ON THE BECOMING OF CONSCIOUS CO-CREATORS

Ekskäret Foundation White Paper on
Transformative Skills for the 21 Century

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"The changes in which we will be called upon to participate in the future will be both deeply personal and inherently systemic. Yet the deeper dimensions of transformational change represent a largely unexplored territory...this blindspot concerns not the what and how - not what leaders do and how they do it - but the who: who we are and the inner place or source from which we operate, both individually and collectively."

Senge, Scharmer, Jaworski & Flowers (2004)

Introduction

The point of departure of the present paper is our human, as yet largely unexplored, inner territory. In particular, the potential for this ”blindspot” to evolve, that can be regarded as the transformational change needed in order to cope with the many challenges we face in our contemporary world. These challenges are technological, political, informational, social, economical, and environmental. Challenges that are intertwined with, and interdependent on, each other. This require of us to navigate complex issues and make conscious choices about the current course of developments as this is what will shape the future, not only for humanity but for the world as a whole.

From a world where fundamental technological and societal changes took place between generations, we now live in a world where both society and our personal lives are rapidly and continuously changing, a world where change is the only constant. Less than 250 years ago, people lived their whole lives as, for instance, farmers, if their parents had been farmers, in much the same environment and conditions as previous generations. A change in this larger structural pattern took place around the time of the industrial revolution, where it was common for children of a farmer to move to one of the growing cities and become factory workers. Today, in the age of globalisation and the revolution in information technology, we travel and live around the world, change jobs and careers, and for many of us also change partners and living arrangements, many times during our lives. AI and the automation of, for example the administrative work, will have an at least equally dramatic impact on our contemporary society as the mechanisation and industrialisation had on the agricultural society of our great grandparents. Moreover, we are constantly over flooded with information that compete about our attention and related choices to make. Taken together, this put increased pressure on us as humans to be able to live, thrive and make well-informed choices in an environment of high complexity and constant transformation, that is, we need to be able to be in transformation ourselves. But what does this mean? What is it that needs to be transformed, and is this even possible? These questions are at the core of the present paper, where the aim is a literature study of the skills we need to cultivate in order to successfully navigate and increase our wellbeing in today’s world. This paper takes an individual perspective, although we want to emphasise the connections between the lives and inner psychology of individuals and global events, as our daily choices and habits influence other people, animals as well as the environment far beyond our own nearest surrounding. Indeed, this makes an argument for the need to turn our attention towards our inner world and cultivate capacities that will support us in navigating the uncertainty, rapid change and constant transformation that characterizes our external world.

Deep adaptation, Bildung and adult development as processes for transformative learning

In dealing with the rapid change that the civilization is currently facing, a question to explore is how humans learn and live when faced with a sense of uncertainty and danger? How does a society change from our current condition into one of which we understand that uncertainty is a fundamental

feature of life and all living systems? How do we avoid the illusion of certainty of life and learn how to adapt well in the face of uncertainty?

With these questions in mind, it is necessary to explore and find the underlying depth and structure of the process of learning. In order to unlearn the illusion of certainty, it is important to learn or re-learn fundamental approaches to adapt to the uncertainty of change in any given context, and the potential danger that it may bring.

When everything is changing rapidly, it is necessary for you to be open, aware, and responsive so that you can act with laser-focused clarity to the challenges, triggered by emerging and rapid changes moment to moment. Consequently, the importance of finding a foundational toolkit to learn (re-learn) on how to build the capacity to ground and balance yourself in order to stabilise your core in the midst of rapid and emerging change. This toolkit would allow you to access and tune into a deep source or code that appears to be ingrained in our essence, formed within the evolutionary cycle of humankind. This is where you will learn and re-learn your timeless essence to tune in towards balance and harmony within yourself in any given context.

It is surprisingly simple, yet it has a deep core for stability. This foundational approach starts with relaxation, to open the path by releasing all forms of contraction, tension, blockage, and holding on to past, present, and future. This helps to be truly open to what is there, within yourself and beyond, within the tangible and intangible domains. Ultimately, it is experienced as a complete surrender into the truth of here and now, bringing in stillness and deep presence in the moment. Once the tensions and blockages are released, the possibility of realizing presence naturally arises. To be fully present allows to deeply connect, sense and listen into with whatever is appearing moment by moment. All distractions dissolve in the only time there is: now.

By fine-tuning/refining each fields of awareness, our senses will be mentally and physically better prepared, more present, attuned and aware Sensing and mediation are ways to open up for clarity and cultivate intuition. This inner work will facilitate us in opening up on a human-nature deep ecological level.

Another angle to approach this “blindspot” of potential transformative learning and development is through the lens of Bildung. This originally German concept of lifelong inner development became very popular in the Nordic countries at the turn of the last century and played an important role in the development of the modern Nordic societies (Andersen & Björkman 2017). A third way to approach our deeper developmental potential is through the academic field of adult developmental psychology (see for instance Keegan, 1982), and the concept of ego-development that is at focus in this paper.

By maintain a high degree of presence people get the basic fundaments for learning so they can develop the transformative skills to increase capacities for deep adaptation. All choice-making in all possible contexts is founded on these capacities. Once a person masters the skills, one is ready to respond to any possible set of circumstances. This is how the deep code for learning can be applied in everyday life.

Human and transformative skills

Regarding human skills, or capacities, there are some that we are born with and that are essential, such as IQ or our rational intelligence. In our contemporary world of change and transformation, although high IQ can be expected to be beneficial, this capacity is more or less unchangeable.

There are, however, other important skills that we can learn, primarily in school, such as to read, write and count, amongst others. Several of these skills moreover need to be continuously updated through life-long learning. However, the skills at focus in this paper are not covered by either those we are born with or those we learn in school. Rather, they lie within the ”blindspot” and concern who we are at a deeper level, skills that can be developed and strengthened, although not through traditional, formal learning, but through transformative learning. As such, these skills are referred to as transformative. Importantly, transformative learning is not a concept invented by Ekskäret Foundation, but is a well-established academic discipline within learning theory (Taylor & Cranton, 2012).

So, how can we think about these transformative skills? There are a range of deeper, transformative skills that can be argued to be of importance in today’s world. Skills that can help us mature and grow, navigate in complexity and increase our well-being. The Ekskäret Foundation, have made an attempt to arrange a number of these transformative skills into five clusters of skills in order to get a road map serving as guidance of the bigger picture. The clusters are:

Openness
Perspective seeking
Sensemaking
Inner compass
Compassion

We sometimes refer to these clusters of transformative skills as ”super skills”. Not only because we are convinced that we all need to develop them in order to function well in a constantly changing, global and connected world, but also because they can be considered to be of value irrespective of future technological developments. Taken together, they can be expected to help us cope with difficult and complex issues as well as to develop an inner compass giving us the ability to navigate and lead ourselves which, in turn, can be considered a prerequisite for taking greater responsibility. Only then are we able to contribute to increased sustainability for ourselves, others, and society at large.

The first cluster of skills is referred to as ***openness*** and concern openness on various levels, both inwardly and outwardly, to have an open mind and an open will, as well as openness in terms of being present in the here and now. Thus, it involves the capacity to meet situations, people, thoughts and feelings with curiosity and acceptance and develop a mindset of growth and change. In a confusing and rapidly changing world, it is easy to close down our perception in order not to be overwhelmed. To deliberately open up our senses, minds and hearts is the first step in constructively coping with a rapidly moving and more complex world and increasing the possibilities of realising one’s full potential.

Next, there is the cluster of skills around ***perspective seeking*** referring to capacities for actively seeking, coordinate and bringing more perspectives into different situations and circumstances, in order to get an increased understanding of ourselves, others and the whole. Once we are open to really take in what is happening both inside ourselves and in the outside world, actively seeking new perspectives on ourselves and the world becomes crucial.

The third “super skill” is a cluster around ***sensemaking***, or meaning making. This regard the ability to see and understand the bigger, more complex patterns around us, and our individual role in the world we create together. With an open mind and the ability to take on many perspectives, we need to be able to make sense of a multitude of impressions and feelings. In a more complex world, sensemaking itself also becomes more complex. Thus, we need to develop our ability to make sense of the world with more nuance and depth, and develop our capacity to resist the temptations of false dichotomies of right and wrong, black and white, us and them.

The fourth cluster concerns the capacity to ***develop an inner compass***, which is considered vital in order to navigate ourselves with insight on what is of real importance to us as well as the courage and will to act on this, thus resembling the concept of self-leadership. In times of rapid change and confusion, it is very tempting to seek the comfort of an external authority: a dogmatic ideology or an authoritarian leader. The more chaos in the outside world, the greater the need for us all to develop a strong inner compass.

Last but not least, there is ***compassion*** referring to capacities to meet and treat ourselves and others with warmth, caring and take actions to reduce suffering. That is, that our choices and actions are based on empathy, concern and care towards ourselves and others. Compassion can both be deepened and expanded. We can cultivate our ability to feel more and more strongly with others and also to include more and more persons into our circles of compassion, eventually embracing all of humanity and future generations. To what good is clear sensemaking and an inner compass if they are not guided by compassion? Compassion, self-compassion and empathy are important skills in this final cluster.

Based on this introduction, an assignment was given to Christin Mellner, PhD and researcher at the Department of Psychology, Stockholm University, to conduct a scientifically based literature study of the transformative skills presented above. Specifically, it was investigated whether these skills can be said to represent scientifically based constructs and if so, if and how they can be measured. Moreover, the aim was to investigate whether these skills can be developed, that is, if they can be considered transformative. If so, the techniques and methods that can been used to enhance and develop these skills, and their effects, were investigated.

A short summary of this literature study is that the findings support the notion that the skills above can be said to represent scientifically robust concepts and can thus be measured scientifically. Research also clearly shows that these skills can be developed over time. However, research into different methods to facilitate this development is still very limited. Even though some research is very promising, most of the knowledge around practical facilitation of the development and embodiment of transformative skills still rests with practitioners of personal development and transformative learning.

Stockholm, Sweden, May, 2019
Tomas Björkman, Founder Ekskäret Foundation
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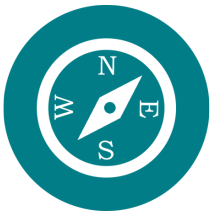
TRANSFORMATIVE SKILLS

Openness:
To meet situations, people, others' and own thoughts and emotions with curiosity and acceptance

Perspective-seeking:
To search for and coordinate several perspectives for a larger understanding of myself, others and the whole

Sense-making:
To help oneself and others to find and create meaning in the changing patterns of the world

Inner compass:
To have the courage to navigate and take action based on what is really important to me



Compassion:
To see and meet myself and others with warmth, caring and take action to reduce suffering

ON THE BECOMING OF CONSCIOUS CO-CREATORS

BY CHRISTIN MELLNER

Sign of times

We live in a world of rapid change and information overload. Technology is developing at a lightning pace, which changes our ways of living in terms of how we create and gather knowledge, how we communicate with each other, how we work, how we spend our leisure time, and even how we start and end relationships. The only thing that is constant is that change is continuous, and fast. However, even the nature and dynamics of change changes. Hence, there is a lack of predictability, but always the prospect of surprise. Moreover, due to globalisation, even small causes can create enormous consequences worldwide. Traditional simple cause-and-effect chains and explanations are replaced by highly complex interconnected forces, where this interconnectedness in itself make things increasingly complex. The amount of information is massive, and there are many convincing, competing and often times contradictory types and sources of information, leading to that it is increasingly difficult to gain clarity of events and situations.

Taken together, this development has been referred to as VUCA, where we can be said to live in a VUCA world or in VUCA times. V stands for *volatility* and concern the nature and dynamic of change as well as the speed of change forces and catalysts for change. U stands for *uncertainty* and regards the lack of predictability, prospects of surprise, and our sense of awareness and understanding of issues and events. Uncertainty is common in volatile situations that are complex and involve unanticipated interactions. C stands for *complexity* and concern the multiplex of forces in terms of the interconnectivity and interdependence of multiple components in a situation, context or system, as well as the confounding of issues, that there is no chain of cause-and-effect, and that confusion often surround a given situation or context. Finally, A stands for *ambiguity* and refers to that there are mixed meanings of conditions, such that the general meaning of something is unclear even when there is sufficient information regarding a situation. As such, ambiguity differ from uncertainty, which refer to a situation when relevant information is unavailable and unknown, whereas ambiguity is about having the relevant information but that the general meaning of an event or situation is unknown. This may lead to that individuals start to make their own assumptions based on the relevant information that they have, that is, they try to make sense, or meaning, of the situation at hand. This, in turn, may lead to simple categorisations of both situations and other people.

The roots and implications of this development has been described by the German sociologist Hartmut Rosa (Heidegren & Wittock, 2013) in his theory of *social acceleration*. Rosa describe modernity as a development of acceleration that takes place in three different parts, or dimensions: technical acceleration, social acceleration, and acceleration of life tempo. Moreover, Rosa argue that acceleration cannot be reduced to other modernisation processes like rationalisation, individualisation, or economisation. Rather, acceleration is at the root of these other processes. This means that the different parts of acceleration drive each other: the technical acceleration drives the acceleration of social changes, which in turn, drives the acceleration of our life tempo, which in turn, lead to that people demand ever more technical acceleration and so forth. These ever faster changes in our lives are associated with both the experience of a fundamental, general uncertainty as well as affecting our perception of time. In pre-modern and early-modern time, historical time was perceived

as a static time-space, meaning that people could identify certain patterns in events that tended to repeat themselves, such as the changing of seasons, or life and death. As such, changes were perceived as changes in cyclical, stable structures. At the rise of modernity, in the second half of the 1700 century, a modern view of history was born characterised by that people collectively sought to bring forth political change and strived to re-shape society at its core, and the following promise of democracy, autonomy and freedom. But in our late-modern era, this is replaced by a ”timeless time”, where the over-arching, collective projects of different political ”isms” no longer are viewed as dynamic movements in a certain direction, but more as reversible alternatives of different political, alternatives. This does not, however, imply a return to the pre- and early-modern experience of a static time-space of cyclical, natural events. Rather, the experience is that the conditions of our lives are constantly changing, but without being either part of naturally occuring cycles or being channelled into collective projects of shared goals. This leads to the common experience that all we can do is to try to cope with and adjust ourselves to these constant changes through temporary solutions referred to as situative politics and situative identities. This development, where the gap increases between the promise of modernity for democracy, autonomy and freedom and the demands for adjustment and flexibility raised by acceleration, leads to alienation. This is experienced and expressed in various ways. For instance, alienation from things, through an ever faster replacement of new things rather than repairing the ones we already have as well as not establishing a stable bond to the things we have. Moreover, there is alienation in relation to our own actions, such that we tend to behave in ways that we do not want to. For instance, endlessly browsing the internet, zapping on the TV, constantly checking our e-mails or the like, where we are drawn into behaviours that we either do not want to engage in or feel emotionally alienated by. Moreover, Rosa talk about alienation from time itself, where life falls apart into isolated episodes, referred to as fragmentarisation, where these episodes are difficult to integrate into a meaningful whole. There is also alienation in terms of our relationship to other people, where we tend to activate and de-activate relationships depending on needs and context. Taken together, these different types of alienation can result in self-alienation, that is, when the contact, or relationship, with our inner selves is broken, which also has consequences for our social relationships, and the relation and engagement with our external world. The antidote to alienation, according to Rosa (2019), is the cultivation of resonance. This refers to when this relationship with both ourselves and our external world is intact, and that this is expressed through connection, mutual understanding, trust and collaboration. As such, in order to move from alienation towards more resonance, we need to re-connect to ourselves, to our inner, subjective world, as well as to our social and natural worlds, by co-creating stable relationships of resonance.

In sum, our world is changing rapidly, and technology is moving forward at a lightning pace. The demands of late-modernity are predominantly mental and emotional in nature which require creativity, flexibility and interpersonal communication skills. In this context, it is pivotal for us to develop the motivations and capacities needed in order to be both willing and able to operate in a world of cooperation and openness, adopting holistic models in which ethics, social responsibility, and sustainability are integrated in politics, corporations, and culture. The technical development needs to be combined with a focus on creating conditions that promote the development of individuals’ inner growth, including a focus on values that are essential to human existence such as meaning, recognition and trust. This can be argued to be at the core of creating a sustainable world as people are the carriers of purpose and values, and also of the skills and competencies required for creating

a more sustainable development. Taken together, this means that, given the global challenges of our time, it can be regarded crucial to develop our reflective capacities, i.e., the ability to deal with complex challenges and to make judgments that incorporate several different perspectives that often present incomplete and conflicting positions. Put differently, to develop an inner, mental complexity that matches the complexity of our modern world. Related to this development is the necessity to simultaneously cultivate our capacity for building resonant relationships. This developmental process can be regarded essential for our ability to make sense of, and find meaning in, the ever-increasing complexity and constant change of today's VUCA world, and most importantly, to rise to the challenge of becoming conscious co-creators of a future that benefit ourselves as well as that of other living beings, and the planet as a whole.

Aim and method

The purpose of the present literature study was to investigate some of the human skills, or capacities, expected to play a crucial role for successfully navigating in a VUCA world. Specifically, the present study focused at meaning-making as this has been suggested to be at the core of human functioning in terms of understanding and making sense of ourselves, our relationships with others, as well as with the world around us. Today's world is characterised by change and disruption, ecological crisis, societal and political tension and polarisation, psychological and relational alienation, mental fragmentarisation, and complexity. Moreover, there is a rapidly increasing development of global boundary-transcending technology and information overflow that presents us with a multitude of competing and often times conflicting truths and so-called alternative facts. Given this scenario, it can be considered vital to support the enhancement of our capacity for critical reflection and an open, non-judgmental understanding of other's perspectives, the ability to guide ourselves and act on our own purposes, values, feelings and meanings, as well a sense of care and compassion for all of life. Thus, the present study investigated meaning-making, self-leadership, perspective taking, compassion/empathy, and openness. In particular, it was investigated whether these skills can be said to represent scientifically based constructs and if so, if and how they can be measured. Moreover, the aim was to investigate whether these skills can be trained, that is, if they can be considered transformative. Finally, if so, the techniques and methods that have been used to enhance these skills, and their effects, were investigated.

In order to locate empirical research studies related to the development of the skills defined in the present study, a literature search was performed in the PsychINFO database. Initially, the following key words were searched via the advanced search option: review, intervention, meta-analysis, emotional intelligence, compassion, empathy, altruism, openness, perspective taking, meaning-making, sense-making, self-leadership, self-management. The following criteria were used for including studies in the following section: the article had to be peer-reviewed; in the review studies the outcome of the intervention had to include some of the skills defined in the present paper and the effects of the intervention on some of the skills defined in the present paper had to be measured based on self-reports and/or observed behavioural outcomes. In order to select the articles included in the present paper, several steps were taken. First, the title was read and evaluated given its appropriateness with regard to the skills defined in the present paper. The articles that were based upon empirical studies measuring some of the skills defined in the present paper were selected.

Conscious meaning-making in a VUCA world – Next step of human development

In psychology it is generally considered a vital part of human functioning for individuals to understand and make sense of the world around them, their relationships with others and with themselves. Put differently, to make sense, or meaning, of both their outer and inner worlds as well as the relationships between them. Jean Piaget, a pioneer in Western psychology on the study of cognitive development in children, demonstrated that this development occurs in levels and that every level has a different worldview with different perceptions and moral motivations, and therefore, that reality in many ways is constructed (1972). Hence, individuals construct reality by making interpretations of their experiences and these ways of constructing reality evolve through regular principles of stability and change. Based on constructivist learning theory, meaning-making is regarded as an on-going process where the individual is viewed as an active part in creating his/her knowledge through the integration of new experiences with his/her current knowledge. This process of meaning-making start from birth and continues throughout our lives and has been described as a crucial component of human development.

Later scolars have, in addition to cognitive development as described by Piaget, shown that there are numerous developmental lines, such as ego, moral, affective, and interpersonal, to mention a few, and that these lines can evolve relatively independent of each other. As such, a person can, at the same time, be very advanced in some lines, medium in others, and still low in others. This means that overall development, i.e., the totality of all of these lines, does not take place in a linear, sequential fashion (Wilber, 2000), rather most theories describe human development as evolving in a spiral fashion (Cook-Greuter, 2002; 2005). However, research shows that within each of these lines, development tends to unfold in a sequential way, where higher stages build upon earlier stages, and that no stage can be skipped (ibid.). This has been shown by a large body of research by developmental psychologists, for example Piaget on cognitive development, Kohlberg on moral development, Gilligan on female development, and regarding ego development, in particular late stage adult development, we find Loevinger, Cook-Greuter, Torbert and Kegan to mention a few of the most influential theorists in the field. Moreover, research has found that in most cases, development goes through five, six, seven or more stages. In the present paper, the focus is specifically on ego development.

One of the most widely known theories on ego development is Robert Kegan's (1982; 1994) subject-object theory of five orders of consciousness. The present paper will mainly draw upon Kegan's theory where each level represents a more advanced understanding of an individual's experiences, that is, his/her meaning-making, and thus, the creation of his/her knowledge as a life-long process. The focus is primarily on the later stages of adult development, and furthermore, how these might relate to the capacities, or skills, that can be regarded necessary in order to successfully navigate in a VUCA world.

Kegan's theory of orders of consciousness

According to Kegan, the ultimate purpose of the process of human consciousness development is adaptation in terms of an active process of increasingly organising the relationship of the self to the environment (Kegan, 1982). The state of an individuals' evolution describe what s/he sees as ”self” and ”other”, and this, in turn, define the underlying psychology of her/his meanings. What is ”self” and what is ”other” is, to Kegan, a question of the subject-object relationship that s/he has *become* in the world. This expression of becoming underscore that subject-object relations are not static, rather, they *become* in the world. Furthermore, subject-object relations *live* in the world in terms of taking form in our relationships with others and in social contexts. As such, this constructive-developmental perspective on human development and its relation to the environment reminds us that the distinction between the individual and the social is not absolute, but that development is about a continuous process of settling and resettling of this very distinction (Kegan, 1982). This can be illustrated by the infant who is embedded in its own sensing and moving, that is, in its body. However, it lives in a very real human environment in terms of its caretaker, with which it confuses its own sensing and moving. This way, the caretaker provides the context in which the infant's development takes place, and the caretaker is perceived by the infant as part of its self (ibid.). This ”holding environment” is however not limited to infancy. Rather, we live and develop in a succession of holding environments that make up the psychosocial environments in which we are embedded across the life span. This relationship between the individual and its environment is, in the words of Kegan (1982), expressed as that the person is an ”individual” *and* an ”embeddual”. (p. 116). These environments hold us and we fuse with them, and then they let go of us and we differentiate from them. From this perspective, human development goes through different stages of fusing and letting go, where the various developmental stages can be regarded as markers in an ongoing, lifelong process of evolution.

This developmental process goes from a stage where we are being totally subject without any object, to a stage where there is no subject at all, so that whatever we meet or look at, we see it as it is without our own filters as subjects (Kegan, 1994). This means that the subject of one stage becomes an object of the next. Wilber (2000) exemplifies this process where his own definitions of the overall self is divided into two parts, the proximal self and the distal self. The proximal self refers to what an individual experience as a form of observing self, as an inner subject or watcher, that is, what is experienced as an ”I” part of the self. The distal self, in turn, refers to what the individual see or know about him/herself, for instance: I am a mother, I am a researcher, I have green eyes, which is experienced as a ”me” or ”mine” part of the self (ibid.). These distinctions of the self relate to Kegan's theory as the ”I” of one stage becomes a ”me” at the next, such that what an individual identify with at one stage become dis-identified with at the next so that s/he sees it more objectively. Wilber gives an example of this in terms of an infant who identifies with the body as the self or subject (the proximate ”I”), and therefore, cannot objectively observe its body. It *is* its body and as a body it looks at the world (Wilber, 2000). This example is in line with Kegan's description of the baby that is fusing with its caretaker and its environment (1982). As the infant develops a more verbal and conceptual mind, it will gradually identify with the mind, that is, the mind becomes the self or the subject (the proximate ”I”). At this stage, the infant can see its body objectively (as a distal ”me”), as an object of the new subject in terms of the mental self (ibid.). Research has shown that the self, in terms of Wilber's proximate self (the ”I”), undergoes a relatively stage-like development. Each time the self reaches a

new level, it first identifies with it, then dis-identifies with it, and then integrates it from the next higher level. According to Kegan (1994), each stage is a new solution to the tension between the individual's lifelong yearning for connectedness and inclusion on the one hand, and to be autonomous and independent, on the other. These different stages of human consciousness development as described within Kegan's theory are presented briefly in the below.

- The first order of consciousness (The Impulsive Mind) refers to awareness that is fixed on sensation and impulse without the infant yet being a real self. The subject is defined by perceptions and impulses, and identifies with sensations and movement, as described in the example above with the infant identifying with its body as well as with its caretaker and surrounding environment. Thus, there is no separation between subject and object at this stage.

- The second order of consciousness (The Instrumental Mind) rrefer to the stage of awareness of the self as a singular point of view without comprehension of others as independent selves. The individual is at this stage self-centred and mainly regard other people as either obstacles or facilitators when it comes to the realisation of their own desires. Thus, at this stage, the primary perspective of the individual is his/her own needs and preferences, and relationships are mainly in the form of simple reciprocity. Here, the former subject in terms of perceptions and impulses has become object as the child now is capable of viewing them as something separate from the newly developed self-concept. This stage is usually between age 6 and up to adolescence.

- The third order of consciousness (The Socialised Mind) rrepresent the stage where our sense of self is aware of both self and others as independent beings. Here, we develop subjectivity and self-consciousness, as well as role consciousness and mutual reciprocity, whereas our former subject of needs and preferences now become object. At this stage the individual's identity has developed into being closely linked with his/her relationships with others and where both the individual and other people take up different roles that are prescribed by the culture in which they live. Relationships are no longer viewed merely as a means to an end, and the individual is instead highly influenced by others and their opinions, and thus, what s/he believe that others want her/him to do or be like. Hence, the individual's concept of self and identity is shaped and influenced by expectations from the environment and s/he rely heavily on external authorities for direction. As characteristics of this stage is that people subjugate their own desires to that of the group, and to their interpersonal relationships. Thus, at this stage, the individual is dependent on his/her relationships as what matters most is the opinions, values, norms and beliefs of those around him/her. This stage has been described to reflect traditionalism according to Kegan (1994). Approximately 15 per cent of the adult population operate predominantly from this stage of a socialised mind, whereas another 30-40 per cent are somewhere between this third stage and the fourth stage (ibid.).

- The fourth order of consciousness (The Self-Authoring Mind) rrefer to a capacity to formulate abstractions and to multiple-role consciousness. At this stage of development, the individual can define who s/he is for her/himself, instead of being defined by other's, the relationships

with them and the environment, as well as becoming aware of and taking responsibility for his/her thoughts and feelings. Thus, the individual is capable of stepping back from his/her environment and viewing it as an object rather than identifying with it as a subject, and therefore being able to reflect upon it critically. As such, this stage of development represents the capacity to reflect upon and question, the expectations, demands, norms and values in the environment, as well as formulating one's own values and opinions, and ways of dealing with situations and solving problems. This can be described as the individual becoming the author of his/her own identity where s/he is also being guided by an internal sense of direction and judgment, aligned with an inner compass that is independent from the environment. As such, self-determination, acceptance and tolerance of previously rejected aspects of both self, others and society is possible. According to Kegan (1994), this stage reflect modernism. An estimated 35-40 per cent of the adult population is at this fourth stage of consciousness, whereas another 5-7 per cent are somewhere between this fourth stage and the fifth stage (ibid.).

- The fifth order of consciousness (The Self-Transforming Mind) represent the highest order of consciousness in Kegan's model, and it regards the capacity to hold paradoxes, contradictions and opposites, as well as self-transformation in terms of interpenetration of not just one self, but several inner Selves. At this stage the individual can question not only authorities, but also him/herself, expand who s/he is and open up to other possibilities and perspectives of the world, him/herself, other people and his/her relationships with them. The individual is able to take in different ideologies, belief systems and perspectives at the same time, to compare them and hold the contradictions between them, thus being subject to the dialectic between different thought systems, i.e., understand things from many different perspectives. Only an estimated one per cent, or less, of the adult population is at this developmental stage (Kegan, 1994).

Related theories on consciousness development

These stages in Kegan's model share similarities with Loevinger's, Cook-Greuter's, Wilber's as well as Torbert's theories on consciousness, or ego, development. For instance, Loevinger refers to ego development as a holistic process where the individual strive for meaning and self-consistency over time (1979). Moreover, ego development, according to Loevinger, involve motives for behaviour, moral reasoning, and cognitive complexity, as well as ways of understanding oneself and others. Loevinger also argue that ego development takes place in a hierarchical and sequential way, where qualitative changes in complexity of meaning-making emerge as the ego strives to integrate various elements of personality. Torbert's developmental theory posits that the individual develop, beginning in childhood, through so-called action logics over the life span. These action logics represent developmental stages referred to as: Impulsive/Opportunist; Diplomat; Expert; Achiever; Individualist; Strategist; Magician, and Ironist. This model has been further elaborated by Cook-Greuter (2002; 2005), as described in the following. The model posits that ego stages from the Impulsive/Opportunist to the Achiever action logics represent conventional linear reasoning and the individual's knowledge is mainly socially programmed. At these stages, there is increasing differentiation between subject and object. The higher stages, from Individualist to Ironist, represent post-conventional understanding, and it can be

said that the individual's knowledge is more in terms of wisdom. Here, knowledge, or meaning, is self and other constructed, and there is an increasing integration, or assimilation, towards an ever more conscious sense of belongingness and unity. Development through these stages is seen as a sequence from identifying with others who are externally alike (Diplomat), to like-minded (Achiever), to the like-principled (Strategist), and finally, to like-spirited (Ironist).

At the first stages, referred to as the conventional stages, the *Impulsive/Opportunist action logic*, the self has a first person perspective and is rudimentary and physically self-labelling and focused on ”me” and ”mine”, whereas others are regarded as fulfilment of needs on demand. Later on, the self is described in terms of own wishes and is self-serving. Others are seen in the perspective of competition for goods, space, dominance and power. At this later stage, the individual start to see others as having their own wants and wills. Between the Opportunist and Diplomat action logics, there is a transitory stage referred to as a rule-oriented stage, where the individual start to gain a second person perspective. Here the individual can start to make comparisons and realise that others sees oneself as well, and that if the self wants something it has to make itself appealing to others. The development through these first stages usually take place during the first 12 years of life. At the next stages of development in Torbert's model, referred to as the conventional stages, there is first the *Diplomat action logic*. This stage refers to that the individual now is capable of cognitive concrete operations, that the self is viewed in terms of several external features, and others are divided into two groups: own family, group or nation, and everyone else who is different from that, that is, belongs to an out-group. Between the Diplomat and Achiever action logics, there is another transitory stage referred to as the expert stage. Here, cognitively abstract operations can be performed as well as the ability to take a third person perspective and looking at oneself objectively. The self is separate from others and others are also seen as separate and different from oneself. At this stage there is a need for constant comparison with others. At the next stage, the *Achiever action logic*, there is a clear separation between subject and object, and as such, the self is independent. At this stage, the individual operates in society with others that share the same goals and aspirations. The individual at this stage is preoccupied with reasons, causes, achievement, effectiveness, contracts and agreements. Again, there is a transitory stage, now between the Achiever and Strategist action logics, referred to as the individualist stage where the individual become capable to take a fourth person perspective. Here, the individual develops the capacity for relativism in terms of discovery of personal and cultural conditioning. There is also the realisation that truth can never be found and that everything is relative. The next coming stages regard the post-conventional stages that represent the final stages in Torbert's model. First, there is the *Strategic action logic*, where the fourth person perspective is expanded. At this stage, the individual operates in the realm of society with others of the similar principles and convictions, and time is viewed from one's own history and lifetime. The individual is at this stage preoccupied with his/her own development, self-actualisation and self-fulfilment processes. At this stage, it is realised that truth can be approximated, and that higher development is better as more complex arguments carry more weight than ”weaker” ones. At the next stage, the *Magician action logic*, the individual become capable of taking in ever more perspectives, up to a fifth person perspective and more. The realm of the individual goes beyond his/her own culture, and the time frame adopted is a global-historical perspective. Here the individual is preoccupied with inner conflict regarding existential paradoxes and intrinsic problems of meaning-making. There is moreover the realisation that no matter the level of cognitive insight or abstraction,

the self is always separated from the underlying non-dual reality. For the first time, the individual is capable of seeing its own ego and the ego's ways of self-preservation. At this stage, the individual turn further inwards and starts to see his/her own attempts at meaning-making. There is the aim and hope to unlearn one's automatic, conditioned responses. Furthermore, the individual start to pay attention to his/her habits of automatic judgments, analysing and reflecting in order to create ever more accurate theories on life and nature. With a deepening process of self-awareness and when reasoning becomes ever more differentiated, the access to intuition, bodily states, feelings and dreams and transpersonal materials increases. There is a more regular practice of turning inward and observing one's own mental processes, which often leads to an experience of that the personal sense of self disappears, when "the knower and the known momentarily emerge". This has been referred to elsewhere as peak moments, flow states, or bliss experiences (Maslow, 1971; Csikszentmihalyi, 1991). These kinds of states has also been described in altered states of consciousness entered through other means such as for instance devoted meditation practice. Furthermore, at this stage, the individual have access to his/her own previous ways of meaning-making to a much higher extent than at earlier stages. At the final stage – although there may of course exist many more stages beyond these post-conventional ones, for instance as described by Wilber's full-spectrum model of consciousness (2000) – the *Ironist action logic*, the individual come to realise that all objects are human-made constructs, including the ego. At the cognitive level unitive concepts are embraced. The realm of the self is the universe and the time frame eternity. At this stage the individual is preoccupied with being, non-controlling consciousness, and witnessing a flux of experiences and states of mind. Here, the individual is accepting, characterised by presence, fully empathic, and the ability to be with whatever is. Truth is viewed as immanent, as experiential truth of interconnectedness and non-separateness, and existence is seen as changing states of awareness within timeless spirit. This stage presents a totally new way of perceiving human existence and consciousness, from the previous view of reality solely from the point of the self, to a universal, or cosmic, perspective. At this stage, the tension between belongingness and separateness is overcome, and these two human needs are integrated. The individual furthermore, has as an internalised transpersonal or inter-individual morality in terms of that inner conflicts and external demands are seen just parts of being and does not need to be either resolved or denied. Moreover, there is a sense of interconnectedness with all living beings and the individual feel compassion, tolerance and an affiliation with all of life. There is a total openness that lead the individual to comprehend things in a holistic way. Doing and thinking are viewed as merely modes of existence, and as equally valuable as feeling, being or non-being. (Cook-Greuter, 2002; 2005).

Generally, all people pass through these stages over time, however, not all reach the end of the line. Typically, transition from the second to the third stage in Kegan's model occur during adolescence, although not all adolescents achieve the third stage when they reach adulthood. In adulthood, there is typically a transition from the third to the fourth stage. Again, however, this does not mean that all adults go through this transition. In Torbert's framework, a majority only passes through the first four stages of development, or action logics. As can be seen from this, the ego development framework tends to describe human development in a linear sequence of stages. Importantly however, this does not mean that the self is just at one stage or level in a rigid fashion. On the contrary, it can, in the words of Wilber (2000) be *"all over the place"*. This means that it can, within limits, be all over the spectrum of consciousness such that it can regress, spiral, reconsolidate, and return (ibid.). As such,

development does not go from a lower level to a higher level in a single step. Rather, it is an iterative process of going back and forth, that is, we are in a continuous process of transition between stages. However, the self tends to centre around one level of consciousness at any given time, and there is a gradual development from one level of consciousness to the next (Kegan, 1994).

Taken together, the self can be regarded as the central source of identity, and that this identity over the course of development expands from being egocentric, to socio-centric, and to world-centric (Wilber, 2000). However, according to Wilber (ibid.), this does not mean that the individual at the higher stages of development has no ego, rather that their ego is mature in terms of being able to take multiple perspectives that are not confined to their own ego. This means the ability to make judgments based on the consideration of others as well as on concepts such as for instance care, fairness and justice, and moreover, that these are made irrespective of gender, race, or creed (ibid.). This relates to Kegan's definition on what is means to become an adult, which is about becoming self-directed, being able to navigate through competing or conflicting ideas and perspectives and develop mature relationships with others. This imply operating at the 4-5 stages of development of Kegan's model.

Transformative learning as a vehicle for growth

Scholars generally agree upon that the transition to higher stages of consciousness is not something that can be learned through traditional forms of education, or informative learning, in terms of just adding new information into the mind, by for example reading a book on ego development, it can only take place through transformative learning. Transformative learning as a concept has its origins in Piaget's constructive-developmental perspective (1972) presented in the above. Piaget identified three major, and interconnected, dimensions of human development considered essential for meaning-making. The first relate to a cognitive dimension that refers to our assumptions about the nature of our knowledge and how we come to know this. The second refers to an intrapersonal dimension consisting of our assumptions about our sense of self and identity. And finally, the third refers to an interpersonal dimension regarding our assumptions about the nature of social relationships. According to this perspective, individuals construct sets of assumptions by making sense of their experiences, and as such, generate meaning-making structures, or rules, based on these experiences. These rules are used to interpret new experiences until experiences that cannot be explained by these rules are encountered. These new ”non-explainable” experiences are initially regarded as exceptions, but when the individual's current stage of meaning-making is overwhelmed with too many ”non-explainable” experiences, these produce dissonance that calls the individual to engage in a process of questioning, re-evaluating and revise his/her meaning-making in order to accomodate these new experiences into more complex forms. Kegan (1994) refer to this as *”the growth of the mind”*. As such, adopting increasingly complex meaning-making structures can be said to represent the developmental growth that underlies transformative learning.

According to transformative learning theory (Mezirov, 2012), how individuals interprets the meaning of their experiences is filtered through their own, deeply held, and often times unconscious, assumptions. As humans we have a basic need to understand and order the meaning of our experiences, and to integrate it with what we already know in order to avoid chaos. If our experiences do not make sense to us, we tend to turn to traditionalism, the socialised mind in Kegans' theory

(1994), and accept the explanations and meaning-making of external authorities, or restort to psychological defence mechanisms to create imaginary meanings (Mezirov, 2012). Central to adult learning is the capacity to formulate dependable beliefs about our experiences, assessing their contexts and seeking informed agreement on their meanings, and then make decisions based on the resulting insights. This process can be expressed as using prior interpretation to construe new or revised interpretation of the meaning of one's experiences as a guide to future action (ibid.). This require the capacity to be aware of one's own assumptions and expectations, as well as those of others and also to assess their relevance for making an interpretation. This could be viewed as representing Kegan's fourth order of consciousness, the self-authoring mind (1994). However, development, or learning, only takes place when our experiences either challenge or contradict our deeply held assumptions. Then we start to engage in what has been referred to as critical self-reflection, mirroring a transformational process of evaluating these assumptions and the related meaning-making, and the creation of new categories of meanings. As such, transitioning to higher stages of consciousness goes through transformation. This process has been described by Langer in terms of mindful learning (1997) referring to the continuous creation of new categories, openness to new information, and an implicit awareness of more than one perspective. Mindlessness, on the other hand, refers to relying on past forms of action or previously established distinctions and categories (ibid.). Importantly, there are different degrees of comprehension and mindfulness regarding becoming aware of one's thoughts. In adulthood, this relates to knowing how you know, which involves understanding and awareness of the context as well as your own interpretations and beliefs and those of others (Mezirov, 2012). As such, transformative learning refers to the process of transforming assumptions that we have taken for granted and making them more inclusive, discriminating, open, emotionally capable of change, and reflective in order to generate beliefs and opinions that are more true and justified to guide action (ibid.). This means changing how we understand and know the world, which require of us to transform our minds by shifting from subject to object. This process represents a shift in the relationships between the self that is being re-structured in the different developmental stages as described by Kegan (1994), and what this self can take as objects of awareness at these stages (Jordan, 2018). Hence, the more we can regard as objects, the more we are able to see the world clearly, as well as ourselves and others. Later views on the higher states of consciousness in adult development has emphasised the role of concepts such as construct awareness (Cook-Greuter, 2010 in Jordan, 2018), self-awareness and self-witnessing (Joiner & Josephs, 2007 in Jordan, 2018), respectively. Construct awareness generally refers to meaning-making (Cook-Greuter, 2010 in Jordan 2018), in the sense that the individual is aware of that his/her thoughts, feelings, judgments etc. are the results of a process of giving meaning to them and that this depend on his/her social-environmental conditioning. Self-awareness, as defined by Jordan (2010 in Jordan, 2018), regard the individual's awareness of thoughts, emotions, perceptions and judgments as they arise in the present moment. The concept of self-witnessing takes this even further as the individual is able to witness internal events as they arise, or even beforehand, without having to act and react upon them in certain ways (ibid.), i.e., acceptance of what is by not resisting what is. According to Jordan (ibid.), the witness self is free from the forces of emotions, desires, impulses, and mental interpretations, but instead is capable of actively relating to coming and going of emotions, desires, and thoughts. As such, this kind of self has the ability to decide what to do with the emotions and thoughts that are evoked, as well as to relate to the contents of awareness without being attached to it.

Taken together, the focus of transformation theory is, according to Mezirov (2012, p. 76), on how we learn to negotiate and act on our own purposes, values, feelings and meanings. Based on this, we have the capacity to become life-long learners that can both adapt to and actively shape the society of the future (Schuetze et al., 2015). However, this imply a mind shift from uncritically accepting external authority and move into a critical reflection of these authorities in order to establish our own, individual internal authority.

The journey to self-authoring and beyond

Adult development can be regarded as a journey from following external expectations, demands and norms, through a crossroads where the individual's own, inner voice start to internally formulate and define his/her own identity, beliefs, and social relations. From regarding knowledge as something certain and trusting others description of the world, and seek their approval, the individual gradually tends to become more aware of that knowledge can be uncertain, and start to take his/her own stand that may differ from that of authority figures. To be able to work through the tensions created by these realisations and begin to view knowledge as contextual, identity as internally constructed, and relationships as based on mutual negotiation requires self-authorship. Evolving into self-authorship enables the individual to evaluate information critically, form his/her own judgments, and collaborate with others. A self-authoring mindset is thus characterised by a more mature and self-directed perspective on knowledge and how to use this which enables more freedom and scope of behaviours that are not limited to being a subject to interpersonal relations, but viewing them in relation to one's own, internally driven values (Wallin et al., 2018). This is in line with the goal of adult education in terms of fostering conditions for making more autonomous and informed choices and developing a sense of self-empowerment (Mezirov, 2012, p. 90).

Transformative learning can take place in various ways depending on the context, the situation or the individual. Hence, transformative learning can be a rational endeavour, or it can be emotional and intuitive, and in other contexts it can be about social change preceeding individual change, or individual transformation as driving social change (Cranton & Taylor, 2012). These ways of learning represent different dominant perspectives on transformative learning theory. First, there is the rational approach, building on constructivist assumptions (Mezirov, 1991, in Cranton & Taylor, 2012). In addition, there is an imaginative and intuitive approach to learning as well as a spiritual approach. The relational or connected approach to transformative learning suggest that individuals learn through relationships with others resulting in suspending judgment and developing the capacity to take another's perspective. These latter approaches also rely on constructing meaning from our experiences, although the process involved is different than in the cognitive rational approach, as the aim is to see holistically, not analytically. Finally, there is a critical social approach to transformative learning where the focus is on questioning social structures forming the basis for inequities and oppression. Thus, the focus is on the world outside the self rather than on the self as in the other approaches.

Within the cognitive rational approach, a common practice for transformative learning is *reflective discourse*. This refer to the process in which we have an active dialogue with others to better understand the meaning of an experience (Mezirov, 2012, p. 81). This is a specific form of dialogue

with the focus to search for a common understanding and assessment of the justification of a belief or interpretation. This method involves assessing different reasons that are put forth and then the weighing of the supporting evidence and arguments as well as examination of the alternative perspectives. According to Kegan (1994), discourse is the the arena where the individual finds his/her own voice, which can be regarded the prerequisite for full participation, thus answering to every human's longing for inclusion and self-agency. Furthermore, critical discourse relates to emotional intelligence (Goleman, 2006), as the method requires emotional maturity in terms of awareness, empathy and control, or the capacity for self-regulation.

The setting is important for full participation in terms of creating feelings of trust, psychological safety and solidarity as well as empathy, as the aim is to find agreement and welcome difference, trying others' perspectives, tolerating the anxiety evoked by contradiction and searching for synthesis. These conditions have been referred to as *"democratic habits of the heart"* (Bellah et al., 1985, in Mezirov, 2012): respect for others, self-respect, willingness to accept responsibility for the common good, and willingness to welcome diversity and to approach others with openness (ibid.). The capacity to make reflective judgments that is trained in the practice of reflective discourse has been shown to be closely linked to individuals' cognitive and epistemological complexity (Hofer & Pintrich, 1997, in Wallin et al., 2018). Epistemological beliefs refer to individuals' beliefs about the nature of knowledge and how they can know things (Hofer, 2001, in Wallin et al., 2018). These epistemological beliefs, in turn, are interdependent on individuals' metacognitive and reflective skills (Muis, 2017, in Wallin et al., 2018). Supporting the development of this kind of cognitive and epistemological complexity can be argued important in for instance educational settings as this would aid children and adolescents to transition to higher stages of consciousness. This would require creating conditions that support the process of how they reflect upon their own learning, what this means to them and how they come to know something, as well as discussing with themselves about potential alternative perspectives, and in particular, making reflective judgments in relation to values so as to be able to determine whether these come from external sources or reflect their own values (Wyn, Cuervo & Landstedt, 2015, in Wallin et al., 2018). This kind of learning environment is considered conducive to growth into what Magolda and King (2014) refer to as a self-authoring epistemology. This development can be supported by providing students with feed-back on their performance as well as a teaching approached referred to as *scaffolding*. This means that students' learning is developed through interacting with a more knowledgeable person who support them in their process and over time reduce their support as the student become more independent (Wood, Bruner & Ross, 1976, in Wallin et al., 2018).

One major critique against the cognitive rational approach to learning is that is has focused too much on rationality without enough consideration to that there are other ways that individuals come to know and learn, such as through emotions, spirituality, and embodied forms of knowing (Tisdell, 2012). These other perspectives on transformative learning is represented by for instance, O'Sullivan (1999, in Tisdale, 2012) who propose a more holistic approach. O'Sullivan argue that, although cognitive, rational critique is important, it risk loosing out on the sense of the whole. Thus, other ways of learning are equally important in order to create a vision, rather than just focusing on the learning process itself. These other ways of learning involve creativity, ritual, symbol, and story (ibid.). Moreover, there is also the critique that the cognitive rational approach does not pay enough attention to power

relations or social transformation (Taylor, 1997 in Tisdell, 2012). This discourse on transformation is referred to as emancipatory education and it focuses specifically on social transformation in terms of challenging power relations based on gender, etnicity, social class, religion, disability, or sexual orientation (Tisdell, 2012).

As described in the above, although rooted in a cognitive-constructivist perspective, the forms for transformative learning can also include alternative languages such as art, drama, dance, and music, as well as dreams, intuition, and imagination as these represent other powerful ways of meaning-making. Techniques used in these alternative ways of transformative learning include embodied narrative, storytelling, artistic expression, and fiction and film. As an example of these alternative ways of transformative learning, Romanowska et al. (2011) conducted an intervention study where an art-based leadership program was compared with a conventional leadership development program. The art-based program, where the specific method used is referred to as Shibboleth, built on an experimental theatre form, a collage of literally text and music, followed by discussions. The findings showed that the leaders in the art-based program increased in sense of coherence, i.e., comprehensibility, manageability, and meaningfulness, as well as in prosocial behaviour, measured as the personality factor agreeableness, compared to those in the conventional program group. Interestingly, the leaders in the art-based group moreover improved their leadership behaviour as evaluated by their subordinates. In the context of these alternative ways of transformative learning, imagination can be considered vital for understanding the unknown. Hence, it is a way for how we can see other interpretations of our experiences than our own by being open and reflective to the perspective of others. Thus, we are able to change our point of view by examining and ”stepping into” another’s point of view. Moreover, empathy, inspiration, and transcendence are regarded crucial to self-knowledge and draws attention to the affective quality of human experience (Mezirov, 2012). This process of transformative learning can be illustrated in the context of the cultural-spiritual approach. Within this perspective, meaning-making involves a range of experiences in which knowledge is socially and collaboratively constructed (Charaniya, 2012). This process involves listening, questioning, relating, symbolising, feeling and sharing stories. Thus, it includes a broader view on transformative learning than the intellectual and logical dimensions alone, nor is it limited to regard the progression as linear. Rather, it is *”a spiralling, creative, collaborative, and intertwining journey of discovery.”* (Charaniya, 2012, p. 236). Or put differently, in the words of Tisdell (2008, p. 32, in Charaniya, 2012) *”just as events and experiences of the past can be infused and remapped with new meaning, so too can symbols, mythic story, metaphor, and music”*. Irrespective of the ways in which transformative learning occurs, the outcome is similar in terms of a deep shift in perspective that leads to more open, permeable and better-justified meaning perspectives (Mezirov, 1978, in Cranton & Taylor, 2012, p. 3).

Taken together, transformative learning can be argued to have the potential to support ego development as well as enhancing human skills by, as in the words of Bowman (2014), improving *”feelings of self-efficacy and perceived competence through goal setting and achieving, allowing individuals to contribute their personal talents to the success of the group, which may increase (the student’s) sense of agency and empowerment.”* (p. 118).

Consciousness development and self-determination theory

Kegan's theory of ego development can be related to self-determination theory (SDT) (Deci & Ryan, 1985; Ryan & Deci, 2000. This is one of the most empirically supported motivation theories within psychology, and it is based on a humanistic approach to human motivation that underscore individuals' need satisfaction, motivation and wellbeing. SDT state that motivation is central to how people stimulate themselves and others to act (ibid.). Self-determination has been defined as *"a quality of human functioning that involves the experience of choice…(which becomes) the determinants of one's actions."* (ibid., p. 38). This imply that behaviours differ in the degree to which they are self-determined, that is, that the individual experience them as freely chosen and emanating from his/her own self, as compared to controlled in terms of experienced as being pressured or controlled by some external or interpersonal force. The basic assumption of SDT is that humans strive to be self-agents, which requires opportunities in the social environment for the individual to satisfy three innate, basic psychological needs. These needs are: *autonomy* (perceiving oneself as being the origin of one's own behaviour); *competence* (feeling capable and effective); and *relatedness* (feeling connected to others). Autonomy refers to individuals' need to be the masters of their destiny and to have, within limits, control over their own lives, and in particular, over their own behaviour. Autonomy facilitates making personally relevant choices and acting in a self-directed manner, where the individual affirms his/her own feelings and preferences rather than being controlled externally on what actions to perform and which decisions to make. Competence concern the need to build one's own competence and develop mastery over tasks and activities that are regarded important by the individual. Hence, competence refers to the individual's knowledge, abilities, talents and skills that, when expressed, leads to efficient fulfilment of responsibilities. Relatedness, or Connection, regard relationships and depends on reciprocity among people, creating feelings of belonging and connectedness, which is important as all of us needs other people to various degrees (Deci & Ryan, 2008).

In addition to these needs, SDT put forth two types of motivation that mediate between need satisfaction and wellbeing. First, extrinsic motivation which regard a state where the individual performs a behaviour in order to obtain a certain outcome, where the motivation tends to cease when the objective is reached. These types of external motivations and sources include, for instance, grading systems, employee evaluations, and the respect and admiration of others. Second, intrinsic motivation refers to behaviour that is performed for the inherent interest or satisfaction that the individual finds in a task. Hence, the activity is performed because it is perceived as enjoyable, optimally challenging, or aesthetically pleasing (Ryan & Deci, 2003). As such, intrinsic motivation comes from within referring to internal drives that motivate individuals to act in certain ways that include their core values, interests, and personal sense of ethics. When intrinsic motivation increases, autonomy, in terms of being empowered, leads to that individuals achieve and perform at higher levels. In addition, competence is vital in intrinsic motivation as the individual then pursue activities that s/he finds intrinsically enjoyable and rewarding. Regarding relatedness, positive interpersonal relationships increase intrinsic motivation through feelings of safety and care. According to SDT, self-regulated motivation goes through a process including both extrinsic and intrinsic motivation through internalisation along a continuum of regulatory styles where each level represents an increase in internalisation. At the first level, regulation is external, meaning that behaviours are performed to

either meet an external demand, avoid punishment or get an external reward. At the second level, regulation is introjected, referring to when behaviours are performed to avoid the individual's own, inner feelings of guilt or anxiety. At the third level, regulation is identified, where behaviours are performed because a task or action is congruent with the individuals own goals. At the fourth and final level, regulation is integrated, meaning that behaviours are performed because the task and action have been assimilated in the individual's values and needs.

Both intrinsic and extrinsic motivation influences individuals' behaviours and drive them to meet the three basic needs of autonomy, competence and relatedness. Hence, Deci and Ryan (1985) suggested that optimal motivation include both intrinsic and well-organised extrinsic motivation, and moreover, that supportive environments cultivate satisfaction, commitment, effort, persistence, creativity and performance, as well as self-motivation, personality integration, and engagement. Thus, self-regulated motivation refers to internalisation of both intrinsic and well-organised extrinsic motivation, that, when taken together, contribute to the individual's overall motivation (ibid.). However, individuals differ with respect to the degree to which each need is satisfied (Deci & Ryan, 2008), where these differences include so-called causality orientations and life goals, or aspirations. Causality orientations refer to how individuals adapt to and orient themselves in their environment and their general degree of self-determination. Autonomous individuals represent those for whom all three basic needs are met, whereas controlled and impersonal individuals, respectively, regard those where either competence and relatedness are somewhat satisfied, but autonomy is not, or those for whom none of the needs are satisfied, respectively. In addition, life goals concern what individuals use to guide their own behaviour, generally falling into either extrinsic or intrinsic motivation as described in the above. Extrinsic life goals refer to, for instance, fame, wealth, and attractiveness, whereas intrinsic life goals concern personal development, affiliation, and generativity. Although life goals drive individuals, they are considered to be learned desires rather than innate needs, as autonomy, competence and relatedness (Deci & Ryan, 2008).

Traditionally, SDT research has conducted cross-sectional self-report studies. However, there has been an increase in longitudinal studies (Jang, Reeve & Kim, 2012) as well as in new methodologies such as ecological assessment (Shiffman et al., 2008), referring to repeated sampling of experiences in real time. Moreover, objective methods have been used, such as behavioural assessment of intrinsically motivated behaviour, memory measures in terms of recognition accuracy, and implicit measures such as priming, and response time assessment. In the studies that have employed different measurement methods, support has been shown for the hypothesised relationships between psychological need satisfaction, intrinsic motivation and wellbeing (Ryan & Deci, 2017). Moreover, a meta-analysis of 128 studies (Deci, Koestner & Ryan, 1999) supported the hypothesis within SDT that rewards lower intrinsic motivation. Regarding developmental psychology, studies have shown that children raised in a loving and caring way become more autonomously motivated for a range of tasks and activities in adult life (Deci & Ryan, 2014). This support the idea within SDT that relatedness is key in enhancing intrinsic motivation. Taken together, SDT emphasise people's capacity to be free and self-directed agents, which is reflected in the basic need for autonomy and the benefits of autonomous self-regulation. Hence, SDT assume that an individual can only develop his/her full potential as an autonomous agent who can freely engage in the world (Koole et al., 2019). This standpoint has recently been put forth as an illustration of that many of the basic principles of SDT

are humanistic in character (deRobertis & Bland, 2018). This is based on the similarities between SDT's focus on that human motives and goals that are imbued with intrinsic values also are those that support integrity, personal growth and generativity having an inherent connection to relationships and community (Ryan & Deci, 2008), and the humanistic psychology's conceptualisations of human growth, such as self-actualisation, self-realisation, and self-fulfilment. This imply that SDT share the impetus of humanistic psychology to revive the Aristotelian notion of human beings as social and political animals by nature (deRobertis & Bland, 2018).

Based on this brief presentation of SDT it can be argued that a self-determined individual is characterised by someone who feels that s/he is in control over his/her life, as well as is taking responsibility of his/her own behaviour, and moreover, is self-determined rather than being externally controlled by other's expectations, external standards and norms, and finally, determines his/her actions based on own internal values and goals. This correspond to the third and fourth levels of regulatory styles of the internalisation process towards self-motivation, that is, identified- and integrated regulation, respectively. This description of a self-determined individual thus resembles Kegan's fourth order of consciousness, which include the capacity to define our own beliefs, values, identity and social relations, as well as manage our outer world and external conditions by using the inner compass given by our own beliefs, identities, and social relations (Baxter Magolda 2001; Kegan, 1994), that is, self-authoring.

Self-authoring and self-leadership

Both the self-determined individual as described by SDT and Kegan's fourth stage of consciousness, self-authoring, can be related to the concept of self-leadership (Manz & Neck, 2004; Neck & Houghton, 2006). This is defined as a process by which individuals come to control their own behaviour, as well as influencing and leading themselves through the use of certain behavioural and cognitive strategies. As such, self-leadership refer to a process that is used to improve self-motivation and self-direction. The concept of self-leadership is based on both social-cognition theory (Bandura, 1991), and theories of self-regulation (Carver & Scheier, 1981) and self-management (Manz & Sims, 1980) including (self) goal setting and motivation. Self-leadership include behavioural and mental strategies to influence personal effectiveness (Neck & Houghton, 2006). Behaviour-focused strategies aim at increasing self-awareness that foster behaviour, specifically with regard to tasks that are perceived as unpleasant (Manz & Neck, 2004). Natural reward strategies refer to the inherently enjoyable aspect of a task creating feelings of competence, self-control and purpose through enhancing intrinsic motivation. And finally, constructive thought pattern strategies concern the facilitation of generating habits of thinking that have a positive influence on performance. These strategies aid individuals in identifying their dysfunctional beliefs and instead create new thought patterns or change their existing thoughts into more positive ones (Prussia et al., 1998). One criticism of the self-leadership literature is that it has mainly been conceptual. However, within for instance organisational settings, both field studies and experimental studies show positive associations between self-leadership and performance (Prussia, 1998), and individuals' team performance (Konradt et al., 2009), where self-efficacy mediate between self-leadership (Konradt et al., 2009; Prussia, 1998) as well as the perceived impact of effort (Konradt et al., 2009). However, to the best of knowledge, only one intervention study on self-leadership have been conducted as yet (Sampl et al.,

2017). This study combined mindfulness training with a number of self-leadership strategies with the aim to reduce stress and improve performance in academic settings where the participants constituted 109 students. The self-leadership strategies included three subcategories of self-leadership (Neck & Mainz, 2004): behaviour-focused strategies such as goal setting, self-reward, self-observation, self-cueing and reminding elements; constructive thought pattern strategies such as visualising successful performances, self-talk, and evaluating beliefs and assumptions; natural reward strategies in order to originate, create, and uphold motivation. The training included 10 sessions that took place over 10 weeks. The findings indicated that the intervention group showed significantly stronger increases in self-leadership as compared to the control group. This point to that self-leadership is a trainable skill, although more research is needed to support this.

Sense of Coherence, Meaning in Life and Self-Regulation

Another construct related to consciousness development and meaning-making as well as to self-determination theory and self-leadership is sense of coherence (Antonovsky, 1987). This construct includes the three components comprehensibility, manageability, and meaningfulness. Comprehensibility is a cognitive dimension and refers to the extent to which an individual perceive internal and external stimuli as rationally understandable, and information as orderly, coherent, clear, and structured, as opposed to chaotic, disordered, random, unexpected, and unexplained. According to Antonovsky, our ability to create structure out of chaos makes it easier to understand the context in which we are embedded as well as our own part in it. Manageability refers to an instrumental or behavioural dimension, defined as the degree to which we feel that we have access to the resources needed in order to meet the requirements of the stimuli that is constantly bombarding us. For example, this can be about formal resources in terms of social services, as well as informal resources in terms of family, friends, colleagues, and significant others. The latter refers to people we trust and can rely upon in difficult situations. In order to cope with difficult situations, we furthermore need to be motivated to solve them, including the willingness to invest the energy needed, as well as find meaning in that we are able to manage the situation at hand. This leads to meaningfulness, which refers to a motivational dimension of sense of coherence. Meaningfulness regards the extent to which an individual feel that life has an emotional meaning, and that the problems one face in life are worth one's commitment and dedication where these are seen as challenges rather than as just burdens. Antonovsky described sense of coherence as a unidimensional construct, whereas later research shows that it is rather a multidimensional construct (Eriksson & Mittelmark, 2017). Moreover, Antonovsky believed that sense of coherence developed until the age of 30, and thereafter remains relatively stable until retirement, to decrease in old age. However, this assumption finds no support in empirical research (ibid.). In contrast, studies show that sense of coherence develops over the lifespan and increases with age (Feldt et al., 2007; Nilsson et al., 2010). In spite of Antonovsky's assumptions about sense of coherence as a unidimensional construct as well as that is does not develop after the age of 30, there is a wealth of support for the scales he developed in terms of being reliable, valid, and cross-culturally applicable instruments (Eriksson & Mittelmark, 2017). Moreover, empirical findings show that sense of coherence predicts motivation and emotional capacity to take responsibility and to deal with stressful life experiences by the use of various strategies, which, in turn, leads to new understanding. This has been described in terms of that an individual who is deeply

rooted in reality is a coherent part of the world and views the world as comprehensible, manageable and meaningful, and furthermore, realises the importance of emotions (Vuori, 1994).

The search for meaning is a characteristic feature of human life. Meaning, according to Martela and Steger (2016), is at the core of our lives and something that supports us in making social life possible as our interactions with each other become more efficient when sharing a common understanding about the meaning of events, objects or symbols. Meaning serve functions such as helping us to organise our social world, predict future interactions in our surrounding environment, orient ourselves towards a goal, as well as to defend ourselves against existential anxiety (Van Tongeren et al., 2018). Many later theorists agree upon that meaning consists of two more components in addition to coherence, as proposed by Antonosvky: significance, and purpose (Heintzelman & King, 2014; Martela & Steger, 2016). In this expanded concept of meaning, coherence refers to experiences of making sense of the world in terms of creating a narrative of one's own life and identity (Martela & Steger, 2016). Significance is about perceptions of value, importance, or worth in different aspects of one's life, such as when feeling connected to something greater than oneself (Steger et al., 2006), or when doing something to improve the lives of others (Van Tongeren et al., 2016). Finally, purpose refers to one's sense of direction and goals in life, where for instance, a personal sense of purpose can be felt when having a clear understanding of a sense of calling or vocation (Steger, Dik & Duffy, 2012). Van Tongeren et al. (2018) integrated theories of meaning with self-regulation research arguing that meaning-making rely on self-regulatory processes. In this context, the process of meaning-making can be described in terms of that people adopt cultural standards for what makes life meaningful and are motivated to meet these standards. Next, they engage in monitoring and detecting potential feelings of meaninglessness that arises from incongruence between their experiences and their standards. In response to these feelings of meaninglessness, they need the strength to reaffirm a sense of meaning by enacting certain behaviours (ibid.). Given the power of our cognitive schemas, or patterns, and their relative resistance to change, it might take considerable effort to change our basic assumptions and interpretations about ourselves and the world, something which require self-regulatory resources (ibid.). In this way, meaning-making and self-regulation are closely linked (ibid.).

Perspective taking

Related to meaning, or making sense, in terms of peoples' understanding of their surrounding world is the ability to mentally put themselves in others' "shoes" and imagine how others think and to emotionally perceive their experiences, and overall, their lives (Moll & Meltzoff, 2011). This refers to perspective taking which concern the social-cognitive capacity to assume another's perspective through inference of thoughts, emotions and motivations (Carpendale & Lewis, 2006). As such, perspective taking is characterised by the capacity to put aside one's own egocentric position and take a different point of view (Moll & Meltzoff, 2011). Generally, cognitive perspective taking, or mentalising, has been referred to as the capacity to consider a situation from other's points of view, as well as their feelings and reactions (Dovidio et al., 2005; Galinsky & Ku, 2004). It has furthermore been suggested to represent two other components, in addition to the *cognitive* one involving the capacity to infer thoughts, motivations and others' intentions. *Visual* perspective taking refers to the capacity to make inferences about how objects are seen by someone at a different spatial dimension; and *affective* perspective taking regards the capacity to understand other peoples' emotional states,

especially when they differ from one's own, which has been put forth as the basis for empathy (Farrant et al., 2012; Hinnant & O'Brien, 2007; Smith, 2006).

Perspective taking is vital for adaptation and is fundamental to the development of intellectual and social skills (Weil, Hayes & Capurro, 2011). Research has shown that children who are more apt at perspective taking tasks also are more emotionally competent (Dunn & Hughes, 2001). Moreover, they are good at interpreting social indicators (Downs & Smith, 2004), and manifest more prosocial and altruistic behaviours (Hinnant & O'Brien, 2007), for instance by acting in a more prosocial way in peer interactions (Cigala, Mori & Fangareggi, 2015).

In a recent review by Mori and Cigala (2016), effects of different interventions on childrens' perspective taking was investigated. The age span was limited to age 3 to 5, as this has been referred to as the period during which perspective taking emerges (Baron-Cohen, 2001; Wellman, 2002). Three types of intervention approaches were identified: cognitive, behavioural, and affective. In the *cognitive approach*, 19 studies were identified. The total duration of these interventions varied between 2 and 4 weeks, where usually one or two sessions were conducted, once or twice a week, and each session lasted for about 15-20 minutes. The training variables within the cognitive interventions varied considerably, with some studies presenting false belief and appearance-reality distinction tasks referring to belief and desire, and these were accompanied by detailed explanations or delivery of evidence-based feedback. Other programs used discursive interaction as the intervention instrument where language was central to enhancing perspective taking. Others used group reflection regarding the thoughts of characters in short films, and yet others involved reading a book or using puppets. In some interventions, the reading of stories was supplemented with engaging the children in adult-led discussions with the aim to encourage their active participation. This so-called pragmatic perspective, states that it is through exchange of views with others that children understand that people have subjective views of the world, and that this is based on their experiences, which may or may not, be shared by others (Harris, 2008; Turnbull et al., 2009). Finally, other studies stimulated conversations and reflections, which was followed by related activities, such as drawings and drama. Regarding effects, the methods that used provision of feed-back and concrete evidence that both justified and explained the correctness of the childrens' responses were the most efficient ways to increase their cognitive perspective taking. What makes this method efficient seems to be the reprocessing of metacognitive experiences from the feedback as this allows the children to generalise knowledge of mental functioning as well as the acquisition of new insights (Melot & Angeard, 2003). Regarding storytelling as a method, only listening to stories was not sufficient to improve and accelerate cognitive perspective taking. Rather, it was the everyday conversations and interactions with peers and adults after storytelling, where the terms used in the stories, were practiced and actively used that mattered. Moreover, increased perspective taking was facilitated when drawing and drama was added to conversation and reflection exercises.

Turning to the *behavioural approach,* perspective taking has been considered an important behaviour that is necessary for the development of social skills. In daily interactions, adults shape childrens' responses through verbal hints and reinforcements that reflect their own and others' perspectives, which, in turn, produce active perspective taking behaviours in children (Rehfeldt et al., 2007). In the review by Mori and Cigala (2016), only for studies with a behavioural approach were identified, and

they included very small experimental groups of 1-3 children, and no control groups. The intervention phase varied considerably from six or nine session up to 16 or 65 sessions. The methods used concerned solving tasks by answering questions about relational stimuli describing a comparison between two different points of view. First, children were presented with different scenarios, followed by a contextual cue, and then two questions regarding both perspectives, and finally, a corrective feedback to their answer. The findings showed an increase in the childrens' proportion of correct resolutions compared to their answers before the intervention. Moreover, a generalisation effect was found in terms of that the greater perspective taking ability was transferred to real life events. However, these findings were based on small group numbers and no control groups, thus, interpretations and conclusions need to be made with caution.

Finally, affective perspective taking consider the capacity to understand another's emotional state (Harwood & Farrar, 2006), and as such, it is a part of the broader construct of emotional competence. It has been argued that understanding one's own and others' emotions imply the attribution of meaning of emotional states such that these can guide one's behaviour in social contexts (Harris, 2008). Only six intervention studies on the *affective approach* to perspective taking was found (Mori & Cigala, 2016). The studies used a conversational approach where storyreading was followed by discussion. The findings showed that conversations focused on emotions increased childrens' affective perspective taking. This was explained by that a greater mastery of emotional language skills, through discussions and explanations of mental states, may increase the understanding of others' feelings. As such, children were able to co-construct with peers and adults an understanding of others' emotional experiences. However, only one study conducted a follow-up assessment, and the findings showed that the effects remained after six months. In the other studies, it was not possible to draw conclusions about whether these skills persisted over time.

In adults, the capacity for perspective taking has been associated with reduced prejudice and bias towards stigmatised groups, and increased liking of and empathy with stigmatised individuals (Galinsky et al., 2005; Todd et al., 2011). As such, individuals are capable of taking the perspective of both other groups of people and experiencing a specific situation, where the latter has been referred to as situational perspective taking (Madera, 2018). Situational perspective taking is considered a part of social perspective taking which has been found to reduce thinking in terms of out- and in-groups as well as to increase mental representations of shared elements of oneself and others (Dovidio et al., 2004; Galinsky & Moskowitz, 2000). Social perspective taking requires the capacity to think and feel what it would be like to be a member of an out-group which, in turn, leads to creating a sense of similarity and shared identity with others that produce positive feelings towards them. In social perspective interventions people are asked to imagine a day in the life of an individual from an out-group. After this, they show more positive attitudes toward the out-group as compared to participants in a control group (Todd & Galinsky, 2014). The process of increased social perspective taking has been described as that, at first, when imagining to be the out-group individual, distress is aroused (Batson et al., 1997), resulting in greater egocentrism (Vorauer & Sasaki, 2014). This is due to that it is easier for us to imagine how we would think and feel ourselves than to imagine what another would think and feel. Next, this kind of egocentric bias lead to exaggerations of how we would perceive a situation (Blaine & Crocker, 1993). Lastly, as it is vital for our wellbeing to maintain a positive view of ourselves, we strive to protect this positive self-image (Crocker & Wolfe, 2001). In this way, activating

the self through situational perspective taking has been suggested to lead to positive evaluations that alleviate the negativity of a situation. This has been shown for instance in organisational settings where participants engaging in situational perspective taking as being the target of workplace discrimination was found to become more attracted towards organisations that fostered diversity management than those who did not engage in perspective taking (Madera, 2018).

Based on the account above, perspective taking can be considered a skill that involve various components, such as cognitive, visual, emotional, and social. Furthermore, intervention studies show that, in particular among children, but also adults, it is possible to increase the capacity for perspective taking using different methods including cognitive, behavioural, affective and situational approaches. At the core of perspective taking is the social-cognitive capacity to assume another's perspective through inference of thoughts, emotions and motivations, which help people to give sense to their surrounding world (Carpendale & Lewis, 2006). In addition to this meaning-making function, the affective aspect of perspective taking in terms of the capacity to understand other peoples' emotional states, especially when they differ from one's own, is considered the basis for empathy (Farrant et al., 2012; Hinnant & O'Brien, 2007; Smith, 2006). From the behavioural point of view, perspective taking is regarded an important behaviour necessary for the development of social skills. Taken together, these components of perspective taking can, at least partly, be expected to be interwoven with the capabilities included in the concept of emotional intelligence.

“Emotional intelligence is the subset of social intelligence that involves the ability to monitor one’s own and others feelings and emotions, to discriminate among them and use this information to guide one’s thinking and actions.”

Emotional intelligence

Emotional intelligence (EI) refers to multiple capabilities including both intrapersonal and interpersonal intelligence in terms of knowing and handling one's own, but also others, emotions (Salovey & Mayer, 1990). Goleman (2006) proposed that EI encompasses five components – self-awareness, self-regulation, motivation, empathy, and social skill – and it focuses on the capability to identify and manage one's own as well as others emotions. Salovey and Maier (1990) defined EI as *"the subset of social intelligence that involves the ability to monitor one's own and others feelings and emotions, to discriminate among them and use this information to guide one's thinking and actions."* (p. 189). Recently, EI was defined as being characterised by the four domains self-awareness, self-management, social awareness and social skills at appropriate times and ways in sufficient frequency to be effective in the situation (Goleman, Boyatzis, & McKee, 2013). *Self-awareness* concern the knowledge and recognition of one's emotions and influence on others. Self-aware individuals recognise their own strengths, weaknesses, and capabilities. *Self-regulation* refers to the ability to control one's emotions and think before acting, which resembles what is referred to as the dimensions of non-reactivity to inner experience and acting with awareness within mindfulness. Being in control over one's emotions, in turn, support in building a trusting environment. *Motivation* regards the drive to pursue goals with a feeling of energy and persistence where the individual seeks to achieve for the sake of achievement, that is, not for external rewards but through intrinsic motivation as described by SDT. *Empathy* describes the capability to understand the emotions of others and being able to treat them accordingly. Finally, *social skill*, regard the capability to manage relationships, build social networks and common ground. Importantly, social skill is considered the outcome of the other dimensions of EI.

Research on EI shows that the capability to manage emotions influence productivity by encouraging trust and loyalty (Cooper, 1997). Moreover, individuals high in EI are more successful, have better interpersonal relationships, lead more effectively, and have better health, as well as score higher on empathetic perspective, self-monitoring, social skills, and show greater cooperative responses. Previous research also show that EI is related to the personality characteristics of extraversion (happy, optimistic), agreeableness (low assertiveness) and conscientiousness (self-motivation) as well as emotional stability (Petrides et al., 2016) and prosocial behaviour (Fredrickson, Petrides & Simmonds, 2012). There is also a link between EI and a tendency toward emotional openness (Grieve & Panebianco, 2013), which may explain that individuals high in EI has been found to be more gullible and overestimate others' honesty (Baker et al., 2013). The personality characteristic openness to experience refers to the depth and complexity of individuals' mental lives and experiences (John & Srivastava, 1999) and has been connected to so-called universalism values, including promoting peace and tolerance and seeing all people as equally deserving of equality and justice (Douglas et al., 2016). Hence, these values and general outlook on life may explain the finding that openness is associated with a tendency towards gullibility, and as such, something that may be regarded as "the other side of the coin" of openness. Interestingly, openness, although naturally increasing with age as the individual gains more experience to learn from (Schretlen et al., 2010), seems to be a highly stable characteristic that is not easily altered.

However, EI can be enhanced, as shown by studies investigating deliberate training of EI, such as among leaders and employees (Cherniss et al., 1998; Groves, McEnrue & Shen, 2008). For example, in a recent study it was found that EI scores changed after a 5-day training workshop (Nafukho et al., 2016), suggesting a four-phase process for improving EI in organisations (Cherniss et al., 1998). These include a *preparation* stage which require that people are motivated to change and maintain their motivation. During this phase, the needs of the organisation are identified, personal strengths and limits are assessed, feed-back is provided with care, learner choice is maximised, participation is encouraged, and learning goals are linked to personal values, as well as adjustment of expectations and gauging readiness to change. In the next phase, *training*, a positive relationship between learner and trainer is fostered, self-directed change is maximised, clear goals are set and these are then broken down into manageable steps, opportunities to practice are maximised, feed-back on practice is provided, relying on experiential methods and using models are trained, as well as building support and enhancing insight, and preventing relapse. In the third phase, *transfer*, the skills learned needs to be transferred to the workplace and then maintained through encouragement of using the skills on the job, support a learning culture, and remove situational constraints. Finally, in the fourth phase, *maintenance*, in terms of on-going evaluation of the change, is essential.

Although the many positives associated with EI, recent research has however begun to identify that it may also be deleterious to the individual or others in certain contexts and under certain conditions. For instance, Cote et al. (2011) found that within occupational settings, high levels of EI may be used as a tool for emotional manipulation of others. In another study, high EI was associated with narcissism (Zhang et al., 2015). This point to that it seems difficult to identify what an optimal level of EI might be, as well as in which contexts this might arise. Up until now, research shows that average levels of EI appear most beneficial for adaptation (Li et al., 2015), and that individuals with low to average levels of EI benefit the most from training interventions (Keefer, Parker & Wood, 2012).

In addition to the view that the qualities that constitute EI are essential conditions for transformative learning (Mezirov, 2012), it is also, given EI's focus on the ability to monitor one's own and others feelings and emotions, and to use this in guiding one's thinking and actions (Salovey & Maier, 1990), as well as the associations shown between EI and prosocial behaviours (Fredrickson et al., 2012), related to questions of if, and how, prosociality and related concepts regarding our capacity to develop mature relationships with others can be supported.

Prosocial behaviour, altruism, empathy, and compassion

A central feature of human adaptive success is prosociality as it fosters cooperation and cohesion among groups (Fehr & Fischbacher, 2003). Prosocial behaviour has been defined as an individual's voluntary behaviour that is intended to benefit another (Eisenberg, Fabes & Spinrad, 2007), making it distinguished from affective responses to other peoples suffering such as empathetic concern as well as from the cognitive capacity to take another's perspective. Moreover, whether an act is regarded as prosocial or not is not dependent upon the motivation for the act (Penner & Orom, 2010). Thus, a prosocial act may be motivated by altruism referring to that there is no expectation of personal reward (Eisenberg et al., 2007). However, it is equally plausible that prosocial behaviour is performed in order to conform to norms or rules (Penner & Orom, 2010), to enhance one's own status and reputation as

well as to adhere to one's own sense of fairness (Eisenberg et al., 2007). This means that prosocial behaviour may be guided by either extrinsic or intrinsic motivation, as described within the framework of SDT (Deci & Ryan, 1985). Moreover, depending on the underlying motivation, the behaviour can be argued to reflect different stages of consciousness within Kegan's theory of ego development (1994). For instance, an individual who perform prosocial behaviour in order to enhance his/her own status can be argued to operate at the second stage in Kegan's model, the instrumental mind, whereas if the intent is to adapt to external norms and rules it would reflect an individual operating at the third stage, the socialised mind. Finally, if prosocial behaviour is performed because a given act is in alignment with one's own judgment and inner compass, it would reflect operating at the fourth stage of consciousness, the self-authoring mind. Hence, prosocial behaviour can be performed due to external sources such as societal norms, internal sources such as altruism without any specific affections being involved in the act as well as no expectation on rewards, or due to empathetic concern.

The capacity to share the feelings of others is referred to as empathy. However, feeling empathy does not mean that one confuses oneself with another, but rather, one knows the emotion is another's, although it resonates with oneself. Hence, empathy involves an internal response to another's happiness as well as suffering and awakens similar feelings within oneself. It can be expected that sharing happiness is easier than suffering, and this kind of shared distress can be especially difficult for people within helping professions. Another way of responding to others' suffering, without experience distress oneself, is to respond with compassion. This is also the aim of empathy-related interventions by first enhancing understanding towards others which is then expected to cultivate acts of kindness and compassion (Weisz & Zaki, 2017). The word compassion is Latin and is made of the words "com" (with/together), and "pati" (to suffer), thus referring to the emotional response of caring and wanting to help when another is suffering. In contrast to empathy, compassion is not about sharing the suffering of another, but is characterised by feelings of warmth, concern and care, as well as a strong motivation to improve another's wellbeing (Singer & Klimecki, 2014). As such, compassion is feeling for, not with. In psychological research, an empathetic response to suffering can result in two different reactions, either empathetic distress or compassion, where the latter has been referred to as empathetic concern. Thus, compassion and empathetic concern can be argued to mirror the same construct. In a recent review of definitions and measures on compassion (Strauss et al., 2016), it was proposed that compassion include the five elements: recognising suffering, understanding the universality of human suffering, feeling for the person suffering, tolerating uncomfortable feelings, and motivation to act to alleviate suffering. Some of the definitions of compassion that has been put forth are *"The felt response to perceiving suffering that involves an authentic desire to ease distress."* (Goetz, Keltner & Simon-Thomas, 2010), and *"A sensitivity to the suffering of self and others with a deep commitment to try to relieve it."* (Gilbert, 2010). Compassion thus include three components: awareness of another's suffering; feeling empathy for him/her; acting upon this to relieve suffering (ibid.). From this follows that compassion involves altruism driven by intrinsic motivation.

There is a growing body of research on compassion showing that individuals who report more compassion for others exhibit more prosocial behaviours such as altruism, empathy, and forgiveness, and are more likely to provide social support to others (Fehr, Sprecher & Underwood, 2009). In addition to the way compassion benefit others, individuals with compassionate goals tend to benefit themselves as well in terms of lower levels of anxiety, depression, and chronic distress (Crocker et al.,

2010). Moreover, studies show that compassion is associated with better mental health and emotion regulation (Keltner et al., 2014; MacBeth & Gumley, 2012; Seppälä, Rossomando & Doty, 2012) as well as increased motivation and efficiency, improved health and wellbeing, increased positive feelings, prevention of stress, exhaustion and anxiety, and increased creation of social connections and better work-life balance, as well as the creation of a sense of meaning (Seligman, 2011).

On another note, there is an increasing interest in studying compassion in organisational settings, and it has in that context been defined as *sets of practices among members* that build and sustain the health of individuals, teams and the organisation (Kanov et al., 2014). Employees in compassionate workplaces, i.e., where kindness, affection, and caring for coworkers' wellbeing is openly expressed, reported higher job satisfaction, showed superior teamwork and lower rates of absenteeism and emotional exhaustion (Barsade & O'Neill, 2014), as well as increased motivation and efficiency, improved health and wellbeing (Meyers, Woerkom & Bakker, 2013). Moreover, compassion at the workplace provides important meaning-making occasions for employees (Lilius et al., 2008) as well as alters the "felt connection" between people, and is associated with positive attitudes and behaviours such as justice, responsibility, and care (ibid.). Finally, as compassion has been shown to increase a sense of meaning (Seligman, 2011), it is noteworthy in this context that people who find meaning in their work are three times more likely to remain within the same organisation (Amortequi, 2014).

Turning to intervention studies, findings show that several weeks of regular compassion training have beneficial effects on positive affect, personal resources, and wellbeing in daily life (Fredrickson et al, 2008). Moreover, in a recent intervention study on the effects of compassion meditation on altruism through an online training, it was found that after only two weeks training participants who practiced compassion meditation every day behaved more altruistically towards strangers than a control group who were taught to simply regulate their negative emotions (Leiberg, Klimecki & Singer, 2011). Furthermore, this compassion training increased prosocial motivation, rather than just norm adherence. Additionally, the participants who were the most altruistic after the compassion training also showed the largest brain changes in response to images of suffering. This suggests that compassion training increases detection of others suffering through neural circuitry involved in empathetic concern and the sharing of others' experiences. Hence, compassion training can even alter the way that the brain perceives others' suffering and increase individuals' actions to relieve this suffering. The method used to train compassion included that participants were told to observe the thoughts and feelings that arise as they imagined a time that each individual has suffered. The aim was to give participants practice to tolerate their own reactions, rather than avoiding them or getting overwhelmed by them. In the next step, participants were told to actively wishing others compassion, or wishing their suffering to be relieved, where they used the phrases *"May you be free from suffering. May you be have joy and ease"*. Moreover, during this step of the training they were instructed to pay attention to sensations in the body, especially in the heart area, so-called "interoception". This specific form of compassion training is usually referred to as Loving Kindness Meditation (LKM).

LKM is one of the most widely used meditation techniques (Hoffman, Grossman & Hinton, 2011) to foster benevolence and kindness. This mental practice is specifically undertaken in silence and build upon the cultivation of friendliness towards a range of imagined persons. One start by visualising someone close, a dear friend for instance, and then gradually extend this feeling of loving kindness

to others, finally including both those with whom one has difficulties and strangers. Loving Kindness Meditation, also known as metta, stems from Buddhist tradition and encompass ideas such as non-romantic love, kindness and non-violence. LKM support us to develop a compassionate attitude towards ourselves as well as others. The focus is the repetition of phrases, such as those mentioned in the above, which generate specific feelings of loving kindness. LKM teaches individuals to adopt a calm and kind attitude which encourage positive connections with ourselves and others. Research shows that LKM increases grey matter in areas of the brain related to emotion regulation (Leung et al., 2013), increases respiratory sinus arrhythmia (RSA), i.e., ability to enter a relaxing and restorative state, and slowed (more relaxed) respiration rate (Law, 2011). Furthermore, LKM affects telomere length (a biological marker of aging) (Hoge et al., 2013), as well as decreases migraines (Tonelli & Wachholtz, 2014), chronic back pain (Carson et al., 2005), and post-traumatic stress disorder (PTSD) (Kearney et al., 2013). Regarding intervention effects, studies show that LKM increase feelings of social connectedness, and that it is effective even in small doses (single session, less than 10 minutes) (Hutcherson, Seppälä & Gross, 2008).

Other compassion-based interventions include: Compassion-Focused Therapy (Gilbert, 2014), Mindful Self-Compassion (Neff & Germer, 2013), Compassion Cultivation Training (Jazaieri et al., 2013), Cognitively Based Compassion Training (Pace et al., 2009), Cultivating Emotional Balance (Kemeny et al., 2012). In the first meta-analysis of compassion-based interventions as yet (Kirby Tellegen & Steidl, 2017), 21 studies including 1 285 participants, showed significant moderate intervention effects on compassion, self-compassion, and mindfulness. However, the authors conclude that the current evidence base for these interventions is still small due to small scale studies, not using active control groups, and finally, that only a few studies used compassion-based self-report questionnaires. Hence, there is a need of future research that study whether these types of intervention effects are due to increases in compassion.

Regarding potential mechanisms, and their connection to other skills of interest in the present literature study, such as perspective taking, these compassion-interventions use specific strategies with the aim to calm and sooth the individual. These include breathing practices, the use of friendly voices, and facial and bodily expressions, that have been found to activate the parasympathetic system which improves heart rate variability (Krygier et al., 2013) and decreases stress. This is important as, when in contrast, the sympathetic system is activated, that is, when we perceive threat or stress, the ability for higher order cognitive capacities such as perspective taking, or mentalising, is inhibited (Klimecki et al., 2014; Liotti & Gilbert, 2011; Thayer & Lane, 2000). Activation of the parasympathetic system, on the other hand, provide feelings of psychological safety, which in turn, activate the prefrontal cortex and thus enables perspective taking (ibid.).

Compassion can also be directed towards oneself, referred to as self-compassion. This involves a loving, non-judgmental understanding of one's own shortcomings so that the perception of one's own suffering and difficulties is viewed in a larger perspective of what it means to be human (Neff, 2011). Self-compassion includes the three components *Self-kindness* (vs self-judgment): being kind towards oneself when encountering pain and personal shortcomings, rather than ignoring them or hurting oneself with self-criticism; *Common humanity* (vs isolation): recognising that suffering and personal failure is part of the shared human experience; *Mindfulness* (vs identification): taking a balanced

approach to one's negative emotions so that feelings are neither suppressed nor exaggerated. As such, self-kindness refers to refraining from criticising oneself for mistakes or flaws, but rather to be understanding and supportive towards oneself. Common humanity regards the recognition that everyone makes mistakes and fails at times, and the acknowledgment that this is part of being human. Mindfulness allows awareness of negative self-talk and the identification with one's feelings and thoughts which makes it possible to address them with love and compassion. Taken together, this means that people act the same way towards themselves when they go through difficult times as they would towards a friend, that is, noticing the suffering, empathising with him/her, and offering kindness and understanding. The purpose of self-compassion is to *"enable people to suffer less while also helping them thrive."* (Neff & Dahm, 2015).

Research shows that self-compassion helps to generate positive emotions by embracing the negative ones (Neff et al., 2007), and that it is associated with less anxiety, depression, and stress (MacBeth & Gumley, 2012) as well as higher emotional intelligence, wisdom, life satisfaction, and feelings of social connectedness (Neff, 2003). Furthermore, self-compassion has been linked to personal initiative, perceived self-efficacy, and intrinsic motivation (Neff et al., 2005; Neff et al., 2007). In higher education settings, it has been found that self-compassionate students provided more social support and encouraged interpersonal trust with room-mates compared to those less self-compassionate (Crocker & Canevello, 2008).

As with compassion, self-compassion has shown to be trainable, where it has been put forth that mindfulness practice is associated with the development of both compassion and self-compassion. In particular, practicing mindfulness and (self)compassion in combination can increase the benefits beyond what mindfulness or (self)compassion alone can bring (Germer, 2010).

Mindfulness as a path for transformation

Mindfulness has a long tradition in the East originating from the Buddhist psychology tradition, specifically from the text known as *Ahbidharma* (Sanskrit meaning higher teachings) concerning teachings on how the mind, emotions and consciousness works (Rapgay & Bystrisky, 2009). The word *mindfulness* corresponds to the translation of the original word *smrti* (Sanskrit), referring to the capacity to retain an object in the mind, but more broadly, to also include being aware of and attentive to the present moment (Lutz et al., 2015). Mindfulness is becoming increasingly popular in the West due to the growing use of scientifically developed and standardised mindfulness-based interventions. Mindfulness has been viewed as a unidimensional construct characterised by an attention to and awareness of moment-by-moment experience (Brown & Ryan, 2003) defined as the enhanced, receptive attention to, and awareness of the current circumstances, without evaluation, judgment or cognitive filters (Brown & Ryan, 2003; Brown, 2007). Other scholars view mindfulness as a bidimensional construct and distinguish between attentional and affective components (Cardaciotto et al., 2008), whereas still others regard it as comprising multiple factors such as observing, acting with awareness, describing present-moment-experience, non-judging and non-reactivity to inner experiences (Baer et al., 2006). However, all these perspectives on mindfulness are based upon a common, underlying construct consistent with the definition by Kabat-Zinn (1982; 1994; 2013)

described as the quality of awareness that arises through intentionally attending to present-moment experience in a non-judgemental and accepting way.

In addition to traditional mindfulness practice, modern mindfulness interventions include contemporary psychological practice, with the aim to improve psychological health and wellbeing. One of the most evaluated and adopted interventions is mindfulness-based stress reduction (MBSR) (Kabat-Zinn, 1982; 2013). This is an 8-week group-based therapy which teaches mindfulness through a range of mindfulness practices, including mindfulness of breath, thoughts, sounds, bodily sensations, and everyday activities. The aim of MBSR is to change the individual's relationship with stressful thoughts and situations by decreasing emotional reactivity and enhancing cognitive appraisal (ibid.).

In the last decade, there has been a sharp increase in research investigating mindfulness and its role in health and wellbeing. Earlier studies on mindfulness-based interventions has shown efficacy for a wide array of outcomes for both clinical and non-clinical psychological conditions as compared to control conditions, for instance decreased anxiety (Green & Bieling, 2012), depressive symptoms (Strauss et al., 2014), stress (Chiesa & Serretti, 2009), chronic pain (Grossman et al., 2007), and increased quality of life (Godfrin & van Heeringen, 2010) (for a review and meta-analysis see Gu et al., 2015). Among healthy individuals, a recent meta-analysis showed significant effects of mindfulness-based interventions on the reduction of stress, anxiety, depression, distress, and burnout as well as increased quality of life (Khoury, 2015). In the context of work, mindfulness interventions have been linked with lower employee perceived stress (Wolever et al., 2012), psychological distress (McConachie et al., 2014), and emotional exhaustion (Hulsheger et al., 2013) as well as improved positive affect (Fredrickson et al., 2008). Studies of mindfulness in organisational settings show that bringing mindfulness into an organisation is more beneficial for task performance when the work environment is complex and dynamic as mindfulness is linked to higher level functioning and increased ability to focus attention in a dynamic, task-focused way (Colzato, Ozturk & Hommel, 2012). Moreover, organisational leaders' mindfulness lower employees' emotional exhaustion and affect their performance as the leader's mindfulness helps foster employees' psychological need satisfaction as described by self-determination theory (SDT), in other words, employees' autonomy at work, their perceptions of competence, and the relationship quality with others at work (Reb, Narayanan & Chaturvedi, 2014).

As regards the specific mechanisms between mindfulness and psychological outcomes, a basic theoretical premise of MBSR is that mindfulness leads to non-judgemental and non-reactive acceptance of all experience, which in turn results in various positive psychological outcomes (Kabat-Zinn, 1982). Although prior studies have shown that mindfulness interventions buffer stress and improve psychological health, the underlying psychological and neurobiological mechanisms are still not clear. However, a recent empirical study found that in particular acceptance, or learning how to be open and accepting of the way things are in each moment, was crucial for the impact of mindfulness practice on stress biology (Lindsay et al., 2018). In addition, mindfulness has been proposed to lead to changes in self-processing through developing self-awareness, self-regulation and prosocial characteristics (Vago & Silbersweig, 2012). This has been supported by neurocognitive studies pointing to that mechanisms implicated in mindfulness practice involves attention control, self-awareness, and emotion-regulation (Tang et al., 2015). In particular, positive changes of mindfulness

practice has been shown in locations of the brain involving functions of emotion-regulation, self-referential processing and perspective taking (Hölzel et al., 2010), all of which are important for emotional intelligence, suggesting that emotional intelligence can be enhanced by mindfulness practice (Cotler et al., 2017).

In a recent meta-analysis (Donald et al., 2018) on the effects of mindfulness on prosocial behaviour, 31 studies were included comprising 17 241 participants. Out of these, 12 were correlational studies and 21 were intervention studies. The intervention studies were classified into mindfulness only (9 studies) and mindfulness plus prosocial emotion interventions (13 studies). The mindfulness only interventions ranged between 5 to 10 minutes and to 224 hours. The mindfulness plus prosocial emotion interventions ranged from 6 to 36 hours. Findings showed that for 14 out of 19 (74 %) studies there were significant improvements in self-reported outcomes following meditation as compared to controls regarding compassion, empathy, or prosocial behaviour, respectively. The two studies that included long-term follow-up showed that improvements were maintained over time. With regard to objective measures, 11 out of 14 (79 %) studies showed support for increases in objective prosocial outcomes following meditation when compared to the control interventions. Of the studies that did not find any significant effects, two out of three were conducted in children. There were no significant differences between the two studies that compared mindfulness and compassion meditation with regard to improving prosocial outcomes. In the two follow-up studies, one showed maintained improvements at 5-month post-intervention, whereas the other found no significant improvements either at post-intervention or follow-up.

Several of the study findings furthermore suggested potential mechanisms, which were investigated using either formal mediation analyses or more complex structural models, regarding how meditation can improve prosocial outcomes. For instance, emotional mechanisms included increased social-emotional connectedness, positive affect, mindfulness and self-compassion, and decreased stress and negative affect. Some studies also showed that meditation led to improved individual, socioemotional functioning, which in turn, led to improvements in prosocial outcomes. As such, the findings support that meditation can lead to improvement in prosocial emotions through improving individuals' own socioemotional wellbeing (ibid.). Concerning both age and gender, medium-sized effects were found, suggesting that mindfulness facilitates prosociality across a range of individuals. However, mindfulness was most strongly related to prosocial behaviour among adults than among children and adolescents.

Taken together, mindfulness was linked to prosociality and mindfulness interventions can as such be said to predict prosocial behaviour. In particular, a non-judgmental disposition towards one's own experience was associated with that individuals were more likely to respond to others' needs in a helpful way. This response was mediated through an increase in empathetic concern, or compassion, as well as increased emotion regulation and positive affect. Moreover, mindfulness per se was found to be sufficient to increase prosocial behaviour. This point to that there may not be additional benefits to prosocial outcomes of combining mindfulness with positive, emotion-oriented approaches. Interestingly, the findings suggest that mindfulness training may be able to overcome intergroup biases in terms of viewing and judging oneself and others with regard to in-groups and out-groups. However, there is still a lack of knowledge as to whether these effects of intergroup biases

are maintained over time. Finally, the effects did not vary depending on type of intervention, type of control condition, or randomisation. Regarding intervention intensity, the findings showed that a brief intervention, i.e., < 1 hour in duration, had similar effects on prosocial behaviour as multi-session interventions that ranged between 1 to 10 hours, and up to a 1-month intensive retreat. One possible explanation for this may be that longer treatments have longer follow-ups, and as such, the effects may wear off over time. In sum, the findings suggest that mindfulness enhance prosociality in terms of ethical and cooperative behaviour across a range of interpersonal contexts (ibid.).

Openess from a socio-cognitive view on mindfulness

Following this vein regarding the effects of mindfulness on prosocial and cooperative behaviour, a socio-cognitive perspective of mindfulness has been proposed by Langer (1989). This framework includes a focus on the interpersonal/social dimension of mindfulness characterised by the process of noticing new things and drawing novel distinctions (ibid.). This approach is rooted in the awareness that reality is in constant change. Mindfulness, from this perspective, has been defined as *"a person's relative openness to experience, willingness to challenge strict categories, and continual reassessment of the environment and their interactions to it."* (Langer, 2004, p. 4). This interpersonal perspective on mindfulness is defined as having the qualities of: listening with full attention to others; present-centered awareness of emotions experienced by the self and others during interactions; openness, acceptance, and receptivity to others' thoughts and feelings; self-regulation, which includes low emotional and behavioural reactivity and low automaticity in responses to the everyday behaviour of others; and compassion for the self and others (Duncan, 2009). As such, Langerian mindfulness is characterised by presence in the moment, sensitivity to the environment and the context, a continuous creation of new categories for structuring perception, openness to new information and possibilities, awareness of more than one perspective, and flexibility in perspective taking (Langer & Moldoveanu, 2000). The awareness of multiple perspectives helps in reducing the need for one's previously established categories, thus promoting mind-openness and engagement (Langer, 1992, in Davenport & Pagnini, 2016). This transformational process, where the individual start to engage in critical self-reflection when his/her experiences either challenge or contradict deeply held assumptions, is reflected in what Langer describe as mindful learning (1997). This refers to the continuous creation of new categories, openness to new information, and an implicit awareness of more than one perspective. Langer's perspective has been further refined by Weick and Sutcliffe (2001, p. 516) in their description of mindfulness as *"the combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness and capability to invent new expectations that make sense of unprecedented events."* Moreover, Levinthal and Rerup (2006) suggest that mindfulness represents a conversion of experience into reconfiguration of assumptions, frameworks and actions (in Pirson et al., 2012). Mindfulness, according to Langer, is the opposite of mindlessness. This refers to when we hold our perspective still and confuse the stability of our own mindset, or perspective, with the underlying phenomena as something stable, which it is not as everything is in a continuous state of flux, that is, always changes. This kind of mindlessness can arise in a variety of ways as we always form perspectives about what we encounter, and these impressions take form in our mind. This type of predetermined mindset, or perspective, leads to that the next time we face the same thing, we do not explore other ways of

seeing it, which makes us miss new perspectives and possibilities. Mindfulness, on the other hand, is about noticing as it *”puts us in the present, makes us sensitive to context, and aware of change and uncertainty.”* (Langer, retrieved from blog.langleygroup.com.au). Thus, approaching the world with mindful awareness leads us to more accurately assessing and responding to the situations we encounter, to release judgment and stay more open to possibilities. By this approach, we are able to separate ourselves from our limiting beliefs, and instead stay awake in the present moment (ibid.).

Langerian mindfulness has been found to be positively correlated with the personality factor openness for experience as well as negatively correlated with the personal need for structure (Pirson et al., 2012). The latter refers to individual differences in the desire for simple structure which may influence how individuals understand, experience, and interact with their worlds (Thompson, et al., 2001). Individuals high in need for structure has been found to organise social and non-social information in less complex ways, and to stereotype others (Neuberg & Newsom, 1993). Such preferences for simplicity and reductionism reflect a preference for interactions that require little cognitive processing capability (Pirson et al., 2012). In contrast, Langerian mindfulness can be argued to involve the ability of individuals to engage with the world and the complexity of daily life, as well as their ability and willingness to seek and produce novelty (ibid.). In this context, the socio-cognitive perspective on mindfulness as represented by Langerian mindfulness can be said to correspond to meaning-making at higher stages of consciousness.

Importantly, the practice of Langerian mindfulness does not include meditation, and as such, it is different from the traditional perspective and practice of mindfulness as we have come to know it. An illustration of how to embed this socio-cognitive kind of mindfulness in daily life can be seen in educational settings, referred to as mindful education in practice. Mindful learning regards a divergent and context-dependent approach to ideas, whereas convergent thinking regards the ability to organise, prioritise and decide (Langer, 1993). Divergent thinking has been referred to as a mind-expanding process that is commonly associated with creativity (Nusbaum & Silvia, 2011). This can be exemplified practically by examining ideas by considering their alternatives, creating more possibilities rather than narrowing one’s focus to a specific answer. Through mindful learning, the process of divergent thinking is channelled by considering multiple perspectives when searching for multiple solutions to match multiple contexts (Langer, 1993). Thus, key in mindful education is not only acceptance, but also promotion, of differences. This approach has shown to be a powerful tool for education and learning among undergraduates and high-school students (Langer et al., 1989). A recent study within a primary school setting explored the ways in which mindfulness was implemented by both teachers and students (Davenport & Pagnini, 2016). In this context, rather than meditating, teachers encouraged students to actively notice changes in context and consider situations from multiple perspectives. The pedagogical process is referred to as inquiry and is driven by *”student voice and choice”* that *”strongly supports educators to implement student ideas, questions and solutions into the learning progression.”* (ibid., p. 2). In this mindful context, the students exercised their ability to generate a variety of solutions, rather than converging to one correct answer. For instance, this was done by a game called ”Magic Number 10”, where the students were challenged to think of as many ways as possible to add two numbers to make 10. In this way, they did not only create different combinations of numbers, but also different contexts in which the numbers can be applied, such as 10 fingers, 10 cookies, 10 students (ibid.).

Other research on the Langerian perspective on the interpersonal/social dimension of mindfulness has also shown positive results. In different contexts, the Langerian Mindfulness Scale has been associated with physical and psychological wellbeing, life satisfaction, positive relations with others, creativity, job satisfaction, employee engagement, and decision-making, in particular with regard to the propensity to invest in social responsible investments (ibid.). Other studies point to a link between Langerian mindfulness and social functioning, such as marital satisfaction (Burpee & Langer, 2005). Moreover, an experimental study (Haas & Langer, 2014), where Langerian mindfulness was induced to participants by noticing 10 different things about their partner during a 15-minute conversation, showed that pairs in the mindful group were higher in interpersonal synchronicity, i.e., the closeness in time to go back and sit together simultaneously, as compared to the pairs in the control group. The authors conclude that Langerian mindfulness techniques play an important role in the context of building and maintaining happy personal relationships. In addition to findings regarding the role of Langerian mindfulness in interpersonal relationships, the Langerian framework has also shown clinical relevance, including increased psychological flexibility (Kashdan & Rottenberg, 2010), mindful attention to change regarding heart rate resulting in greater control over heart rate (Williams, Delizonna & Langer, 2009), and the ability to reframe negative experiences (Lambert, Fincham & Stillman, 2012). Taken together, this suggests a robust relational impact of Langerian mindfulness on interpersonal relationships, social cognition, social behaviour, health and wellbeing (Khoury, 2018).

In sum, it can be argued that mindfulness, in addition to the traditional, interpersonal dimension, needs to include also an interpersonal/social dimension, thus taking into account both personal, *embodied* mindfulness as well as mindfulness as *embedded* in the interpersonal/social context, and the interaction between an individual and his/her environment (ibid.).

“We have the possibility to step into the power of becoming conscious co-creators of a future where we care, make decisions, and act for the benefit of all of life, in all its complexity and diversity.”

Discussion

The aim of the present literature study was to investigate whether some of the human skills, or capacities, expected to play a crucial role for successfully navigating in a VUCA world, can be said to represent scientifically based constructs. If so, the next question was as to whether they can be measured by scientifically developed and validated instruments, and furthermore, if they can be developed. In that case, it was also investigated by which methods these skills can be developed. Specifically, the skills investigated included meaning-making, self-leadership, perspective taking, compassion/empathy, and openness.

Overall, the findings supported the notion that these skills can be said to represent scientifically robust concepts. Moreover, research shows that they can be developed, that is, they can be considered transformative. This potential for transformation is especially relevant with regard to meaning-making. According to transformative learning theory, as humans we have a basic need to understand and order the meaning of our experiences, and how we interpret the meaning of our experiences is filtered through our own, deeply held, and often unconscious assumptions (Mezirov, 2012). We are constantly in a process of making sense, or meaning, of our experiences, irrespective of the level of our cognitive and emotional capacity for meaning-making. Thus, we create meaning of ourselves, our relationships, and the environment in which we are embedded, at the current level of our meaning-making. As has been described in the above, the development of our meaning-making goes through a continuous adaptation in terms of an active process of increasingly organising the relationship of the self to the environment (Kegan, 1982). In this process, we gradually become able to take in ever more perspectives and increasingly more complex interpretations of ourselves and the world around us, as reflected by the different stages of consciousness put forth in theories on adult development (Jordan, 2018; Kegan, 1982, 1994; Loevinger, 1976, Torbert, 2002 in Cook-Greuter, 2002, 2005; Wilber, 2000). However, if we fail to make sense of our experiences, we tend to turn to traditionalism and accept the explanations and meaning-making of external authorities (Mezirov, 2012), which can be said to represent the third order of consciousness, the socialised mind, in Kegans' theory (1982). If we are to transition into higher stages of consciousness, beyond the socialised mind from where many of us operate today, we need to be able to formulate dependable beliefs about our experiences, assessing their contexts and seeking informed agreement on their meanings, and then make decisions based on the resulting insights. This require that we develop the capacity to be aware of our own assumptions and expectations as well as those of others and also to assess their relevance for making an interpretation. This could be viewed as representing Kegan's fourth order of consciousness, the self-authoring mind (1994), where evolving into self-authorship and beyond enables us to evaluate information critically, form our own judgments, and collaborate with others.

Given the view of meaning-making as a process through different stages of ego development, it may be argued that, rather than seeing meaning-making as a skill among other skills, it can be understood as representing an over-arching construct where the other skills investigated in the present study may serve as indicators of the overall level of individuals' ego development, meaning-making, or level of consciousness. There are several scientifically developed instruments for measuring ego

development, such as the Subject-Object Interview (SOI) (Lahey, Souvaine, Kegan, Goodman & Felix, 1988), Loeviner's Washington University Sentence Completion Test (WUSCT) (Loevinger 1976; Hy & Loevinger, 1996), and the Maturity Assessment Profile (MAP) which Cook-Greuter developed out of the WUSCT. The SOI, that has been widely used (e.g., Boes, 2006; Berger, 2004; Villegas-Reimers, 1996, in Creamer, Baxter Magolda & Yue, 2010), measure an individual's mental complexity and tries to capture those things that expose the structure of his/her sense-making with regard to both content, i.e., *what* we think about - the substance of our thinking, and structure, as well as *how* we think about the world - our hidden assumptions about authority, agency, what can be known. The SOI produces a score reflecting a dominant and, if present, a subordinate mode of meaning-making from among five possible stages and four transitions between each stage (Lahey et al., 1988). Similarly, the WUSCT enable the researcher to get a glimpse of the different ways in which people give meaning to their life experiences. Based on the test responses, Hy and Loevinger (1996) summarised stages of ego development, and grouped them into levels (pre-conformist, conformist, and post-conformist). In a review of the validity of both Loevinger's ego development theory and its measurement (Manners & Durkin, 2001), it was concluded that there is substantial support for both the conceptual soundness of the theory and the WUSCT test. The MAP, also a sentence completion test, has been tested in a Harvard study including 4,000 tests and its construct validity has been replicated in several dissertations (retrieved from https://www.cook-greuter.com/SCTi-MAPForm.htm). The MAP assesses the stage of an individual's overall level of maturity. It locates his/her center of gravity at the developmental trajectory and include his/her level of self-awareness, self-identity, behavioural patterns, cognitive complexity, emotional intelligence, relational capacity, coping strategies, stress management, preferred defenses and values (ibid.). Taken together, these tests can be said to measure many of the skills at focus in the present literature study.

However, in the words of Creamer, Baxter Magolda and Yue (2010), *"the intensive time demands of conducting and transcribing the interviews and of training the interviewers and scorer who are well versed in the theoretical framework are among the disadvantages of the qualitative approach to assessing self-authorship."* (p. 551). For instance, the SOI, although producing a score, *"remains fundamentally a qualitative measure because the score reflects a scorer's judgment about the dominant mode of thinking evident in an interview transcript. Reliability in scoring is only achieved through an intensive program of training and practice that is impractical for most practitioners."* (ibid., p. 552). Regarding the WUSCT, this is normally conducted by a clinical psychologist or psychiatrist, and the investigator also has to be present in the room when people respond to the test. As for the MAP, the scorer conducting the test need to be certified. Hence, these qualitative tests may have limited application. In order to overcome this, there has been attempts to develop quantitative measures of for instance self-authorship (Goodman & Siefert, 2009; Pizzolato, 2007; Pizzolato & Chaudari, 2009, in Creamer et al., 2010). However, the results have produced mixed results. One reason for the challenges presented in developing quantitative measures is that self-authorship is a theoretical construct that has emerged from clinical practice (Creamer et al., 2010). For instance, there is difficulty in translating the theoretical assumption that the phases and dimensions of development are inter-related into quantitative measures that distinguish them (ibid., p. 553). In a recent endeavour to overcome this, Creamer et al. (2010) developed and tested a quantitative measure of self-authorship in an educational setting using 18 questions from the Career Decision Making Survey. Findings showed that the instrument produced six statistically derived scales that

measured three dimensions (epistemological, inter-personal, and intrapersonal) as well as three early developmental phases (External Formulas, Crossroads, and Early Self-Authoring). One limitation with this instrument is that is developed for educational practice. However, it is a promising step in the future development of other quantitaive measures of self-authorship.

Given the current difficulties, as presented in the above, regarding the measurement of ego development at later stages, it may be both scientifically valid and practically sound to measure individuals' level of ego development indirectly through more easily administered self-report instruments targeted at capacities such as self-determination or self-leadership, perspective taking, compassion, and openess. This proposition is based on the empirical evidence presented in this literature study showing that there are both methods for developing these skills, and that the effects of these methods can be measured by scientifically validated instruments. However, there is a need of future studies that investigate the potential associations between individuals' test results on instruments measuring ego development and their scores on instruments that measure the skills that can be argued to serve as indicators of their level of meaning-making.

Taken together, consciousness development can be regarded as a journey of transforming our assumptions about ourselves and the world, from those we have taken for granted, following external expectations, demands and norms, through a crossroads where they become more inclusive, discriminating, open, more emotionally capable and reflective, and our own, inner voice start to internally formulate and define our own identity, beliefs, values, and social relations. In context of the rapid change, technological disruption, fragmentarisation, alienation, increased complexity, and competing narratives that characterises today's world, it can be argued that it is pivotal to raise our level of consciousness, both individually and collectively. The findings of the present literature study point to that we are able to make this transition into higher stages of consciousness through the development of our capacity for critical reflection and an open, non-judgmental understanding of other's perspectives, and the ability to guide ourselves and act on our own purposes, values, feelings and meanings, as well as a sense of compassion. In this way, we have the possibility to step into the power of becoming conscious co-creators of a future where we care, make decisions, and act for the benefit of all of life, in all its complexity and diversity.

Appendix

In the following, various scientifically developed and validated instruments for the included skills in the present literature study are presented.

Self-determination

There is a range of different self-report measures of SDT, where one of the most widely used is the Perceived Locus of Causality (PLOS; Ryan & Conell, 1989). This refers to the degree to which people regard their behaviour as caused by internal factors such as their interests, values and identities, or as caused by external factors such as other people's demands or other external sources.

Self-leadership

Self-leadership can be assessed by the validated revised self-leadership questionnaire (Houghton & Neck, 2002). This is a 35-item scale including the three primary self-leadership dimensions: behaviour-focused strategies; natural reward strategies; and constructive thought patterns strategies. Furthermore, these dimensions include the sub-scales: self-goal setting; self-reward; self-punishment; self-observation; self-cueing; visualising successful performance; self-talk; and evaluating beliefs and assumptions.

Sense of Coherence and Meaning in Life

In order to assess sense of coherence, Antonovsky's (1987) life orientation questionnaire/sense of coherence scale (SOC) has been widely used. This scale has been used in at least 49 languages and in 48 countries (Eriksson & Mittelmark, 2016). The scales most commonly used are in a 29-item version and a 13-item version. Both these has shown to be reliable, valid, stable and cross culturally applicable in measuring how people manage stressful situations and stay well (ibid.). Moreover, a recent study evaluated a three-item version of the SOC scale against the 29- and 13-item versions, respectively, (Chiesi et al., 2018), and found evidence for that the three-item SOC scale is a valid and time saving instrument of sense of coherence. Importantly, it has been argued however, that the SOC scale has limited use as coherence is not the only component of meaning (Hill et al.,2018). Hill et al. (ibid.) reviewed existing measures of meaning, including SOC, and showed that many of these instruments have different problems (ibid.). Based on the problems identified in existing measures, Hill proposed a new, psychometrically sound 8-item measure, the Meaning in Life Measure (MILM). This new instrument consists of critical components within theories on meaning, and include all of them in a comprehensive measure regarding an overall sense of meaning with five components of felt sense, mattering/significance, purpose/goals, coherence, and reflectivity (ibid.).

Perspective taking

Among children, the emotional dimension of perspective taking can be measured by the Test Emotion Comprehension (TEC) (Pons & Harris, 2000; 2005). Among adults, one validated measure of perspective taking is a 7-item sub-scale in the Interpersonal Reactivity Index (Davis, 1980). However, this measure does not seem to have been used extensively, or sufficiently tested for validity. Therefore, one recommendation is to use other, validated scales that include aspects of perspective

taking, such as the Langerian Mindfulness Scale (LMS). This is a 14-item scale covering three dimensions: novelty seeking, novelty producing, and engagement (Pirson et al., 2012).

Emotional Intelligence

There are several instruments that can be used in order to measure emotional intelligence. Some of the most common scales are for instance, Goleman's Emotional Competence Inventory (ECI) (Boyatzis, Goleman & Rhee, 2000), and the Mayer, Salovey and Caruso Emotional Intelligence Test (MSCEIT) (Mayer, Salovey & Caruso, 2002a, 2002b). The latter has a strong focus on the ability to use emotional intelligence in practical situations.

Compassion/Empathy

Measurement of the loving kindness-compassion construct is generally made using the Loving Kindness-Compassion Scale (LCS). Tests of the validity and reliability of this measure has been performed (Cho et al., 2018), showing a three-factor structure of compassion, loving kindness, and self-centeredness. Moreover, this scale has been found to be associated with self-compassion, compassionate love, social connectedness, empathy and satisfaction with life (ibid.). There are several other validated measures for compassion and self-compassion as well as for empathy. Regarding empathy, however, there is not a consensus on the precise definition, although scholars tend to agree that is consists of both the ability to share the emotional experience of another and the ability to understand (mentalise) this experience (Baldner & McGinley, 2014). One measure of empathy that has shown fairly satisfactory validity (ibid.) is the 20-item Basic Empathy Scale (Jolliffe & Farrington, 2006). However, it seems that existing empathy measures do not adequately measure a uniform, consistent construct (Baldner & McGinley, 2014). Regarding measures of compassion and self-compassion there are for instance the 24-item Compassion Scale (Pommier, 2010), and the 12-item short version (Raes et al., 2011) of the Self-Compassion Scale (Neff, 2003; 2015). Both of these scales are targeted at the general population and are based on the argument that compassion consists of six elements: kindness (in contrast to indifference); mindfulness (in contrast to disengagement); and common humanity (in contrast to separation). However, based on a recent review of existing compassion scales, the authors argued that of the nine scales identified, they cannot be confident that the existing measures are assessing the construct of compassion accurately (Strauss et al., 2016). This raises the question of how compassion can be assessed and how to evaluate the effectiveness of interventions intended to enhance compassion if the construct cannot be measured accurately (ibid.).

Openness

Openness from a socio-cognitive perspective on mindfulness can be measured through the reliable and valid instrument Langerian Mindfulness Scale (LMS). This 14 item scale covers three dimensions: novelty seeking, novelty producing, and engagement. (Pirson et al., 2012). (Same instrument as suggested for *Perspective taking* in the above).

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