varies according to many factors (Fischer & Bidell, 2006), key to which is the role of emotion in development. “Any action necessarily involves an integration of cognitive, connotative, and emotional processes” (Mascolo & Fischer, 2010, p. 152). Emotions involve three classes of components; appraisals, feeling tone, and motive action tendencies. Appraisal processes run unconsciously and are ongoing, and “affect amplifies, organizes and selects these same appraisals for conscious attention. ... With development, appraisals become increasingly mediated by higher order meanings” (p. 153). It becomes apparent that emotion is very active in the development of habits of thought and choice that become the basis for action. Feeling tone is about the phenomenal or subject experience of emotional states. They are most often described in terms of circumstances prompting the feeling, or as metaphors. Higher order cortical control is organized by the lower order processes like emotion/affect which generally function outside of conscious awareness.

Every action involves an integration of cognitive, conative, (see chapter from Harney) and emotional processes that influence behavior at any given time. In this, one can see that emotional states affect our action tendencies referring to biases or constraints that emotions exert on the resulting behavior (Fischer & Yan, 2002). Action-tendencies shape skills in immediate situations by the subject’s reaction to his/her own expectations and present feelings which again causes variation of performances. Through repeated evocation over long periods, these action-tendencies shape developmental pathways – describing that reiterated microdevelopmental sequences creates macrodevelopment (Granott, 1994; Kegan & Lahey, 2001).

Even though conscious motivational forces are partly driven by will power and self-regulation, affective science has shown that the role of emotions and emotion-regulation plays the bigger part of how individuals behave and choose to act (DeSteno, 2009). While the will power of committing to a task tends to fluctuate extensively, emotions and emotional bonds between oneself and the social environment seem to cause more perseverance into committing to a cause over time (DeSteno, 2018).

This brief overview of DST presents a picture of the high degree of granularity available to understand the developmental sequence of skills that can form the basis for Day and Dragoni’s identification of leadership knowledge, skills and competencies as a key domain. It is this granularity that can enable a focus on short term development of proximal outcomes.

The Moral Element

However, it has been noted in the previous chapter (Roux) that in addition to these developmental aspects, there is also a need to attend to the moral element. It is not enough to just think more complexly – what you think about also has consequences. As seen using the immunity to change process, (Kegan and Lahey, 2009) (and cognitive behavioral therapy in general), limiting beliefs and assumptions can have a significant impact on maintaining or even increasing the gap between our desired outcomes and our actual actions. We take ‘wrong turns’ or act with ‘good intentions’ while failing to have a helpful impact on situations.

In this section, we will not attempt to lay out a comprehensive foundation for moral issues, but rather draw on a specific body of work (that was utilized in the program focused on in this chapter) that addresses this aspect from a simple yet powerful approach. The Arbinger Institute (1997, 2006, 2010, 2016, Warner, 2001) makes a simple claim. If we attend to “the light coming from others” (Warner, 2001, p. 51) and act on the call of their humanity to do what we can to help them, then all is well, and our moral integrity is intact. If, however, we do not, we essentially betray ourselves. This simple and subtle act of self-betrayal automatically leads to self-deception – we do not recognize that this has happened and our moral sense becomes corrupted.

This corruption then actively inserts deceptive representations of situations (think Argyris’ ladder of inference here) into perception. We thus see the world in a skewed or incoherent (Bohm, 1992) manner that justifies our initial act of self-betrayal. Then, over time, as we carry this incoherence or distortion with us, we provoke others to betray themselves, and invite them to collude in mutual mistreatment and mutual justification.

In this fog of self-deception, we feel ourselves to be the victim of others’ actions and do not see our own responsibility and role in creating not only the feelings we have, but even the situations themselves. The judgments that arise as a result of our self-betrayal appear as coherent and feel integrous. They justify us. The physiological feelings that come along with these judgments give an appearance of them not being constructs of our own justification, but of being caused by the other person or the situation. These judgments naturally lead to being able to blame others, while in reality we are blaming them for our own self-betrayal (Arbinger, 1997).

So then how can we take ourselves out of this condition? When we go in search of understanding, and do so sincerely, we put ourselves in a *receptive* posture towards truth. Listening deeply for what we honestly perceive to be the right thing to do, separating this from what might feel right according to our justifications, and then acting on this, in other words, doing the right things for the right reasons, can lead to a change of heart.

So the choice that can change our hearts is not a choice of either our behavior or feelings. The first does not affect our way of being and the second, which tries to affect our way of being, is impossible. ... The choice point comes elsewhere. It comes when we decide or not to yield to the truth about ourselves, about others, or about what’s required of us and be guided by it in our actions. (Arbinger, 1997, n.p.)

Arbinger has taken a number of approaches to creating simple yet powerful concepts to get this distinction across. Being “out of the box” (2010), or “having a heart at peace” (2006), or an “outward mindset” (2016) have all been used to convey this key message. In the program that is the focus here, we synthesized these into the notion of being “clean.”

Applying Theory for Program Design

The above theory, as well as much more, served as the background for designing the program for Trondheim municipality. One challenge was to take these relatively complex, abstract and fine-grained theories and translate them into concepts and tools that we could utilize in the program. The above notion of being 'clean' was one such move we made. This section will cover a variety of ways in which we applied the above theory and turned them into program elements.

One way in which we made sense of all this was to categorize some aspects as working through a psychological lens, and some as a learning lens. To address the aspects of leadership self-efficacy, self-awareness, leader identity, we began with a combination of tools and processes that could be characterized as using a psychological lens. We wanted to help leaders see how effective they were in their roles, how self-aware they were in terms of how others perceived this, and what underlying beliefs and assumptions might be affecting this.

To do this, we started with the use of 360-degree feedback. While a leader may have a self-sense about their effectiveness, there is a huge potential benefit in getting feedback from others. In our program we used the Leadership Circle (TLC) (Anderson, 2006; Anderson & Adams, 2016) as a method for systematically collecting perceptions on a leader's performance from a specified group of people with multiple perspectives on the leader's behaviors. An advantage of using TLC is that its two key distinctions, reactive tendencies and creative competencies, are related to Kegan's socialized and self-authoring minds, as well as to the Arbinger Institute's concepts of inward and outward mindsets.

The use of TLC helped program participants identify the gaps between their self-perception and how others experienced their impact. We then had them identify one core issue from this they would like to work on. This led into the immunity to change process, (Kegan and Lahey, 2009) which helped them uncover big assumptions underlying the competing commitments holding their internal systems in place and prevented them achieving their goals. These assumptions are beliefs that we are subject to or assume to be true and then they automatically and unconsciously inform and filter how we see reality. From these insights, we helped them design a test of one of those assumptions to learn more about what they were subject to.

These big assumptions, along with many of the foundations of these reactive tendencies can also be conceived of in terms of cognitive biases (Kahneman, 2011). Using this framework, we presented the functioning of these reactive tendencies as 'gut reactions' or even 'intuitions' that function as 'fast thinking' and govern behavior. The advantage of these system one (Kahneman, 2011) heuristics is that when coherent, they enable us to process larger and more complex chunks of information without tying up working memory. When biased, or incoherent, this fast thinking produces less than optimal to disastrous results.

The concept of "cleaning up" was part of how we framed this work. The chance to identify and reframe limiting or incoherent mental models or cognitive biases provided participants with a way to clean up their perceptual filters. It was also psychological in terms of them dealing with their inner thoughts and feelings. The debriefing process for their TLC feedback, along with the ITC work, became the basis for ongoing personal work through individual coaching.

At the same time, we realized that it would be important, from this foundation of inviting greater self-awareness, to address the components of leadership knowledge, skills and competencies. Here we used the learning lens in our design, based on Fischer's dynamic skill theory (1980; Fischer & Bidell, 2006). To operationalize this theory, the work of Dawson and colleagues (2002; 2005; 2011;

2003) has produced a content independent assessment of cognitive structure that has been applied to domain specific skills such as decision making. Using the Lactical Decision Making Assessment (LDMA), specific learning activities targeting subskills foundational to decision making can be designed to target learners' zone of proximal development (Vygotsky, 1978), or their 'Goldilocks zone.' The ability to target very focused skill development in this manner supports optimal learning that effectively produces the desired proximal effects for leadership skill development.

Having a measure of cognitive complexity for participants also allowed us to do a number of things. For one, we utilized this knowledge to create learning partnerships during the program. Participants expressed that they found the pairings to, for the most part, enable a very good flow of communication and common understanding. Another thing we were able to do was create customized worksheets and activities for participants based on their LDMA reports (a more detailed description of this in the next section). Finally, it allowed us to get a better sense of how to meet the participants where they were at and avoid presenting them with overly abstract instructions, although this took practice!

Using this combination of frameworks, models and tools, we could tie together the psychological and learning lenses. We introduced, later in the program, the notion of approaching the questioning and reprogramming of big assumptions in the ITC process with a skill development and learning lens, that offered another pathway to the growth of leadership competencies. This is a developmental path, driven by a basis in dynamic skill theory.

Program Description

With this wide array of theory and tools to draw on, as well as research and application from others in the field we undertook to design the specifics of this program in a way that would also incorporate the best of what we had learned through prior practice applying portions of this material. While we had budgetary constraints, we were given freedom and encouragement in terms of experimenting with the program design. It became a leadership laboratory, a term which we used with participants in framing how we were approaching the work itself, both for them as well as for us in terms of experimenting with combining tools, methods and other elements in the design.

The 16 participants in the program worked in a variety of areas for the municipality; social services, early childhood education, communications, infrastructure design and some participants from a group of expert staff who provide internal support for various areas of technical competence.

The program was conducted over a period of eight months and included 10 days of workshops plus 4 individual coaching sessions. Prior to the start of the program, each participant was given a short introduction to the program and then were interviewed about five questions based on an ill structured dilemma designed to elicit their best thinking in terms of decision making. Transcripts from these interviews were then used to generate Lactical Decision Making Assessment (LDMA) reports that were used later in the program.

The initial day allowed for orientation, participant introductions, initial focus groups based on an exercise using the Center for Creative Leadership's developmental action logic cards (see chapter from Palus, McGuire, Stawiski and Torbert for a more detailed description of these), and an introduction to the process for doing their Leadership Circle (TLC) profile.

The next session one month later was three full days. This was made up of a half day TLC orientation workshop, receiving their TLC reports, doing a series of embodied group exercises related to their profiles on a 6.5 meter diameter floor mat replica of a generic TLC profile, going through the

Immunity to Change (ITC) process, and beginning to prepare for taking the self-awareness gained and investigating it in their everyday work life. (For a more detailed description of these three days, see a similar design described in Reams and Reams, 2015). This was followed by individual debriefing sessions of their TLC reports, and three coaching sessions over the coming months working with this and their ITC maps.

The second half of the program consisted of four one-day workshops where participants brought cases from work that met specific criteria; they needed to be something challenging, involve multiple stakeholders, could involve conflict and could need coordination with others. They then had to identify why the case had arisen, what was at risk, who the other stakeholders were, what they might care about and finally, how they were planning to deal with the case. This was done iteratively with a new case each month.

To aid in working on their cases, they were given a workbook we designed that contained a portion of their LDMA report. Each session would have one area of the workbook that focused on the complexity of their thinking and one on a subskill related to decision making (working with perspectives, contextual thinking, collaborative capacity and the actual decision-making process). The workbooks included exercises for identifying differences in the descriptions provided in their report indicating what their thinking would look at like at the next quarter phase of developmental complexity, (for the complexity sequences), or the next step in the sequence of that particular subskill area, or what was in their 'Goldilocks zone.'

Working in pairs, participants then applied the new distinctions offered to how they could approach their specific case. This included designing specific action plans for applying these distinctions. In the next workshop, they would begin by reflecting in small groups on what they learned from trying out these new skills. The process would then be repeated with a new case, more developmental distinctions and newly designed skill improvements.

This cycle for the four one day workshops in part two of the program aimed to create iterative virtuous cycles of learning (VCoLs) (Dawson., T. & Stein, Z. 2011a, 2011b). This meant;

- setting skill development goals based on the distinctions offered in the sections of their LDMA reports,
- receiving new information related to their goals in the form of brief lectures, coaching or short texts in their reports,
- designing new approaches to their specific cases and applying these between sessions,
- starting the next workshop by reflecting in small groups on their experiences from applying the new approaches, then
- designing a new goal based on their learnings from the previous cycle as well as on new input from the next section of their LDMA report.

The last two days of the program provided an opportunity to reflect on their journey, on the new skills they had learned, as well as what had happened around their self-awareness from ongoing inquiry into their ITC maps. It also included working on how they would then take key elements of their learning in the program and scale this by beginning to mentor and teach others in their teams.

Focus Group Method and Implementation

To explore the participants experiences of the program, multistage focus group discussions were adopted. The multistage focus group discussion is characterized by exploring a certain theme or

phenomenon through several group discussions, and it is described by Hummelvoll (2008) as inquiring into knowledge dialogues emerging from experiential material. Data was collected in group discussions held during the first gathering in May 2017 and focus groups in September 2017 and four months after the program ended, in May 2018. Participants only inclusion criterion was that they had participated in the program. In total all 16 participants participated in focus group discussions, six participated three times, five participated only once.

Thematic Analysis

Following the aim of this study, the transcribed text from the multi-staged focus group discussions was analyzed using thematic analysis (Braun & Clarke, 2006). The second and third authors conducted the initial data analysis by reading the transcripts to become familiarized with the data, noting initial thoughts, ideas, and emerging themes. Subsequently, the material was coded. The initial ideas and the emerging themes were then condensed, interpreted, labeled, categorized and subsequently condensed into a coherent text, then merged with the preliminary themes from the first reading. Meaningful elements, such as quotes and descriptions of the emerging themes, were identified, listed, collated and then sorted into tentative categories. The data was examined several times to go from the categories to overarching themes. Through the process of thematic analysis, we (the second and third authors) identified four overarching themes the leaders experienced from participating in the leadership accelerator program: (1) Increased awareness and expanded perspective taking, (2) Creating a we-culture, (3) Relevance to daily work, and (4) Leadership as embodied knowledge.

Research Ethics

The study was conducted in accordance with The Norwegian National Committee for Research Ethics. Ethical approval to conduct the study was granted by the Norwegian Social Science Data Services (NSD). After a complete description of the study to the participants, written informed consent was obtained. Confidentiality was assured for participants.

Findings from Focus Groups¹

Increased Awareness and Expanded Perspective Taking

In the focus group discussions, all participants emphasized that the leadership laboratory had increased their self-awareness in relation to others and expanded their perspective taking. This was helpful in their development as leaders and in communication with others.

This increased awareness they highlighted was specifically connected to the TLC 360. This feedback meant a lot to them. They took time and let it sink in; *when we got the 360 feedback there was silence*. Some expressed that it was painful but effective: *I was shocked, shaken into the spinal cord*. Another participant said: *It became very visible, like a flash in my face, I thought no one saw it – then I had to do something about it! The 360 evaluation it made me realize it*. Another participant described a clearing process;

The 360 cleared in lots of flies in my head that I had no idea were there before ... Now I am straighter in my back... It has cleared my head in a kind of way, where there were a lot of things happening at the same time and it can mess up the understanding of what you're doing there and then ... I've also become clearer to myself.

¹ All quotes are translated from Norwegian, with some slight editing related to cultural expressions.

This clarity was articulated by others as well. *Yes, something you have sensed became more visible; easier to overcome an obstacle as you know how high it is, where it is, and you see it more clearly.* One of the participants expressed that the 360 was; *drawing an understandable image of my leadership – something that I can do something with.*

Doing the 360 as part of a group was very useful for the participants. In the program, they had to expose themselves to the group, sharing aspects of their feedback and from these group activities everyone got increased insights into the feedback.

Another topic the participants talked about was that through the 360, the exercises, the coaching and the pairing with a buddy (a leader from another part of the organization), they expanded their perspective awareness. Perspectives were important, as one said; *it is not only about looking inward at their own thinking. Nor is it just about how something is experienced by others. It was more that you have for example a task or project – that you can see it from different perspectives, and additionally see more issues related to the task or project. Then it became much easier to succeed with it, compared to just having your own perspective.* Some of the participants also highlighted the coaching they received as important for seeing diverse cases differently.

Creating a We-culture for Challenge and Support

The participants in the program stated a wish for a more ‘we-culture’ and the need for feedback from day one of the program. As part of creating this we-culture the leaders wanted feedback, which they expressed in the interview connected to the first gathering and in the focus group in the middle of the program. The participants also raised the topic of feedback on a more general level in the municipality, indicating a lack of a feedback culture. Support and feedback seemed important for them, *to experience that you are doing a good job and feel that you move in the right direction – to see yourself from the outside.*

In the last focus group, they expressed that through this program they had gotten clear feedback and it was important for them. All participants were positive to the feedback they got through the TLC 360. They expressed that they felt both that they received support, and also saw their challenges. Several of them also felt that being paired with a “buddy” (another leader) was helpful in this process and had an added value related to learning.

The wish for a more we-culture was underlined in one of the groups by saying that *the culture of the municipality is too kind.* Some expressed a need for themselves to become clearer in their own communication, and they agreed that the culture also needed to reveal their assumptions and become closer in dialogue. *I have worked to become clearer and sharpen communication and dare to stand for it and I've received feedback that they are experiencing it as very good.* In terms of challenging assumptions, the participants talked about how important this was, and one participant said:

We have so many assumptions. We need to stop assuming. It is crazy how many decisions are made on the basis of assumptions. My pedagogical leader does not dare to ask. They are not brave enough to have a dialogue and name a spade a spade sometimes. In the TLC 360 you even assume how you lead – and then you see what effect you really have on others.

Participants talked about the move from becoming clearer in their communications and more courageous, to creating the culture they wish for in the municipality.

Leadership as Embodied Knowledge

An element that the participants emphasized and that gave them belief the learning and development would last, was that it was related to several dimensions; cognitive understanding, the associated emotions and the dimension of action. As one of them framed it: *The form is different, same message, but another way of communicating it and practicing it, to see it from another perspective, then you suddenly realize what it's all about through different exercises.* Several participants mentioned that moving physically on the floor, sending postcards, all helped to make sure you both understand and feel the theories, and the experiences may go into the spinal cord, as one said:

It made you know a little more physically. No, I don't want to be here [a dimension in the reactive part of the TLC mat], or something you could be proud of too, and wanted to be able to move on to what was positive also [from the reactive to the creative part of the TLC mat]. Then it wasn't that easy just to put it in the bucket. You think you have understood the meta level, but when you stand there [purely physically on the mat] with your legs well planted, and who you stand with like that, then it becomes clearer. It seems a little banal..., but then it's pretty good.

Another of the participants agreed: *There is something about dealing with what is happening in the body and feelings in the stomach. What drives me, what prevents me, what are my values and my driving forces.* The following dialogue took place in one of the focus groups, where they contrasted this with an opposite type of experience, when they experienced only learning cognitively:

You learn theory, and this is good, you actually think it, and then okay then you know it, and then nothing happens.

Yes, and laughter from everyone. Another gives an example:

The theory about the difficult conversation.

Yes, I've read it, still difficult!

New laughter from everyone.

So, it is something there that happens, between the theory and me as a person, somehow.

The 360 and the coaching, taking home exercises, to do something in a given way, and reporting back how it went; it makes you undressed, I haven't been through that before. Coaches who challenged with questions and support to grasp things and practice.

Long-term effect? - You may get addicted to the good-feeling!

Besides expressions that reflected how various programs are easy to forget, the participants also highlighted various elements that they experienced would contribute to a more long-term impact of the program. Some already experienced changes in themselves and some had colleagues that had seen changes – *that's fun*. One element that seemed to be important to make a program last was that it feels relevant, and that the program is connected to the leaders' everyday work life. *It can't be too abstract, for example only theories, we need to understand how to grasp them.* Some said it was easy to translate into your work context. *Easy to see the connection between the way I act, the way I choose. Didn't need much time to translate it.* Another participant expressed the experience of the program like this: *The gatherings made a clarified and concrete link between theory and work*

through in between homework that was personalized and we had to practice. That created a sense of empowerment.

One of the focus groups highlighted another element they identified as important for a successful program. They used the metaphor of a petrol station, to illustrate the difference between short term and long-term value. They expressed that spending time away from everyday work life is preventative and healthy; *out of workday and reflecting ... one needs to get energy from somewhere ... need to refill energy ... a developmental and meaningful break from everyday work life, ... a break from everyday life to have the opportunity to work on specific challenges, - slowing down, to speed up.* They agreed on the petrol station metaphor because; *it somehow goes in a way, so you need it with regular intervals whatever you do.* During the focus group interview some explicitly expressed their fear of forgetting something that had meant a lot to them: *A lot is cool, but it doesn't last... but this [program] goes a little deeper, - forced us to reflect a few steps further.*

They also discussed what makes this difference. When you get a taste for something, when it feels relevant, extending your comfort zone and the knowledge becomes embodied, and when they see it has an effect beyond themselves, on the team and the municipality. They ended this discussion talking about the commitment they got through working with exercises and coaching, and buddy-coaching in-between- gatherings. That having a 'buddy' (another leader as a sparring partner) keeps what they have learned 'warm.'

To sum up, the leaders who have participated in the leadership laboratory pilot project find they have changed both as human beings and as leaders. They feel that they, to a greater extent than before, open up and include their colleagues in decisions and processes. They experience that they are clearer in their communication and that there is more weight behind and acceptance for the decisions they make.

Of concrete significance for the city and municipality, some of them are sharing the knowledge and capacity they have acquired through this pilot program. They have taken useful exercises from the program, condensed them and used them to design a module for the larger scale program for the 800 new leaders in the municipality. This module received consistently good feedback. In addition to these findings, a description of the program and some of its outcomes can be found here (<https://www.transformleadership.no/2018/03/12/large-scale-leadership-development-program/>), including short interviews with some of the participants.

Discussion

We began this chapter indicating the need for developing better leadership capacities. McCauley et al. (2006) indicated that there was a need to move beyond descriptive models of adult development and leadership, to a better understanding of the mechanisms of how to enable such development. What do our findings imply for this approach to leadership development practices? Here we will briefly reflect on how the application of theory and tools impacted participants and aim to put forward some suggestions for answering this broader call for better leadership development.

First, a reflection on the relationship between adult development theories and how participants experienced and reflected on the program. While these theories were deeply embedded in the design, tools and application of the program, it is clear that participants' experiences did not focus on this per se. It could be said that for them, the experience of practical relevance to their work life, embodiment of practices and greater self-awareness were how they characterized their development. Our interpretation of this was that we succeeded in keeping their focus on the

benefits or results of the work. The developmental aspects of the program design were for the most part hidden in the background and simply experienced as a way to do things differently.

Next, there is a growing body of literature pointing to the central importance for leaders of self-awareness and seeing this come up as a key theme for participants was validating. We see that using the TLC 360 to provide feedback for participants was essential to this process. In addition, tying this to the immunity to change process helped to deepen and make the self-awareness more granular.

A further element of this for us was ensuring that the emotional component of participants' experience was explicitly addressed. Fisher's DST points to the central role of emotion in governing attentional capacity, and others such as Goleman reinforce the importance of emotion and social awareness. Participants' focus on perspective taking was formulated in a manner that can be seen to point to this social awareness.

Participants' also talked about a 'we-culture' where they could get the kind of feedback necessary for their development as leaders. The recently popularized notion of creating an everyone culture, (Kegan and Lahey, 2016) or a deliberately developmental organization, is about using adult development processes to enable the growth of leadership in everyone. But how can leaders in positions of formal authority make use of their opportunity to create space by initiating and modelling practices and habits among organizational members? Modeling an ongoing curiosity (see Harney chapter) that can enable greater perspective awareness and increase self-awareness could be one way. Beyond taking perspectives, Fuhs (2016) found that seeking perspectives from others was the most powerful practice to increase cognitive development.

It was also clear from this experience that what participants described as embodiment could be understood in terms of using VCoL learning cycles to embed a habit of learning practices which can make new knowledge and skills become automatic. The initial explicit system two (Kahneman) work to introduce and scaffold new skill levels (Fischer) is important to enable this learning to operate in system one. As well, there is a need to do this within the ZDP (Vygotsky) or 'Goldilocks zone' so that it has a proximal effect and is applicable directly to relevant work life issues.

Future laboratory experiments can be designed to build on this learning as well as focus on ways to better assess and understand these mechanisms of leadership development processes.

Concluding Reflections

Two incidents from near the end of the program can provide evidence of the conclusion that a developmental approach to leadership development works. In the third session of the program's second half provided me with an insight into how powerful the developmental approach to leadership development can be. Being prompt to go to lunch is a strong cultural habit for Norwegians. This had been in evidence throughout the program, as attempts to keep attention just before lunch were usually futile. On this day, the morning reflections from the previous month's application of tasks to their cases had taken longer than usual, and with ten minutes to go until lunch, I thought I would just let them see their next round of LDMA feedback to skim and have in mind over lunch.

Upon handing it out, a deep and concentrated silence ensued. The ten minutes passed, and no one moved to go to lunch. Another 20 minutes passed before some started to notice the time and drifted off to the lunchroom. After lunch, they eagerly took up their new assignments to work with this round of feedback on their cases, highly engaged in deep conversation with their buddies. For

me, this was clear evidence of the learning theory behind the work, where activating their 'Goldilocks zone' led to deep and sustained engagement and robust learning.

At the next session, we had a visitor observing and when asked to simply introduce themselves by name and where they worked, every one of them began to describe the impact their learning was having on their daily leadership habits. These unsolicited testimonials, combined with the post program focus group reflections, while not comprehensive proof of impact, do point to there being a clear value in applying a developmental approach to leadership development.

References

- Anderson, R. (2006). The Leadership Circle Profile: breakthrough leadership assessment technology. *Industrial and Commercial Training, 38*(4), 175-184.
- Anderson, R., & Adams, W. (2016). *Mastering leadership. An integrated framework for breakthrough performance and extraordinary business results.* Hoboken, NJ: John Wiley and Sons, Inc.
- Arbinger, I. (1997). *Intellectual foundations of Arbinger consulting and training.* The Arbinger Institute. Farmington, UT.
- Arbinger, I. (2006). *The anatomy of peace. Resolving the heart of conflict.* San Francisco: Berrett Koehler.
- Arbinger, I. (2010). *Leadership and self-deception.* San Francisco: Berrett Koehler.
- Arbinger, I. (2016). *The outward mindset. Seeing beyond ourselves.* Oakland, CA: Berrett-Koehler Publishers Inc.
- Argyris, C. (2004). Teaching smart people how to learn. *Harvard Business Review on Developing Leaders, 83-110.*
- Axelrod, S. (2012). "Self-awareness": At the interface of executive development and psychoanalytic therapy. *Psychoanalytic Inquiry, 32*(4), 340-357.
- Bennis, W., & Thomas, R. J. (2004). Crucibles of leadership. *Harvard Business Review on Developing Leaders, 151-170.*
- Bohm, D. (1992). *Thought as a system.* London: Routledge.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi:doi:10.1191/1478088706qp063oa
- Dawson, T. L. (2002). A comparison of three developmental stage scoring systems. *Journal of Applied Measurement, 3*(2), 146-189.
- Dawson, T. L., Commons, M. L., & Wilson, M. (2005). The shape of development. *The International Journal of Cognitive Development, 2,* 163-196.
- Dawson, T. L., & Stein, Z. (2011a). *Virtuous cycles of learning: A digital revolution.* Paper presented at the International School on Mind, Brain, and Education, Erice, Italy.
- Dawson, T. L., & Stein, Z. (2011b). We are all learning here: Cycles of research and application in adult development. In C. Hoare (Ed.), *Oxford Handbook of Reciprocal Adult Learning and Development.* New York: Oxford University Press.
- Dawson, T. L., Xie, Y. Y., & Wilson, M. (2003). Domain-general and domain-specific developmental assessments: Do they measure the same thing? *Cognitive Development, 18,* 61-78.
- Day, D., & Dragoni, L. (2015). Leadership development: An outcome-oriented review based on time and levels of analyses. *The Annual Review of Organizational Psychology and Organizational Behavior, 2*(3), 1-24.
- Day, D., Harrison, M., & Halpin, S. (2009). *An integrative approach to leader development. Connecting adult development, identity and expertise.* New York: Taylor & Francis Group, LLC.
- Day, D., & Zaccaro, S. (2004). Toward a science of leader development. In D. Day, S. Zaccaro, & S. Halpin (Eds.), *Leader development for transforming organizations* (pp. 383-399). New Jersey:

- Lawrence Erlbaum Associates, Inc.
- DeSteno, D. (2009). Social Emotions and Intertemporal Choice: "Hot" Mechanisms for Building Social and Economic Capital. *Current Directions in Psychological Science*, 18(5), 280-284.
- DeSteno, D. (2018). *Emotional Success: The Power of Gratitude, Compassion, and Pride*: Houghton Mifflin Harcourt.
- Fischer, K. (1980). A theory of cognitive development. The control and construction of hierarchies of skills. *Psychological Review*, 87, 477-531.
- Fischer, K., & Bidell, T. (2006). Dynamic development of action, thought, and emotion. In W. Damon & R. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human development* (pp. 313-399). New York: Wiley.
- Fischer, K., & Yan, Z. (2002). The development of dynamic skill theory. In D. J. a. L. Lewkowitz, R. (Ed.), *Conceptions of development: Lessons from the laboratory* (pp. 279-312). New York: Psychology Press, Taylor and Francis, Inc.
- Fuhs, C. (2016). *A latent growth analysis of hierarchical complexity and perspectival skills in adulthood*. Fielding Graduate University, Ann Arbor, MI.
- Goleman, D. (2006). The socially intelligent leader. *Educational Leadership*, 64(1), 76-81.
- Granott, N., & Gardner, H. (1994). When minds meet: interactions, coincidence. *Mind in context: Interactionist perspectives on human intelligence*, 171.
- Harris, L. S., & Kuhnert, K. W. (2008). Looking through the lens of leadership: A constructive developmental approach. *Leadership and Organization Development Journal*, 29(1), 47-67.
- Heifetz, R. (1994). *Leadership without easy answers*. Boston: Harvard University Press.
- Hummelvoll J.K. (2008). The multistage focus group interview – a relevant and fruitful method in action research based on a co-operative inquiry perspective. *Norsk Tidsskrift for Sykepleieforskning*, 10, 3-14.
- Joiner, B., & Josephs, S. (2007). *Leadership agility. Mastering core competencies for handling change*. San Francisco: Jossey-Bass.
- Kahneman, D. (2011). *Thinking, fast and slow*. London: Penguin Books.
- Kegan, R. (1982). *The evolving self. Problem and process in human development*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1994). *In over our heads. The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kegan, R., & Lahey, L. (2009). *Immunity to change. How to overcome it and unlock the potential in yourself and your organization*. Boston: Harvard Business Press.
- Kegan, R., & Lahey, L. (2016). *An everyone culture. Becoming a deliberately developmental organization*. Boston, MA: Harvard Business Review Press.
- Kegan, R., Lahey, L., Fleming, A., & Miller, M. (2014). Making business personal. *Harvard Business Review*(April), 1-10.
- Kuhnert, K. W., & Lewis, P. (1987). Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management Review*, 12(4), 648-657.
- Lucius, R. H., & Kuhnert, K. W. (1999). Adult development and transformational leader. *The Journal of Leadership Studies*, 6(1/2), 73-85.
- Mascolo, M. F., & Fischer, K. W. (2010). The dynamic development of thinking, feeling, and acting over the life span. In W. F. Overton (Ed.), *Biology, Cognition, and Methods across the Lifespan* (Vol. 1, pp. 149-194).
- McCaughey, C., Drath, W., Palus, C., O'Connor, P., & Baker, B. (2006). The use of constructive-developmental theory to advance the understanding of leadership. *Leadership Quarterly*, 17(6), 634-653.
- McCraty, R., Atkinson, M., Tomasino, B., & Bradley, R. (2009). The coherent heart: Heart-brain

- interactions, psychophysiological coherence, and the emergence of system wide order. *Integral Review*, 5(2), 4-107.
- Mezirow, J. (1990). How critical reflection triggers transformative learning. In J. A. Mezirow (Ed.), *Fostering Critical reflection in adulthood. A guide to transformative and emancipatory learning* (pp. 1-20). San Francisco: Jossey-Bass.
- Myatt, M. (2012). The #1 reason leadership development fails. *Forbes Magazine*, December, 19. Retrieved from <http://www.forbes.com/sites/mikemyatt/2012/12/19/the-1-reason-leadership-development-fails/>
- Northouse, P. (2001). *Leadership: Theory and practice*. Thousand Oaks, CA: Sage.
- Pfeffer, J. (2011). Leadership development in business schools: An agenda for change. In J. Canals (Ed.), *The future of leadership development. Corporate needs and the role of business schools* (pp. 218-240). New York: Palgrave MacMillan.
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.
- Reams, J. (2016). An overview of adult cognitive development research and its application in the field of leadership studies. *Behavioral Development Bulletin, Advance Online Publication*. doi:<http://dx.doi.org/10.1037/bdb0000032>
- Reams, J., & Reams, J. (2015). Awareness based technologies for leadership development: Utilizing immunity to change coaching. *International Journal of Evidence Based Coaching and Mentoring*, 13(2), 14-28.
- Rose, T. L., Rouhani, P., & Fischer, K. W. (2013). The science of the individual. *Mind, Brain, and Education*, 7(3), 152-158.
- Skinner, B. F. (1938). *The behavior of organisms*. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis*. New York: Appleton-Century-Crofts.
- Strang, S. E., & Kuhnert, K. W. (2009). Personality and leadership developmental levels as predictors of leader performance. *The Leadership Quarterly*, 20, 421-433.
- Torbert, W., & Associates. (2004). *Action inquiry. The secret of timely and transforming action*. San Francisco: Berrett-Koehler.
- Vincent, N. (2014). *Evolving consciousness in leaders: Promoting late-stage conventional and post-conventional development*. (Ph.D.), University of Adelaide, Adelaide, Australia.
- Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Warner, T. C. (2001). *Bonds that make us free. Healing our relationships, coming to ourselves*. Salt Lake City, UT: Shadow Mountain.