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# Emotional intelligence in organizational development

A q methodological study on what employees in learning organizations think of their emotional intelligence.

Master thesis in Counseling
Trondheim
Spring 2013

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*ABSTRACT*

The main purpose for this thesis was to look at organizations in development. The motivation for this is that there is an increasing amount of organizations that are focusing on developing their employees. The theory sets out to see what these employees think of their emotional intelligence, where the research question was: *How do employees experience their own emotional intelligence in an environment of change?*

The research method applied was q method, which looks for its participant's subjective opinion. 18 participants partook in the study, where they sorted among 36 statements and placed them in a matrix by if they found them to be like themselves or unlike themselves. A two factor solution was selected, where 16 sorts were distributed to the two factors, 11 and 5 in each respectively. The analysis showed that there was a general focus on development for both factors, where there were some differences in how they pursued development and who it included. In the discussion it was proclaimed that factor 1 worked to achieve learning, and included others in having a positive view upon challenges and development. Factor 2 focused on awareness of others and own emotions, and favored development induced by self. Towards the end of the discussion there was an indication that the factors' different views upon development could be explained by that they were in different points of developing their emotional intelligence. The organizational impact on this was further assumed to be at least present, even though a direct causation is difficult to find.

*ACKNOWLEDGEMENTS*

During this work I have gotten a lot of good help to get through the whole process. A big thank you goes to all the people who participated in my study. Thank you for your honest replies and taking your time to really follow it through!

My supervisor, Jonathan, has been a very good help for me by answering my mail. Thank you for always answering and looking through my chapters with helpful and critical eyes. Also, an extra thank you for helping me with my participants and correcting my quirks with the English language. This has been highly appreciated!

I would also like to thank my classmates and friends in our "lesesal". Without all the laughs and support we have given each other this work would have been much slower, and the quality much worse. As I am finishing up my thesis, there is a bitter-sweet feeling to it as this will be the end of our two years here together, and this is the time we all split up and start our "real lives". Thank you for these two years and all that I have learned about both myself and you. At the same time, thank you to all the teachers who have helped us get here, and who have been so helpful with all the students writing up their masters. Even though they were not supervisors obliged to help us all, I feel I have had a helpful hand from each teacher.

I want to thank my family who has been supporting me through this long process, especially my sister who has helped me proofread my thesis even though it is long and tedious for an archeologist to read. My last thanks goes to my boyfriend Luis, who might not understand all the "psychology stuff" I write about, but who still lends me an ear and tries his best to help. Thank you for being sweet and understanding, even though you also had your own job to do.

Eeva-Leena Petrelius Grue

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Trondheim, June 2013

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# CHAPTER 1 INTRODUCTION

Throughout my studies, both in my bachelor's degree and my master's degree, I have been very interested in how humans communicate with each other. One of the most peculiar things for me is how two people can have problems communicating what they really want to say; even though they speak the same language the words seem to give two types of different meanings. During my studies it has become apparent that people's abilities to recognize how another person wants to be met and interacted with can change the whole relationship between them. This brings up questions to me like *why do we not know how to communicate with each other* and *how can we learn it?*

In my bachelor project I wrote about emotional intelligence. From beforehand I did not have a lot of information about this subject, except from it being a challenger to the IQ theories at present. It proved, however, to be a very interesting and difficult project which information I have brought with me into my master degree studies. Nevertheless, it was not the initial idea considering potential subjects for my master thesis. Working with communication between employees and how they can develop at work, my project changed and tuned towards interactions at work. It was not until my supervisor pointed out that this was getting similar to emotional intelligence that the connection became apparent to me. Focusing my research on this was daunting at first, seeing how I had no intentions of repeating my bachelor project. Still, emotional intelligence is extremely interesting when considering the interactions of humans, and helps in understanding how even by having a low IQ you can still do very well, and that high IQ alone will not guarantee success. Being certain this thesis would be different and interesting in a new way, I decided to learn more on the subject, especially in the context of organizations.

An interesting notion is how people are able to make change transpire, more specifically development. Some people, families and workplaces seem to be permanently placed in the same repeating problems without finding enduring solutions, whilst others illustrate how to change and how to make lasting change for everyone's benefit. Why? And how can those who want development follow it through? These are very difficult questions to answer, making potentially challenging basis for a project. As I was working with these questions and themes my point of view turned towards how development in one place influences an

individual on a personal level. The workplace is somewhere we are spending increasingly more time in, and the work role makes an impact on people's lives (Chen, 2001). Consequently more organizations are focusing on the development of workers to become more dynamic. If there is change and development in the workplace, doubtless it should have an effect on the workers more personally, possibly affecting both their perception of themselves and of others, and in the whole picture help raising their knowledge of the social world (Lopes, Côté & Salovey, 2006).

The main emphasis for this thesis thus became how employees themselves feel their emotional intelligence is. After going through different types of development methods in the workplace, how do they themselves feel that they deal with emotional situations? How is organizational work with development affecting the people who work in these specific places? Following these issues the research question for this thesis became:

*How do employees experience their own emotional intelligence in an environment of change?*

As the research question shows, the main theme of this thesis is to find what employees think of their emotional intelligence. The means of testing is through Q method, which looks for the subjective opinion of its participants. The participants are engaged from companies that have focused on development of its employees.

**1.1 Clarification of concepts**

Throughout the thesis I will use many different terms, this section will set out to explain these. There are many definitions of emotional intelligence, but due to its clarity and well renown this thesis will employ following: *"Emotional Intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (*Mayer & Salovey, 1997, p. 5). As the definition shows, how we perceive, access, generate, and understand emotions are in focus, and the main point is being able to achieve emotional and intellectual growth. Emotions are defined as "*organized responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational, and experiential systems*" (Salovey & Mayer, 1990, p. 186).

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The term *organization* will repeatedly be used throughout this thesis. Organization will herby be "A social system that is intentionally constructed to achieve specific goals" (my translation, Jacobsen & Thorsvik, 2002, p. 12). An employee is someone who works in such an organization.

Change is hereby defined as *"an empirical observation of difference in form, quality, or state over time in an organizational entity"* (van de Ven & Poole, 1995, p. 512), whereby an entity is a workplace, organization etc. Development in this thesis is *"a change process […] a progression of change events that unfold during the duration of the entity's existence – from the initiation or onset of the entity to its end or termination"* (van de Ven & Poole, 1995, p. 512). Change is a difference, may it be a positive or negative for the organization, whereby development signifies that something is developing for (hopefully) the better. The thesis will further use the term development to mark that the organizations are not just going through change but also developing towards their goals.

One of the restrictions for this thesis is that participants must work in an organization that focuses on development. This can be a hard concept to define, whereby the limits in this thesis sets it as an organization that has a desire to develop its employees to the benefit of the organization, and that implements this by focusing on the learning of its employees.

**1.2 Structure of the thesis**

The thesis will be divided into six individual chapters. The first chapter is the introduction where expressions are explained and readers are introduced to the idea behind the study. The second chapter will explain the theories that this thesis is based on. It commences with setting the scene for where the thesis starts, namely organizations and their development. Following this, the theories that explain the design for the study are presented. In the third chapter the method chosen for this study is clarified. The origin of q method and how it works is introduced, and the chapter continues on into explaining with examples how the specific study is done. Thereafter follows the analysis for the thesis. The fourth chapter will show the factors that were obtained, and explain them one by one, followed by a comparison between them. In the fifth chapter there will be a discussion around what was found in the factor analysis, and different themes are addressed. The sixth and last chapter is the final comments from the

researcher, explaining limitations of the study and thought for further research. It will be followed by the reference list and appendix.

**CHAPTER 2 THEORY**

The setting for present thesis is organizations going through development. The following is therefore the background and explanations to put this theme in perspective, and to set the grounds for the subsequent theories. Later sections will be structured by the q method design.

**2.1 Background**

*A learning organization* is a place where the focus is on learning, expanding, on how to work together, and having free reins for ideas (Senge, 2006). It has become increasingly important for organizations to have employees that work well together, and that can help the organization learn and grow in order to gain success. The organizations that will continue to do well are the ones who learn how to use all the aspects of the company and keep a focus on learning; the income gains from organizations in learning are significant (Argote, 2012). A central element is *working teams* where people are dependent upon each other (Senge, 2006). An increasing number of organizations are having a focus shift from just training and developing its leaders, to including the whole company with all its employees in the development. Because it is essential that learning happens on all levels of the organization, instead of having focus only on the person on top (Senge, 2006). Even though focusing on the leaders of an organization will create some levels of change, the sustainable change for the whole organization needs to happen on an individual, group, and organization level (Johannessen, Kokkersvold, & Vedeler, 2010).

To be able to attain change it is essential that the employees want and implement change within themselves (Senge, 2006). Without motivation development is not achievable (Kegan & Lahey, 2009). The system in an organization decides the culture, making people who are very different from each other end up with the same result or product due to the influence of the system (Senge, 2006). Even the process of trying to create change can present supplementary problems, as organizations that are having troubles have a harder time developing when things are difficult, threatening or embarrassing (Argyris, 1999). The people in the organization need to look within themselves and work with their own development so the organization can to learn (Senge 2006). People who, on the other hand, have pre-established mindset of being masters at their jobs misunderstand what learning really is, and instead of actually learning, they close their minds and carry out problem-solving actions

(Argyris, 1999). This is called single-loop learning. Actually questioning something can lead to double-loop learning, which is what creates sustainable learning. It is believed that it is single-loop learning that professionals are best at and therefore organizations have problems changing they do not get the necessary learning that double-loop questioning provides (Argyris, 1999). Therefore increasing skills in the workers can lead to development that will later help the organization keep itself dynamic. For this to persist it is significant that the workers follow the same string of ideas and see them as useful and interesting (Senge, 2006).

By making the space and time for it, change and development can happen in organizations. However, creating change is an intricate task, and people do not always know how to approach it (Kegan & Lahey, 2009). There might be a wish for change, though the intentions of the action doer is (maybe hidden) to protect itself; we might want the behavior to change but keep the cause of the behavior. Consequently we hinder ourselves with either not completely transforming our mindset, or by meeting the problem with a wrong method, creating solely a temporary solution (Kegan & Lahey, 2009). This results in failure to change behavior in most cases. Yet change and development is possible to achieve. By figuring out the hidden competing commitments or reasons we hold we can be able to achieve an adaptive change (Kegan & Lahey, 2009). Adaptive changes can help us modify our mindsets and develop in the way that we wish. Even though change is hard to follow through, people who are open to it, who have the heart, head and gut for it, are able to change. Mental complexity can grow; humans have a great capacity for change (Kegan & Lahey, 2009).

Since organizations learn through their employees, thus individual learning becomes a central point to focus on (Kim, 1993). Having employees with high levels of *personal mastery* (hereafter *PM*) means having employees that will continually work towards gaining higher skills and abilities in life (Senge, 2006). Increasing PM at work will result in having employees that seek to get better and develop. They have a desire for continual learning, seeing change and effort as *the journey is the reward* (Senge, 2006). Consequently, many organizations are trying to raise their employees' personal growth, as PM will be beneficial for the company and make it stronger. By raising the PM abilities, the organization is obtaining the building blocks, namely employees with motivation for change, to develop the company into a successful company (Senge, 2006).

## 2.2 Emotional Intelligence

One of the keys for organizations to develop lies therefore with the development of the people working there. In the past 20 years there has been an increase of research on this subject, on a type of social intelligence, and its impact on life. *Emotional intelligence* (hereafter *EI*) is a malleable intelligence that concerns our social and emotional interactions (Mayer, Salovey & Caruso, 2008). EI is considered to be an extremely important factor to focus on in the workplace, as well as in other aspects of life (Goleman 2012), even though its contents and limitations are debated between scientists and authors (Vakola, Tsaousis, & Nikolauo, 2003). For predicting and achieving a successful work life it is no longer sustainable to only rely on IQ. IQ will show a person's cognitive task abilities, which alone cannot adequately predict how an individual will perform in their job (Mayer & Salovey, 1997). EI includes abilities used for social situations, like self monitoring, understanding of environmental context, and has an association with things like marital satisfaction and higher social skills (Antonakis, Ashkanasy, Dasborough 2009; Schutte *et al.,* 2001). Research with employees has shown that individuals with low cognitive abilities can still perform well when they have higher scores of EI (Rozell, Pettijohn, & Parker, 2006). Even though they initially get a low IQ score, they are still leading a highly successful work life. EI can have an impact on how long someone stays in their job (Cherniss, 2001), how well people perform in their job (Cherniss, 2000), and how easily they learn new abilities (Goleman, 2012). Studies are furthermore pointing towards higher gain for companies with highly emotional intelligent leaders (Goleman, 2011)

Gradually more research is showing the importance that EI stands for, even though the term EI is not always employed (Cherniss, 2000). The fact that high rates of EI are linked to superior performance in the workplace shows that it is something employers should think about when looking at the organizations objectives. However there is a vast discussion on what EI really is, includes and if it really exists. It has been claimed that what is labeled as EI is not an intelligence but rather abilities dependent upon another intelligence (Antonakis, Ashkanasy & Dasborough, 2009). Furthermore, the claim is that the research done on EI has never been completed statically correct, and few have ever checked it against IQ. However, even though it is still a term that needs more critical research, studies have already shown that many components of EI are separated from intellectual intelligence within the brain and have also indicated that we have specific areas in our brain that works with integration of emotional and cognitive areas (Antonakis, Ashkanasy & Dasborough, 2009; Mayer, Salovey & Caruso,

2004). Another interesting element is that IQ tests are mostly based on an entity theory of intelligence; that intelligence is an uncontrollable and fixed trait (Dweck & Leggett, 1988). Theories in EI base themselves on an incremental theory of intelligence, namely that you can gain higher abilities of EI. This illustrates two different intelligences with two chiefly different traditions for both testing and obtaining results. One can also discuss the difference of emotions and cognitions; to become aware of emotions one must use cognition (Ellis, in Ivey et al 2009). Both emotions and cognitions are mutually affective of each other.

A lot of the criticism towards EI is often either pointed towards the branches of more commercialized EI, or self-reported EI (Mayer, Salovey & Caruso, 2004). Even self -reported measures of IQ have weak or lower correlation to actual intelligence, so the criticism aligned with these studies is understandable. Furthermore, studies that measure academic success will be best explained by general intelligence tests, and not by emotional intelligence that will better explain the social aspects (Antonakis, Ashkanasy & Dasborough, 2009).

## 2.3 Design explained by theory

Following is the theory that concerns the design of this study. These sections represent the effects of the design, which are; concerning (self-other), attitude towards change and emotional handling.

### 2.3.1 Concerning (self-others)

To gain higher levels of emotional intelligence you need to be able to know and be able to perceive and understand emotions in yourself and also others (Goleman, 2012). Giving distorted amounts of attention to either ourselves or others can give a bias in our attention, and can for example result in looking at others as object and not humans (Allgood & Kvalsund, 2005). The world has two parts; us and others. "To a man the world is twofold, in accordance to his twofold attitude" (Buber, 1937). From birth we are in attendance of social groups, like families, school classes, and our emotional learning starts here (Allgood & Kvalsund, 2005). Seldom humans live in complete solidity, daily we have to relate and converse in some way with other human beings; it is inescapable to go through life being completely alone (Johnson & Johnson 2009). We are born into relations, and change due to them (Buber, 1937). We are naturally in relation to others; no matter if we look at humans as objects or equals, we relate to them or separate ourselves from them. To reach our goals in work situations we are therefore

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in need of others (Kvalsund & Allgood, 2008). Without them we can only partly know who we are and only be partly fulfilled.

As we grow as humans from stages in childhood we get a sense of personhood, of I, and start looking at other people as *it* (Buber, 1937). The Arbinger Institute (2010) calls this *being in the box* which is a concept that leads us to self-deception. When we are in the box it is difficult to see things clear, and our reality of other people is obscured. We will place the root of our problems with the people around us, often giving them unreasonable traits as a part of the justifying how we act and feel. We do not care for other people to change, just to have them there so we can put the blame on them; we want to feed our self-deception to prove to ourselves how right we are. By understanding that other people around us have feelings, hopes and aspirations we can get out of the box and treat them the way we really want to (The Arbinger Institute, 2010). The relationship we have to ourselves and others is crucial in being able to communicate and lead a successful life. Understanding how others can be negatively affected by personal behavior can make a significant change, for both family and work place situations, especially because it is difficult to notice own weaknesses without interaction.

The relations a person has to oneself and others are crucial since it is difficult to be in this world without human contact (Kvalsund & Meyer, 2005). Without being in relation the outcome could be objectifying others or having no insight. As a result it is not sufficient to only focus on the person itself, we also need to look at the person in relation to others.

### 2.3.2 Attitude towards change
In regards to learning and change, a vital point is what mindset we use (Dweck, 2000). The way you view yourself and your abilities can help decide whether you will be what you want to be or not (Dweck, 2007). Believing that your intelligence can neither increase nor decrease is called having a fixed mindset. You believe that you are born with a quantity of intelligence, you can still learn some things, but your intelligence will stay almost the same. This means that individuals holding a fixed mindset do not believe significant change is possible, leading them to have considerable problems with change, mainly because they think that this is the way it is and it will not alter.

A growth mindset, on the other hand, is believing that intelligence is transformable, no matter what you have at a given moment you can always work with it and become smarter or more

proficient (Dweck & Leggett, 1988). Hard work can increase intelligence. Having a growth mindset is helpful in the process of learning new things and overcoming obstacles. Instead of deeming things as fixed entities the individual looks upon things with potential for change (Dweck, 2000). A growth mindset leads to believing that a person's abilities and potential is unknown, and someone's full potential does not show until an effort is made (Dweck 2007). They do not get satisfaction from showing that they are good at something, they rather like getting a difficult task to learn from.

Having a growth mindset leads to a search for more challenging work where the mind can expand (Murphy & Thomas, 2008). This is called seeking ability goals; a challenge is desired, because if there is no challenge no learning can take place. They want feedback, even if it is in a negative manner, it will help them develop (Dweck, 2007). In contrast, those with a fixed mindset often have a performance goal, where showing that you are smart is the aim and therefore easy tasks are preferred (Dweck & Leggett, 1988). Getting feedback that reflects on their *good* abilities is desired (Dweck, 2007).

Research has shown that what theory students have of their *selves* will affect their development and achievement (Murphy & Thomas, 2008). When challenges appear, those with a fixed mindset are more prone to give a helpless response, and end with a bad self-esteem putting the blame on poor intelligence. Those with a growth mindset have on the other hand more likelihood on liking challenges and putting the blame of a poorly executed task on lack of effort and not on the lack of intelligence (Murphy & Thomas, 2008).

In the process of increasing emotional intelligence it would be beneficial to have a growth mindset. For a learning organization, employees' mindset can make a big difference, as having leaders with fixed mindsets can ruin the company (Dweck, 2007). Leaders who have a growth mindset are the ones who ask the questions and deals with the answers, and in this way make sure the company learns from whatever happens. By using others to help them see their errors and wrong turns, people with a growth mindset develop not only themselves but also their company (The Arbinger Institute, 2010; Dweck, 2007).

The parts *growth* and *fixed mindset* are utilized here to see the mindsets held by the employees that have gone through change in the workplace. Even though it is complicated, it is possible to change ones mindset (Dweck, 2007).

**2.3.3 Emotional handling**

EI is, as previously indicated, a wide term containing many abilities. Lacking some abilities leads to a low EI, as the whole emotional spectrum is important in understanding the emotional world. Since there is a wide disagreement on what EI really is and what it encloses (e.g. Mayer & Salovey, 1997), this thesis is based upon the three most common aspects of EI.

Goleman (2011) presents a four way model of EI (claiming that it is recognizable in all EI models) where the elements are *self-awareness, self-management, social awareness* and *relationship management*. Salovey and Mayer (1990) furthermore stress the importance of understanding emotion in EI, which is something they use in their own test of EI *MSCEIT*. Here they focus on a four branch model that includes: *perceive emotion, use emotion to facilitate thought, understand emotion,* and *manage emotion* (Mayer, Salovey & Caruso, 2004). Testing EI towards cognitive abilities has also shown that emotional awareness and understanding is separate from intellectual intelligence (Antonakis, Ashkanasy & Dasborough, 2009). "*People who have developed skills related to emotional intelligence understand and express their own emotions, recognize emotions in others, regulate affect, and use moods and emotions to motive adaptive behaviors* "(Salovey & Mayer, 1990, p. 200). Consequently the three most occurring and widely used elements of models for EI were selected, giving the following design a three way partition in EI, to be *aware, understand* and *manage* emotions.

*2.3.3.1 Awareness*

Becoming aware of emotions can be difficult, a lot of our emotions can be in our unconscious, and some people are not able to transfer it to the conscious mind (Goleman, 2012). However, awareness of emotions is important for understanding oneself and others, EI abilities will grow through unity with others, especially with other individuals with high EI, and will also affect the quality of the relationships (Cherniss, 2001). In theory, our awareness of emotions starts from infancy, where we begin to learn about facial expressions (Mayer & Salovey, 1997). Gaining higher EI will lead to a greater comprehension of one's own emotions, and the emotions of other people, and will further help to understand actions and to control situations. Someone who is emotionally aware recognizes how emotions can affect themselves, their job performance, their co-workers, family members, and so on (Goleman, 2011). They know how

to plan ahead to avoid stressful situations, and understand the effect of and on other people's feelings.

### 2.3.3.2 Understanding emotion

Understanding emotions in oneself and others is needed to be able to show empathy and to recognize certain situations and outcomes (Goleman, 2012). Those who have better control of their lives are the people who know and understand their own feelings. They will have more successful lives, because they understand both their own and other people's feelings, and can therefore make choices that are personally profitable. Empathy is an important aspect when it comes to understanding other people's emotions. Having empathy makes a person more in-tune with the social signs people around them are sending and gives a better understanding of their needs (Goleman, 2011). It also leads to a better understanding of when a certain emotion is suitable or not. Being good at understanding emotions can therefore be beneficial in work at tasks such as to be able to make deadlines and in creating a good workgroup.

### 2.3.3.3 Managing emotion

Managing emotions can for example be being able to hold back one's own emotions in times when they are not appropriate, but also managing other people's emotions in a rational way (Goleman, 2012; Mayer, Salovey & Caruso, 2004). Being able to manage one's own and others emotions can lead to less distress and better quality of friendships (Mayer, Salovey & Caruso, 2004). Usually individuals with abilities in managing emotions attract more people and are the ones that become the "social stars" in social life (Goleman, 2012). They also have an expertise in building networks (Goleman 2011). Their control of their own and other people's feelings are in a non manipulative way, and they are predisposed to be very good at managing relationships. Through their control of emotions they are able to gain growth in both emotions and intellect (Mayer, Salovey, & Caruso, 2004). Training that helps managers to focus on human relations or self-awareness, helps them a lot with on-job-behavior.

EI is therefore something that can be crucial for organizations to focus on. Having employees with high EI will likely lead to successful employees that know how to communicate with and work with each other. This will moreover, in the long run, help the organization become dynamic and reach its goals. The subsequent chapter will follow on into explaining the method for this thesis and how the theory explained is applied.

# CHAPTER 3 METHOD

What I initially wanted to figure out with this thesis was the subjective opinion of the employees. Having a strong statistical background from my Bachelor in Psychology, q method was intriguing and it was very interesting to look at research in an opposite way from what I had been trained to do. Even though q method looks at individuals' subjectivity, there are still some statistical methods used which makes the after work with the results very interesting to me. I feel that for the master's degree I have been working with the last years, and all the things I have learned from it, q method it is very beneficial and suiting for the research I want to do.

The main theme of this thesis is looking into emotional intelligence with employees in an organization that is working with development. Testing EI has often been executed through problem solving tasks (e.g. Mayer, Caruso, & Salovey, 2000) or questionnaires that ask people to answer questions measuring their EI skills (e.g. Schutte *et al,* 2001). Both types of assessments have shown quite important results, and have been re-tested many times. Still there is some uncertainty of how to measure EI, and in what way it affects performance and effectiveness (Cherniss, 2001). Even though there is a vast amount of questionnaires whose goal is to find self-measured EI, their validity is quite well discussed between researchers (Antonakis, Ashkanasy, & Dasborough, 2009). For this thesis I found that I would like to challenge both myself and EI and try something different. Using a quantitative approach for this thesis could have gotten a very different result and would not have been able to catch those things that I find important. A qualitative approach would have been able to help get in close contact with the selection of people. However in qualitative research you will have trouble with time and space in interviewing more than five people, consequently not getting all available information, and dealing with the danger of participants withholding information due to the closeness of an interview (Johannessen, Tufte, & Christoffersen, 2010).

Q method uses a mix of both qualitative and quantitative methods. It is qualitative in the way it communicates with the subjects and analyzes the results, and quantitative in the way it calculates the factors (Watts & Stenner, 2012). Being a good advocate for subjectivity, it is highly relevant for a study such as this. In this chapter the background for q method will be explained, thereafter followed by the setup, and finally the analysis.

**3.1 Origins and history of q methodology**

Q method first appeared in 1935, being introduced and created by William Stephenson (Thorsen & Allgood, 2010). One of the reasons behind introducing something like the q method was to try and challenge the focus on objective truth and instead show the importance of subjectivity. People in the psychological areas of research were at the time focused on finding the "real truth" about human beings, and wanted therefore to generalize to the whole population to show that their results were in fact showing how humans *really* are. Stephenson wanted a different way to look at behavior, thoughts and feelings, and distance his research from finding the objective views that could be applied to the general public (Allgood & Kvalsund, 2010). He stated that a person's subjectivity could only be assessed by that person, whereas objective assessments could be made by anyone (Kvalsund, 1998). At the time of presentation, up to the last decades, q method was not given a lot of attention (Thorsen & Allgood, 2010). It was in recent years brought back and further developed by Steven Brown and is today known for its scientific research on subjectivity.

Subjectivity is central to q method, and being able to do research on it is crucial (Thorsen & Allgood, 2010). Subjectivity is looked upon as behavior, it simply cannot be observed by others because it is experience that we have within us; it is experienced by me, and used by me operantly. By using the term *operant* the purpose is to illustrate something that is not a mental concept, and combined with *subjectivity* it is a spontaneous behavior (Watts & Stenner 2012). Operant subjectivity is something we do not have or use consciously, but is rather something that happens due to it being based on our experience and our subjectivity. It ensures scientific research for when one takes a step towards examining subjective phenomena in humans. Operant subjectivity is what we are obtaining when people are sorting the statements in q method; it is the behavior that individuals have.

**3.2 P set and concourse**

The p set of a q methodological study is its participants. It is important that the p set is representative of the culture of which the concourse is found. The p set of this thesis is employees of an organization in development. Participants were found through three organizations that have been working with development of its workers and therefore fit the requirements for this thesis. There are a total of 18 participants, who are in the age range of 20-60 years old.

To be able to find the subjectivity of the p set one needs to find the concourse of the area of interest. The concourse contains an indefinite universe of communication around the theme that helps the expression of subjectivity (Thorsen & Allgood, 2010). It is supposed to be recognizable to all in the culture and context, and contains elements like attitudes, values, opinions, beliefs and so on. Having the concourse makes it is easier to see all the values of the certain theme and is where the researcher can find expressions for further work in the study.

Having previous hands-on knowledge, using previous work with EI, and knowledge from the master in counseling in relations and mindsets, together formed background for the concourse for this study. Consequently the work with creating and defining the concourse transpired through the assembly of sentences from previous studies, books and articles. Some examples came from questionnaires measuring and proclaiming high or low EI, and other sentences were inspired from other books on organizations and mindset.

**3.3 Design**

Having the concourse of the study, the design can be constructed, which is crucial for q method. The design in this thesis utilizes *Fisher's balanced block design* and takes into account the research question of the thesis and shows the effects in a balanced way that the researcher thinks is logically connected to and operating around it (Kvalsund & Allgood, 2010). The theoretical design for the present study is shown below in table 1.

**Table 1** *Fishers balanced block design for the experience of emotional intelligence*

| Effect | Level | Cells |
|---|---|---|
| **1) Relation** | Self (A) /Others (B) | 2 |
| **2) Attitude towards change** | Growth (C) /Fixed (D) | 2 |
| **3) Emotional handling** | Awareness (E) /Understanding (F) /Management (G) | 3 |

Fisher's balanced block design, presented above, show the effects and levels of a q method design, which in whole represent the concourse (Kvalsund, 1998). From Table 1 one can see that the effects in this thesis are 1) Relation, 2) Attitude towards change, and 3) Emotional handling. An effect is similar to a theme in the design and consists of levels. Each effect in this thesis has two or three levels. The effect *Relation* points to the levels *self* and *others*, showing that a person can either be in relation to oneself or in relation with others (Buber,

1937). This effect is important in this concourse to demonstrate the levels of EI we have with ourselves and other people around us. The second effect, *Attitude towards change*, is based on the theory that there are two mindsets when it comes to change; it is possible (growth) or impossible (fixed) (Dweck, 2000). To be able to increase EI it is important to believe that intelligence is malleable (Goleman, 2012). The last effect, *Emotional handling*, refers to awareness, understanding or management of emotions. These are three levels which help illustrate the magnitude of EI. (See the theory section for further information).

**3.4 Q sample**

Q method uses statements to obtain subjectivity, called the q sample, which reflect the concourse (Kvalsund, 1998). A statement is a sentence that explains a value or opinion, and the total amount of statements should be enough for the p set to express their subjectivity concerning the concourse (Thorsen & Allgood, 2010). The statements are created with a foundation in the design, where there are 12 different possible combinations. This calculation is done based on the effects and the levels; there are 2 x 2 x 3 levels of the effects in this study. When having a p set of adults it is common to use between 30-60 different statements, where the general rule is to have more statements than participants (Thorsen & Allgood, 2010). Three replicas of each combination were implemented to represent each combination, consequently giving 36 statements. An example of a statement is *I know when I am feeling sad, or happy or angry. And if I am not aware of how I feel I find ways to become conscious of it.* This statement has its root in the levels *self, growth,* and *awareness,* and therefore the contents reflects these three levels. To have statements that are certain to contain the information it sets out to have, inspiration was found in the work with the concourse, where sentences were found and inspired by theory. For the full list of statements see appendix 1.

**3.5 The sorting process**

Q sorting refers to the action the participants perform when they are sorting the statements to a matrix (Thorsen & Allgood, 2010). Through this they end up using and illustrating their operant subjectivity and upon completion one is left with a matrix that will in a holistic way show someone's view. During the sorting process itself the individuals have to sort between the statements, in this case 36 statements, and place them in a matrix. The matrix consists of empty squares, and starts on the left hand side with the value -5 *most unlike me*, continues

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through to 0 which is the neutral part, on to the right side where +5 *most like me* is situated. See appendix 9 for illustrations of filled out matrixes. The present study used two ways for the q sorting procedure. It originally set out to use an internet based program called q-assessor (www.q-assessor.com). Due to it being in English, and several individuals' preference to executing it in Norwegian, some participants also completed the sorting by hand. Both procedures will be explained briefly.

Participants executing the sorting process by hand sorted between 36 statements that were printed and cut into small notes. They got a condition of instructions telling them what to keep in mind during the sorting, and an agreement to participate (see appendix 2). The condition of instruction sets the context for the participants and tells them what to keep in mind during the sorting process (Kvalsund, 1998). They also got an explanation of how to do the sorting (appendix 3), and the possibility of resigning from the project at any point. The participants filled in their matrix by hand, and in the end they answered some questions concerning their choice of sorting. Participants that sorted through the internet program accessed it via a link sent through e-mail. They received the exact same information as those that sorted by hand in the first page, and also got the interview questions in the end.

Though the sorting process for both types of procedures was similar, the way to proceed was a little bit different. The participants sorting by hand had a following instruction sheet to help them understand how they should proceed. Participants sorting through the internet based program were informed in the beginning, and thereafter were put through the sorting process step by step. Roughly, all participants looked through the statements one by one, whereby they would either place it as "Most like me" "Neutral/Unimportant" or "Most unlike me". After completing this task they had the possibility of changing the placement of the statements, or to continue on to place the statements on in a matrix. Each statement was placed in one spot, where the ending result was a matrix of statements that ranged from the ones most like the participant to the ones least like them. Upon finishing the whole process of sorting the statements, the participants got several questions asking about their choices of placement of statements and how they felt it was to go through the sorting. This is important to help the interpretation of the factors later on (Thorsen & Allgood, 2010). They were also asked for age, amount of time worked in the company and gender. See appendix 4 for the list of questions. The whole process took between twenty to forty minutes.

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The means of communication turned out a little bit different between participants finishing by hand and those who used the program. Also, the way of completing the q sorting was different. This should however not affect the results. See appendix 5 for a discussion on the usage of internet based programs.

**3.6 Factor analysis**

Q methodology seeks to uncover subjective views through the means of factor analysis and correlation (Thorsen & Allgood, 2010). Each q sort is compared by correlations, leading to obtaining one or more factors containing these sorts. A factor is a view, it consists of participants that have correlating views, which means that the way they executed the q sorts is similar, and initially that they have a more similar view of the subject. All the sorts, from both the matrixes filled in by hand and from the internet based program, were typed into the program *PQMethod 2.33* which performed the analysis (Schmolck, 2012). From this program a statistical report is produced, showing how many factors solutions are possible, their correlation, the sorts in each factor and so on. This is the first part of q method analysis, which is the statistical component where the numbers are treated in a quantitative way. This helps the researcher to see the basis for the factor solutions, and initially to see the strength of the numbers. Following this the results are examined in a qualitative way where the factors are interpreted. This will be found in chapter 4, following the subsequent in-depth focus on the statistical analysis.

**3.6.1 Factor solution**

Primarily in the analysis section of q method it is important to figure out the amount of factors that are possible. The beginning of the PQMethod report is a table showing the unrotated factors with the following eigenvalues. It is by looking at the eigenvalues that the researcher primarily is presented to the actual factors that are obtainable. By the Kaiser-Guttman criterion a factor is defined as actual and significant if it has an eigenvalue of 1 or more (Watts & Stenner 2012).

To see all available options, the factor analysis was processed three times, once with three factors and once with two factors, where these factor solutions showed a moderate correlation between the factors. Because of this, a third solution was tried out to see if removing some of

the highest mixed sorts would lower the correlation between the factors and get clearer views. Mixed sorts are q sorts that correlate highly on two or more factors, which result in a higher correlation between the factors (Allgood & Kvalsund, 2010). However, this did not create a big change, and led to similar views as the original factor solution and was therefore discarded. The first analysis showed that there was a potential three factor solution. The third factor had an eigenvalue of 0.93, being close enough to the value 1 it could be discussed that it could have been used in the study. It did on the other hand only have two sorts, whereby one of them had a generally low factor loading (low correlation with the factor) and the other one scored high on factor 1 as well. This lead to the discarding of three factors, and a two factor solution was chosen.

**Table 2** *Eigenvalue and explained variance for unrotated factors*

|  | Factor 1 | Factor 2 |
|---|---|---|
| **Eigenvalues** | 7.23 | 1.23 |
| **% expl.Var.** | 40 | 7 |

Table 2 shows there are two factors that have eigenvalues that exceeds 1, factor 1 with 7.23 and factor 2 with 1.23. Together the two factors count for 47 % of the study variance. This shows the percentage found on the various factors of all meaning that has been examined in the phenomenon we're looking for in our q sort.

To get a focused view on the factors, the next step was to perform a rotation of the factors. Rotating the factors does not change the views of the q sorts; it however looks at the views from different standpoints (van Exel & de Graaf, 2005). A varimax rotation was therefore performed, and thereafter the factors were flagged, which resulted in two factors with q sorts that were ranged from highly to moderately correlated. See appendix 6 for the factor loadings of the sorts. The correlation matrix between the two factors can be seen below.

**Table 3** *Correlation between factor scores*

|  | Factor 1 | Factor 2 |
|---|---|---|
| **Factor 1** | 1.000 | 0.597 |
| **Factor 2** | 0.597 | 1.000 |

As can be seen in Table 3 the correlation between the two factors is 0.597. This is a moderately strong correlation, and signifies that the two factors hold similar views. In appendix 6 it is observable that there are more participants that have higher correlation on both factors, making the overall correlation higher. These sorts are mixed sorts, precisely because they have scores fairly high on both factors. There could have been a possibility of removing the mixed sorts, to gain a lower correlation between the factors. Due to the high numbers of mixed sorts, this was however not done to keep the nuances of the sorts and factors.

### 3.6.2 Factor interpretation

It is in the interpretation of the factors that the quantitative side of q method appears. Q method uses abductory principles in understanding the factors, and implies that the researcher enters the q sorters mind and finds patterns of meaning from the q sorting (Thorsen & Allgood, 2010; Wolf, 2010). In this part it is crucial to see the whole factor and to try to understand what view it is displaying. In order to do so the researcher needs to look at each factor in turn and really familiarize themselves with what the statements are displaying. Q method is holistic in the way it interprets the factors, which means that the factor represents one view and it is the factor array that helps in seeing this (Watts & Stenner, 2012). Although PQMethod provides the researcher with many different tables to give a better understanding of the result, it is vital to primarily look at the wholeness of the factor through the array to get the whole impression, and not just parts. After achieving this, the researcher can use the analysis, like tables as *distinguishing statements* and *consensus statements*, to strengthen the look upon the factor. Through this work there will also be some themes that appear to the researcher. These themes or categories will be used for the discussion of the factors.

#### *3.6.2.1 Member checking*
After gaining a firmer idea of the factors, it can be smart to perform small interviews with the participants whose q sorts had the highest factor loading in each factor (Thorsen & Allgood, 2010). This allows the researcher to check out if the findings concur with the thoughts of the q sorter, and is recommended to implement (van Exel & de Graaf, 2005). However, the means used in this thesis presents a problem in implementing this. The participants have done the sorting process from different parts of the world, and obtaining interviews can therefore be

problematic. Even so, another kind of member checking has been utilized, as at the end of the sorting process the participants have been asked to fill out some questions concerning how they sorted the statements. In this way, the researcher still has this information available, and if needed or desired, can actually look at the personal thoughts and feelings behind the sorting process of all the participants. This is an alternative to meeting and interviewing the participants in person (Thorsen & Allgood, 2010).

## 3.7 Quality of the study

### 3.7.1 Pilot testing
There are a number of problems that can come to pass when implement such a study as the present. There can be errors with statements, and problems with the usage of computer programs. To ensure that such errors were not present and mentioned program was running correctly, five pilot sorts were carried out by students and friends. By people who know q method and those not acquainted to it. Consequently, some statements were rephrased to get a higher understanding of them, and some spelling errors corrected. This secured more salience for the thesis.

### 3.7.2 Reliability
Reliability means being able to find the same outcome of the study if it were to be repeated (Ringdal, 2007). To obtain reliability in statistics you have to make sure you keep certain variables constant, for example are you asking questions that will push the participants to answer in a socially acceptable way instead of what they really think? One of the reliability measures we can find is its replicability. Accordingly, a number of q methodological studies should be able to find the same results if the condition of instruction is relatively similar, whereby test-retest reliability has shown that q method has an 80% chance, or higher, to gain similar results (van Exel & Graaf, 2005). This is in addition shown by the reliability coefficient for this study in appendix 7. The appearance of related factors through two or more studies with the same or similar statements and participants shows in addition reliability (Watts & Stenner, 2012). This indicates that without significant changes in a person's life their emotions and feelings about certain topics stay constant through time, showing their operant subjectivity.

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### 3.7.3 Validity

Validity is a concept that shows if we are measuring what we really think we are measuring (Ringdal, 2007). The importance that validity has for q methodological research can however be discussed. Validity as implemented in statistical methods is not highly applicable to q method, seeing how q method measures subjective opinions and thoughts and there are no outside criterions affecting these. Moreover, in contrast to statistical testing, we do not get a single answer using q method (Watts & Stenner, 2012). We are not looking to find something to generalize to the wider population. However, one way of being able to assure validity is through making sure that the participants know what they are doing before they start the sorting process (Kvalsund, 1998). Congruence in the participant can be important to achieve validity of the study. It is expected that validity can be achieved by giving the same condition of instruction to all participating individuals, and through member check. In addition, one can ensure validity through the quality of the statements.

Q method gets the viewpoints of its participants, and in this way can claim to have both reliability and validity (Watts & Stenner, 2012). We are looking for the specific subjective experience at this moment, and subjective opinions belong to the subject.

### 3.7.4 Ethics

When conducting research it is important to keep in mind the ethical aspects (Johannessen, Tufte, & Christoffersen, 2010). Participants need to be treated in an ethically right way, and information about them kept safe. Before the start of the study, it was reported to NSD (Norwegian Social Science Data Services) for approval. See appendix 8 for the approval letter. All information that can identify anyone has been altered, and names used in this study are all fictional. By the end of the study all material will be deleted, papers maculated and computer data removed.

To ensure that all participants are willing to participate they have signed forms consenting to participate. They have also on several occasions been informed of their option to withdraw at any point without any reasons given, and that all information is anonymous.

In both the analysis and the interpretation process the participants were given numbers instead of names, consequently so that I as a researcher would not be able to connect the names to the sorts and distort my own interpretation later on. It is important to keep in mind that as a

researcher that we can never be completely objective. The researcher is of course the one who chooses the theme, the concourse and writes the statements resulting in a lot of influence on the work. Through different means I have therefore done my best to not influence the work too much, and look at the phenomenon that appeared through a phenomenological approach (Johannessen, Tufte, & Christoffersen, 2010). This way, I have tried to see the factors as they are, without adding too much of my own subjectivity. It is important to see the factors view and look at it through the subjects interpretations (Szlarski, 2009). However, a researcher can never be completely objective and therefore needs to acknowledge the effect on the result. Even though I have tried to keep to a phenomenological approach, and attempted to put my pre-understanding aside, according to the hermeneutical approach it is never completely possible and I have therefore tried to keep a middle road between these (Johannessen, Tufte, & Christoffersen, 2010).

# CHAPTER 4 PRESENTATION OF FINDINGS

In this chapter the findings of the analysis are presented and interpreted, following the means presented in the last chapter. Each factor has accordingly 11 (6 men and 5 women) and 5 (4 men and 1 woman) q sorts, whereby 2 people did not significantly correlate with any of the factors. When interpreting factors it is important to keep in mind that this is the researcher's interpretation. Instead of explaining the factors view through all the participants, the factor will be hereby be called *the factor* or *it* (not *they*), since a factor is *a* view, in itself representing many views. This shows the factor as a whole and demonstrates its wholeness. The following will first be a presentation of each factor, including a table for each factor, showing the highest and lowest placed statements; the most significant statements. Since the factors are similar on some points, other highly placed statements will be incorporated to acquire a more nuanced impression of the factors. Subsequently there will be a section comparing the factors and looking at what makes them different from each other; their distinguishing statements.

## 4. 1 Factor 1

*Positive inclusive development*

**I have a positive outlook on life, and like being aware and understanding my own and others emotions. This helps me learn and develop, and help others around me too.**

There are a total of eleven q sorts in factor 1. These are Truls (0.6151) Aksel (0.6050), Vivian (0.4470), Knut (0.5824), Mons (0.7156), Marte (0.7014), Birgitte (0.5637), Oddleif (0.6911), Johanna (0.8103), Geir (0.8772), and Christina (0.7500). We can see that all have moderate or fairly high correlations with the factor. To see the complete matrix for factor 1, see appendix 9

The most significant statements for factor 1 are shown in Table 4

**Table 4 –** *Significant statements for factor 1*

| More like me | More unlike me |
| --- | --- |
| *(+5) 22 I do my best to understand other people's emotions. This leads me to getting better at understanding them, and also myself* | *(-5)12 I don't think I have ever been very good at being aware of how I feel, and never will I be good at it.* |
| *(+4)8 When I experience frustration and stressful days, I motivate myself to keep going and focus on all the things I can learn from the specific situations.* | *(-4)30 I find it hard to understand the non-verbal messages of other people.  Even though I try to better notice them I end up feeling like there is no use in trying because this is something I will never fully understand.* |
| *(+4) 7 I use positive thoughts to help myself keep trying in the face of obstacles. I know I can reach my goals if I only work hard.* | *(-4)18 When something goes wrong at work I immediately feel guilty for it and I can't control my feelings. I try to see what I can do to hinder something similar going wrong again, but I can never change how I really am so there is no use in trying.* |

From the table it seems like factor 1 has a strong view upon development, it wants to understand how other people are feeling, but in the context of also learning about oneself. This can be reflected in the statement 22 in +5, and also in statement 19 in +3, *I am noticing more and more other people's emotions and this helps me to continually learn about others and makes me gain higher personal skills.* The statements show that the factor finds it interesting to understand and notice other people's emotions, and that the personal gain is self-development and gaining of person skills. There is also an indication that the factor uses this to help other people around it. This is seen in cohesion with statement 26; *I use my emotions to affect other people around me. Emotions are contagious and can help us handle and learn from the problems we have in our everyday life* which is placed in +3. The statements points toward a mutual learning of emotions which is beneficial for both *me* and *you.*

Statements 7 and 8 in +4 give the impression that when there are obstacles the factor focuses on learning and positive thoughts to get through it. This shows a will to keep going, where the center of attention is on the positive, and that goals can be met and learned from as long as one works hard for it. This is also reflected by statement 4; *When I am in a positive mood, I am able to come up with new ideas. My emotions help me develop* at +3.

Looking at the *more unlike me* segment, there is a disagreement with having a constant view upon awareness of feelings. It seems the factor feels like it has been aware of its feelings over a period of time, and that there is a feeling of possibility to change. This disagreement with the inability to change can also be seen in statements 30 and 18 in -4. These statements express that one can never change because it is impossible and something one will never understand. The same can also be reflected by looking at all the statements placed in -3. The placement of the negative statements also gives the impression that the factor finds it easy to understand non-verbal messages, shown as well by statement 20 placed in +2: *I have been giving more attention to the non-verbal messages other people send and I have therefore become better at being conscious of the feelings of the people around me.*

Factor 1 seems like someone who is aware of and uses their emotions on- and to learn about themselves and others. It seems to be in contact with its emotions every day, and uses this to affect development and learning. This can also be reflected by the statements in the middle section of the matrix, where the neutral, unimportant, or the statements that were not understood were placed (hereby called *neutral zone*). The statements here are similar to the strengths of the factor, but that have another twist to them. For example statement 28; *By looking at their facial expressions, I recognize the emotions people are experiencing. This is a skill I've always had*. This has a similar view in that it understands non-verbal messages, but it could have landed in the neutral zone because it has a constant view upon change.

There are however some discrepancies to the factor in the neutral zone of the matrix. This means there are some statements placed there that, following the interpretation of the factor, should be more important to it. Statement 1; *I know when I am feeling sad, or happy or angry. And if I am not aware of how I feel I find ways to become conscious of it* describes being able to understand ones emotions, and that it knows how to become aware of them.
Statement 5; *Most of the time I understand my emotions as they appear. Sometimes it can be a hard task, but I feel I have grown and become better at it* shows someone who understands their emotions, and that is continually getting better at it. Why these two statements were placed in the neutral zone is therefore somewhat strange. It could show that factor 1 focuses a little bit more on development from situations, and input from other people. It can on the other hand also only be due to space problems, where the sorter did not have enough space to place it higher or lower in the matrix.

**4.1.1 Member check**

To be able to check what the participants felt in their own words, the interview questions they had answered were used to get a more complete picture of the factor. I have chosen to look at the answers of a handful of the highest factor loadings, where some have answered more in full than others. This led to a more thorough view from the participants as a whole. The interview questions only ask for explanation on the -5, +5 and neutral statements (to see all the interview questions, see appendix 4), so the answers given by the participants will also be used to explain the placement of statements that ended up in a lower row (from 5-3) to give the factor a fuller view.

Most of the participants in factor 1 expressed that it was difficult and time consuming to perform the q sorting, due to various reasons. Some felt they wanted more space for the negative statements, and others thought some of the statements did not fit at all. This is however to be expected when doing q sorting. Those who placed 22 in + 5 said that they were sincerely concerned with other people's emotions, and learning this leads them to make better relationships and decisions. Also from learning from others emotions they learn about themselves. Those who placed statement 8 in + 5, which ended up in +4 for the factor, expressed that it was because this was something they were doing to keep going at work, and sometimes they would get in stressful situations in which they knew they have to move on from anyways.

For the negative side of the matrix, the participants who put statement 12 in −5 said that they disagreed strongly with the idea that you can never be good at improving such skills. They also express a willingness, and likability, towards learning, and that they are conscious of how they feel and have been so for a long time. Other reasons for placement of negative statements were that they are in a continual learning process that does not end, and that they are in touch with their emotions.

In regards to the neutral placed statements, many said that they placed these statements here because these claim that change cannot happen, and that you cannot help anyone to change. One of the higher factor loadings said that even though change is a hard process, most people are able to go through it. Most participants exclaimed that most of these statements felt half-way correct for them, but that the other part was wrong, specifically with the statements that proclaimed that you can never change or learn something new.

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## 4.2 Factor 2

*Positive self development*
**I feel like I am good at noticing others and my own emotions, and am getting increasingly better at it. I am in a state of developing**

There are a total of five q sorts in factor 2. These are Tor (0.7103), Sjur (0.3681), Anette (0.5881), Yngvar (0.5786), and Ole (0.7215). We can see that all have moderate or fairly high correlations with the factor. To see the complete matrix for factor 2, see appendix 10

The most significant statements for factor 2 are shown below in table 5

**Table 5 – *Significant statements for factor 2***

| *More like me* | *More unlike me* |
| --- | --- |
| *(+5)4When I am in a positive mood, I am able to come up with new ideas. My emotions help me develop.* | *(-5)21 I am not very good at noticing other people's emotions, but I'm certain I can be if I work with it.* |
| *(+4)19 I am noticing more and more other people's emotions and this helps me to continually learn about others and makes me gain higher personal skills.* | *(-4)30 I find it hard to understand the non-verbal messages of other people. Even though I try to better notice them I end up feeling like there is no use in trying because this is something I will never fully understand.* |
| *(+4)22 I do my best to understand other people's emotions. This leads me to getting better at understanding them, and also myself.* | *(-4)36 Often I find myself being angry with people who don't really deserve it. I often regret it afterwards, but I just can't seem to change* |

As seen in Table 5, the statement most similar to factor 2 is statement 4, indicating that it uses emotions to develop, specifically focusing on the positive. This is also shown through statement 7 placed in +2, *I use positive thoughts to help myself keep trying in the face of obstacles. I know I can reach my goals if I only work hard*. This focus on development also appears in statement 19 in +4, which indicates that the factor is in a process of gaining more awareness to other people's emotions. This is furthermore underlined by statement 22 in +4 that underlines the focus on understanding other people's emotions, and how this helps to understand oneself and others. From the 3 statements defined as more like me for factor 2 it

appears that development has a big center of attention for the factor. It seems like it is in a process of change and is noticing other people and emotions to gain more skills. This is strengthened by statement 23 in +3, *I get very engaged in other peoples stories, I almost feel as though I have experienced this event myself. I find this interesting since I strongly believe we can all learn from each other*. This gives the impression of continuous learning from one's own and others experiences.

Even though there is ongoing learning, in +3 there are two statements that point towards a feeling in the factor that it has always had some skills when it comes to understanding its own feelings. It appears as if there is also times where the factor does not get affected by others, which is shown by statement 16 in + 3, *In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am.* The other statement in + 3 also indicates this, *10 I think I have always been able to know how I really feel. This isn't something I have learned, but just how I am* can show that it feels like its emotional skills have not been learned at any point, but has always been constantly present. This points toward a constant feeling in factor 2; I know how I feel and I do not get affected by others. This is quite interesting and will be discussed further in the next chapter.

Looking at the negative loaded side of the matrix, namely the more unlike me section, we see that the statement least like factor 2 is statement 21. This indicates that the factor feels like it is skilled in noticing other people's emotions, but can also mean that it does not think that it is possible to get better at it. This strengthens the ambivalence shown previously in the factor, where there is both a focus on development at the same time as there is the belief that things are constant. This is reflected by statements by the five highest placed and five lowest placed statements, which show both a belief in change and a belief in "this is just how I am".

The statements in -4, 30 and 36, does on the other hand show a disagreement with the deterministic view upon change and comprehension. They indicate that factor 2 feels like it understands the non-verbal messages of other people, and also that it does not feel like it acts irrational when it comes to outlet of negative feelings. The position of the statements in -3 can indicate that factor 2 does not use positive ideas to motive itself and does not necessarily take the blame for things going bad at work.

Looking at the neutral zone of the matrix for factor 2, some statements position can be contemplated. Statement 1; *I know when I am feeling sad, or happy or angry. And if I am not aware of how I feel I find ways to become conscious of it* is similar to statement 10 in +3, *I think I have always been able to know how I really feel. This isn't something I have learned, but just how I am.* Both statements say that they recognize their own feelings, still one of them has been placed close to *most like me* and the other one in neutral. The difference between them might have something to do with consistency, where the factor feels like it does not need to work on becoming aware of emotions. Also, statement 28 in +1 is questionably placed, *By looking at their facial expressions, I recognize the emotions people are experiencing. This is a skill I've always had.* In -4 the factor proclaims that it understand non-verbal messages, but chooses to put statement 28 in +1. Maybe the factor differentiates between facial expressions and other non-verbal messages people can send, such as body position, amongst others.

### 4.2.1 Member check
For factor 2 there are fewer factor loadings and more ambiguity in the answers. The q sorters in factor 2 said that overall it was OK to go through the sorting process, even though it took some time. Some said they tried going through the process without thinking through their answers too much, placing the statements in the first place that came to their mind. Those who placed statement 4 in +5 expressed that this is a strategy they use for themselves to feel and do better. Those who placed 22 in +5, which ended up in +4 for the factor, said that they feel it is important that people notice that they are being listened to because this makes them work harder; people try harder if they know someone is hearing them. Those who put 23 in +5, which ended up in +3 for the factor, explained that they learn much from stories from their coworkers, which results in understanding them better, which again affects their performance at work and lead to better coworker relationships.

The q sorts were more spread when it comes to the negative side of the matrix. The explanations here are therefore a little bit more general. For those who placed statement 36 in -5, the sorters explained that they do not often get angry with other people. They also said that they do believe they and others can change. This is additionally confirmed by those who put statement 29 in -5; it is possible to learn and improve, you just have to try. Each day there will be new challenges and new experiences that you can learn from.

Other general reasons for placement of negative statements are that they feel they do the job they should do, and therefore is able to keep emotionally stable. Some said that they use their own and others emotions when there is something to gain from it. And the rest said that they have always been able to tell how they feel.

The statements placed in the neutral zone of the matrix were explained by them not understanding the statements or that they felt wrong about them. For example the statements that had to do with many feelings and being unable to cope with them. Similar with factor 1, some explained that there were statements that did not feel wholly or halfway right, and therefore they ended up in the neutral zone. Some said that many of the statements containing "never" or "can't" ended up around zero, because they did not feel right.

## 4.3 Factor comparison

In interpreting the two factors it is evident that there are a lot of similarities. There are however some distinguishing things that differentiate them. As we can see in appendix 11 (distinguishing statements) there are many statements that are significantly differently placed between the factors, where * marks the ones that are on a 0.01 level or less while the rest are on a 0.05 level. This table demonstrate the aspects that make factor 1 and 2 different from each other.

The most important differences are those placed in *more like me* or *more unlike me* sections. The key differences are shown below in Table 6, where on the left side the statements that make factor 1 different from factor 2 are placed and vice versa.

**Table 6** *The most central distinguishing statements between factor 1 and 2*

|  | Factor 1 | Factor 2 |
|---|---|---|
| -5 | 12 I don't think I have ever been very good at being aware of how I feel, and never will I be good at it. | 21 I am not very good at noticing other people's emotions, but I'm certain I can be if I work with it |
| -4 |  | 36 Often I find myself being angry with people who don't really deserve it. I often regret it afterwards, but I just can't seem to change |
| -3 | 13 I often have a lot of conflicting feelings at work, but even though I understand the reasons for these feelings I cannot change them as that is an impossible task | 17 When there is a bad day at work I try to motivate myself by imagining a good outcome. This usually helps me feel better at the specific time, but it doesn't help me to cope better with these situations in general. |

| +3 | 26 I use my emotions to affect other people around me. Emotions are contagious and can help us handle and learn from the problems we have in our everyday life. | 10 I think I have always been able to know how I really feel. This isn't something I have learned, but just how I am |
| | | 16 In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am |
| +4 | 8 When I experience frustration and stressful days, I motivate myself to keep going and focus on all the things I can learn from the specific situations. | |

As visible in Table 6 there are many differences between the factors in regards to the highest placed statements. These statements help strengthen the interpretations already done on the factors. Looking at the statement placed *most unlike me* it is observable that factor 1 distances itself the most from believing that they have not been good at knowing how they feel, and that it cannot get better. Factor 2 however chooses differently. Where factor 1 feels it has been good in the past with being aware of feelings and being able to gradually get better at it, factor 2 feels it is presently very good at noticing other people's feelings, but does not believe it can get better at it. From these two statements we can interpret that for factor 1 it is important to be dynamic, whilst for factor 2 is either ambivalent or thinks the knowledge is already there and cannot improve.

Factor 2 has a differently placed statement in -4 in comparison to factor 1. This statement can be interpreted as that factor 2 does not feel like it gets unnecessarily angry at other people and regret it afterwards. If factor 1 feels any of these two is difficult to say, as the statement has been placed in -1. It indicates that this is a more salient statement for factor 2, meaning there is a theme here important for it.

The different statements from the two factors in − 3 illustrate that factor 1 does not feel like it has a lot of conflicting feelings at work, and again feels like there is an opportunity for development. Looking at statement 17 in -3 for factor 2 it is interesting to compare it to statement 8 in+4 for factor 1. The first part of the two statements proclaim that they try to motivate themselves to get through bad days, by either imagining a good outcome or to see all the things that can be learned. It is quite interesting that the two factors placed these two statements so differently. It can be interpreted that factor 1 uses development as a motivation

to get through difficult days, whilst factor 2 does not motivate itself to get through this, and maybe has other strategies.

Another noteworthy difference is in +3. Combining this with the interpretation and member check of factor 1, it seems like factor 1 likes to use emotions to develop itself and other people around it, whilst factor 2 does not have this approach. Rather factor 2 puts weight on the constancy it has on knowing its own feelings, and that it does not get affected by things going on because it has control over its emotions. It has not learned this, and it will not change. This is a very different way of thinking compared to factor 1.

From this it is possible to see that factors 1and 2 are similar and different at the same time. Both put some weight on learning and development and being able to notice and understand their own and other people's emotions, but there are some vast differences at the same time which will be discussed in the subsequent chapter.

**CHAPTER 5 DISCUSSION**

From the interpretation of the factors two similar factors become discernible, which have some interesting points that also differentiate them. This chapter will discuss the findings, and will do this in the light of the theory introduced in chapter 2, but also in the light of new theory. New theory is introduced since in q method new things might appear that the researcher did not previously expect. The research question of this thesis was: *How do employees experience their own emotional intelligence in an environment of change?* This question will be assessed by discussing what appeared in the factors and the initial sections from the design. It is important to again point out that all the findings are based on the views of two factors in a work situation. Therefore the findings are not necessarily applicable to other areas of their lives.

One of the things that become clear through the interpretation is the similarities and dissimilarities of the factors. They have similar highest and lowest placed statements, but in cohesion the statements show that the views are a bit different when looking at development and inclusion. These are some themes in the factors that reoccur between them that appeared through the salient statements for each factor looking at the similarities and dissimilarities. The themes are development, motivation, relations, and development of EI, and will be discussed in terms below, respectively. These topics are something that reoccurs through the statements salient in factor 1 and factor 2.

**5.1 Development**

**5.1.1 Fixed or growth mindset, the view upon change**
Through its highest and lowest placed statements, factor 1 seems like it is very concerned with development. All highest and lowest placed statements point towards that it has a growth mindset, and is opposed to a fixed mindset. This becomes noticeable through the lack of fixed mindset statements placed in the *more like me* section, and only fixed mindset in the *more unlike me* section (meaning it disagrees with that view). A then relevant question is if this means that factor 1 has a growth mindset. Having one clear mindset is probably unlikely (Dweck, 2007), but it seems like factor 1 could definitely be leaning towards a growth mindset. Those who have a growth mindset believe they, and others, can always learn more

and become smarter. It is also connected with having a learning goal, which means the goal in focus is to learn, and not to perform (Dweck, 1986). This is an interesting notion, as in placement +4, statement 8; *When I experience frustration and stressful days, I motivate myself to keep going and focus on all the things I can learn from the specific situation* shows precisely this. Its goal is to learn from situations instead of feeling bad from them, which is supported by the negatively placed statement 18 in -4, *When something goes wrong at work I immediately feel guilty for it and I can't control my feelings. I try to see what I can do to hinder something similar going wrong again, but I can never change how I really am so there is no use in trying.* From the matrix of factor 1 there is a strong indication that when it comes to the role at work, it has a growth mindset.

As pointed out in the interpretation of the factors, factor 2 has some discrepancies that are a bit complex to understand. Overall it gives the impression of holding a growth mindset, where it has a desire to develop. On the other hand, there are some statements that form an unclear opinion of it, for example in statement 16; *In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am,* which is placed in +3. This statement indicates that how factor 2 is cannot be changed, which is also shown by statement 10 *I think I have always been able to know how I really feel. This isn't something I have learned, but just how I am* in +3. These statements show in cohesion that factor 2 is leaning towards a fixed mindset. However, there are also some statements that point towards it having a growth mindset. In the statements placed in both +5 and +4 there are expressions of learning new things and going through development, which is also expressed through some of the negatively placed statements in -4 and -3.

Comparing this to factor 1, it becomes apparent that there is most likely a difference among them. Factor 2 exclaims a fixed mindset through no less than 3 statements placed fairly high in its matrix, but does not show the presence of the goals those who have a fixed mindset have, namely performance goals (Dweck 1986). What does this mean? It is possible to have different mindsets depending on what area of aspect one has (Dweck, 2007). One can for example believe it is possible to learn some things but not others. It is plausible that factor 2 does not open up for development when it is induced by others, as two of the statements in +3 indicate, but welcomes change that is self-provoked. It could also be that factor 2 believes in the possibility of learning some new thing, but not in changing or increasing intelligence

(Dweck & Leggett, 1988). From this the conclusion inclines towards that factor 2 has a more mixed mindset between fixed and growth, where it believes some things can change but not all, whereas factor 1 holds a progressed growth mindset.

### 5.1.2 The organization's impact

So far it can be observed that even though the factors view development in ways differently, they both have positive thoughts about developing and learning. Since the organizations they work in have a focus on precisely this, it makes their focus extra interesting. Like mentioned in the theory chapter, organizations should try to develop their employees; having employees that wish for development creates employees that expand their abilities and work for learning (Senge, 2006). It is difficult to come to a decision about the causation for something like this, as for example the employees could have had a learning focus from before, or learned it someplace else. Nevertheless, there are some aspects one can look at to get a better feeling of the organizations impact.

Theory implies that it is difficult to educate someone who is a professional and has been in their job for a long time (Argyris, 1999). One of the reasons is that they will feel like experts in their area, and are therefore not as open to learn more at work. According to this, one would expect that the longer the employees had been working in the organization the less open to learning they would be. In an organization that has not been able to incline its employees towards development the expectation would be to find that the longer someone had worked there the more biased they would be to a fixed mindset. Since the factors are a little bit different when it comes to the view on development, where factor 1 clearly welcomes development, it is interesting to look at the p set to see if factor 1 had been employed for a shorter amount of time than the individuals in factor 2. The answers the participants gave to amount of years they have been in the company does however not indicate this. The range of years in both factors starts at *less than 1 year* and goes up to *7 years or more*, where both factors are fairly evened out. Even though finding cause and effect is difficult, there does seem to have been an influence by the workplace; without having a focus on development the employees could be stuck in their ways, though the impact is difficult to state. This is a point which should hint towards that the organization in some level had an impact on or kept up the development of its employees.

**5.2 Motivation and coping plans**

Something else that becomes apparent when looking at the two factors is that they seem to use two different strategies when it comes to their work. This is made known by factor 1 stating that it motivates itself by focusing on the things it can learn, and uses positive thoughts to help keep going in the face of struggles. These statements are both placed in position +4, making them very salient for the factor. In addition it exclaims that a positive mood will help it to get new ideas. On the *more unlike me* side there is placed a statement that states: *18 When something goes wrong at work I immediately feel guilty for it and I can't control my feelings. I try to see what I can do to hinder something similar going wrong again, but I can never change how I really am so there is no use in trying.* Combined, these statements give the impression of having strategies to get through difficult days at work, and that does not easily give up.

Increasingly more research is showing that emotions are imperative in helping with every day decisions and guides our thinking, where happy moods are especially helpful for increasing creativity (Lopes, Côté & Salovey, 2006). Moreover, being able to notice one's mood, being self-aware, understanding it and having a strategy for what to do usually comes in conjunction with being able to act to change them (Mayer & Stevens, 1994; Goleman, 2012). A bad mood becomes recognizable and there is a wish to get out of it. Those who are able to do this usually have an optimistic outlook on life; they don't stay and thrive in the negative things that happen, they focus on the positive and get out of it. This is reflected by the optimistic notations in the statements salient for factor 1; the positive is in focus and leads to accomplishment. Additionally this is strengthened by the positioning of statements *16; In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am* and *17; When there is a bad day at work I try to motivate myself by imagining a good outcome. This usually helps me feel better at the specific time, but it doesn't help me to cope better with these situations in general,* placed in the neutral zone, which show that they do learn from each situation and they are able to cope with them.

Factor 2 on the other hand seems to work in a different way on this matter. It does not place these similar strategy statements high or low on its matrix, indicating that they are not of high importance to it. This indicates that it has another way of coping with such situations at work. Does it use another way of motivating itself, or does it not motivate itself? In trying to understand this, one can see that the highest placed statement for factor 2 is: *4 When I am in a positive mood, I am able to come up with new ideas. My emotions help me develop*. The statement shows that the factor is aware that positive moods create new ideas and development. Self-awareness is, as mentioned, quite important in being able to change moods and get through the difficult situations or feelings (Mayer & Stevens, 1994). But factor 2 does not show the same kind of strategy use as factor 1. However, placed high we find statement 16*; In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am*. This illustrates another kind of strategy, where it expressed it does not let anything affect the way it is. It can therefore seem that instead of noticing bad feelings and moods and trying to find ways to cope with them and change them to get positive results, they seem to accept it more (Goleman, 2012). There could be two ways this kind of accepting groups can go, either having good moods or those who have bad moods and accept them in a helpless way. Due to the positive placed statements in factor 2 there are indications that it uses a positive accepting kind of strategy, meaning they accept the moods and situations that come along, usually being in a positive mood, and have no big wish to change them (Mayer & Stevens, 1994).

This can indicate that factor 1 and factor 2 use two different approaches at work. It could be that factor 2 does not have the same strategies for motivation at work, and focuses on the goal instead of the process. As an opposite of focusing on the things that can go wrong, and on what not to do during the process, they have a good discipline on themselves and focus on the goal. Maybe this strategy works better for factor 2; it is aware of what makes it work well and gives it good results, but this is not where its center of attention is. Whereby factor 1 focuses more on how to reach its goals, and spends time on the process, maybe factor 2 has developed further to help the organization to grow, where factor 1 has personal self strategies to keep working.

**5.3 Relations**

One part of the design, which is also considerably essential to EI, is how you treat and look upon others. In the theory chapter, theories of treating others as *it* and *being in the box* towards others were introduced. Empathy is something that is essential in having or gaining high levels of EI; you need to understand others and be able to see things from their perspective to see them as equals (Goleman, 2012). The research question of this thesis is how the employees themselves felt their EI were. Since EI primarily grows through relationships, and these have been under development at work, looking at the factors view on relationships gives a comprehensive remark on how it looks upon others (Cherniss, 2001).

Considering the placement of the statements in factor 1 it is apparent that the term *others* is repeatedly used. Looking at the matrix in appendix 9 we can see that in the six highest placed statements, half of them have the term *others* included. First of all one can wonder why only half of them include others, and if it could mean that the factor is self-centered. Yet, it is important to have a balance of focus between self and others (Buber, 1937). The factor has statements where both I and others are used, which reflect that both have equal amounts of importance to it. What does this mean? Accordingly, to have good relationships with others it is important to see them as human beings and not as objects (Buber, 1937). We cannot live alone without relations, but living in a world of only object relation creates a non human life.

A sign of viewing others as objects is looking at them as things we can manipulate or use for our own good (Allgood & Kvalsund, 2005). Considering the view of factor 1, it is noticeable that it attempts to understand other people's feelings in cohesion with increasingly noticing their feelings and affecting their feelings. This indicates that factor 1 has a wish to learn from and affect other people around it. According to the placement of the statements, and the information from the member check, it also does not seem like the motive is self-gain. There are some statements in general that can hint towards this, but all these statements have been put in the neutral zone for factor 1. Factor 1 seems to have a view upon self and others as being in a dynamic relationship where both can learn from each other. This is most strongly shown by two statements placed in +3 and +2 respectively; 26; *I use my emotions to affect other people around me. Emotions are contagious and can help us handle and learn from the problems we have in our everyday life*, and 23; *I get very engaged in other people's stories, I*

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*almost feel as though I have experienced this event myself. I find this interesting since I strongly believe we can all learn from each other.*

Looking at the same theme in factor 2, it is apparent that *others* are as much represented in the three highest placements of statements as factor 1. Seen in cohesion with the other statements the outline is still a bit different. The two highest placed statements that include others are in +4 and +3, 26; *I do my best to understand other people's emotions. This leads me to getting better at understanding them, and also myself* and 23; *I get very engaged in other peoples stories, I almost feel as though I have experienced this event myself. I find this interesting since I strongly believe we can all learn from each other.* These two statements show that factor 2 tries to understand other people's emotions, and gets engaged in other people's stories. The outcome of this is getting better at understanding self and others, and learning from others. In difference with factor 1, factor 2 does not include any statements about focusing on helping others or affecting others. For instance, on the negatively loaded side of the matrix, one of the statements that differentiate factor 2 from factor 1 is 36; *Often I find myself being angry with people who don't really deserve it. I often regret it afterwards, but I just can't seem to change,* which can show that either it thinks it does not get unnecessary angry with others, or that sometimes people need to get reprimanded. This is difficult to conclude from because it can mean that factor 2 uses others to learn, and is not that interested in others learning, leading to a one-way conversation where the objective is to use or manipulate others to self-gain (Allgood & Kvalsund, 2005). The total picture of factor 2 does not seem to have the same similar look upon mutual development as factor 1.

Does this mean that factor 1 has a more I-Thou meeting with others, whilst factor 2 is between viewing others as objects they can manipulate and seeing them as persons? One could say yes based on the reasons specified, and looking at the matrix as a whole this is the given impression. Also, information given in the member check questions show a distortion towards focus on self in factor 2, compared to factor 1 that puts a lot of focus on others as well. However, some of the statements do specify an importance for others. It is therefore difficult to make a conclusion to whereby factor 2 views others as objects or as equal human beings. One can on the other hand lean towards the assumption that there is a difference here between factor 1 and factor 2.

The inconclusive findings lead to an interest in other theories concerning interaction between people. In group affiliations, comparable to work situations, group's development can be explained by 3 different phases. Groups first go through the dependent stage, where there are few conflicts, and participants are dependent upon each other and a strong leader (Kvalsund & Allgood, 2008). It is recognized by an asymmetrical relationship. The second stage is independence where the relation has a better symmetry between the participants, but also where they are more independent of each other. It is somewhere between these two stages that factor 2 could be positioned; it has a self-perspective and shows signs of more independence. The last stage is the stage desired to obtain stable relationships where both parts partake equally. This is called the interdependent stage, and is where the parts are treated as subjects with feelings thoughts and intentions. In its way of treating others it could seem like factor 1 has developed to the last stage, namely interdependency, when it comes to being in relation to others at work. Reasons for this claim are the view factor 1 has on others, where it wants to develop itself and others equally, whilst factor 2 does not see the importance of this yet.


## 5.4 Development of EI

As mentioned, the research question set out to see how employees that work in organizations that develop their employees find their own EI. Looking at the factor matrixes there is a lot of information on the subject to be found there. Comparing this to the parts of the design, more specifically the part dealing with emotional handling, there are three categorizations to utilize: awareness, understanding and management of emotions.

The salient statements for factor 1 show that it finds itself most similar to statements that concern all three, whereby management is the most central. When it comes to the statements that it feels dissimilar to, they involve not being able to be aware of one's feelings, and not understanding them. According to the theories that the design is based on, the parts represent abilities which are reflected by daily life use, where awareness of emotion is something that appears primarily through childhood, and understanding and management of emotions follow respectively (Mayer, Salovey & Caruso, 2004). Factor 1 demonstrates that it uses a mix of the three, but most in the management of emotions area. What could this signify? It could mean that the factor has a distorted EI, where it is better in managing than understanding and being aware of emotions. This would mean it has better EI abilities only when it comes to certain

things. However, to be able to manage one's own and others emotions one needs to be both aware and understand them, they are interrelated (Mayer & Salovey 1995). This could mean that factor 1 feels like it is good at handling abilities that constitute EI. It feels like it has surpassed a lower level of EI, a level of only noticing emotions and not understanding them. This can be seen in the placement of statement 1; *I know when I am feeling sad, or happy or angry. And if I am not aware of how I feel I find ways to become conscious of it.* This statement could be more basic for factor 1 and therefore have been placed in the neutral zone: it does not agree nor disagree with it because it has surpassed it.

Yet, the model of abilities in EI is not a linear model, meaning there are not stages where you need to accomplish one ability to surpass to the next; you do not need to excel in self-awareness to be able to start understanding emotions. This indicates that factor 1 uses less awareness of emotion, in contrast to for example factor 2. The statements placed *most like me* for factor 2 shows that it uses most understanding, followed by awareness and then management. On the negative side it only chooses statements that have to do with awareness and management. What does the difference between the factors mean? Factor 2 observably uses awareness more, and management in a smaller quantity, in comparison with factor 1. Self-awareness is the key in emotional intelligence, still having self-awareness on its own does not suggest high EI (Jordan & Ashkanasy, 2006). Not being able to notice feelings will leave us unable to understand them and act upon them.

Even though the models for EI are not linear, it would be a difficult task to manage one's emotions without being aware of them (Goleman, 2012). This means that self-awareness is an ability that is an important building block in getting higher levels of EI, and is crucial in understanding and managing emotions in self and others, even though it is not necessarily a requirement. From this it appears that factor 1 has moved past the intricate learning of self-awareness, and is using EI on a higher level, including management of own and others emotions. This is shown by the little weight that is put upon awareness in the positive side of the matrix, and the placement of it in the negative and neutral sides; this is something it already is in control of. Factor 2 on the other hand can be discussed to use EI on a lower level. It is still eliciting awareness of own and others emotions mainly, followed by understanding them. This can be seen by the recurring use of awareness in both sides of the matrix, showing the significance it has for the factor, and through placement of statements such as 26; *I use my*

*emotions to affect other people around me. Emotions are contagious and can help us handle and learn from the problems we have in our everyday life,* in -2.

### 5.4.1 The employees' EI

In finalizing the discussion on the development of the factors EI it is evident that both have the existence of some development. Both factors claim to have perception of own and others emotions and all seem to have a focus on this. They are observant to the emotional world around them, and they use it for their own or others' development. According to Mayer, Salovey & Caruso (2004, p. 210) and Salovey & Mayer (1990, p. 201) an individual with high or low EI is accordingly:

*The high EI individual can better perceive emotions, use them in thought, understand their meanings, and manage emotions better than others [...] The individual tends to be more open and agreeable than others.*

*People who don't learn to regulate their own emotions may become slaves to them. Individuals who can't recognize emotions in others, or who make others feel badly, maybe be perceived as cloddish or oafish and ultimately be ostracized. Others peculiarities of emotional deficits exists as well. [...] A far more common ailment may involve people who cannot recognize emotion in themselves and are therefore unable to plan lives that fulfill them emotionally.*

From this it is interpreted that those with low or deficits in EI have problems regulating their moods and have frustrations with things concerning emotions (Salovey & Mayer, 1990). Further, these individuals are more prone to oppose changes due to not being able to cope very well with it (Vakola, Tsaousis & Nikolaou, 2003). Comparing this example of low EI with the factors views, it becomes apparent that factor 2 incline towards a more negative view on change. It is however not the most salient view it has. It seems to be on a path between constancy and development. In comparison with factor 1, it becomes apparent that there are some higher abilities of EI present. It does not belong to the explanation of low EI as it likes change and manages at least the basic abilities in EI. From the theory presented and views offered in the factors it is arguable that both factors have exceeded a low EI, and learned

abilities which make them handle emotional situations better. Both are developing their EI, whereby factor 1 has taken a step further.

**CHAPTER 6 CONCLUSION**


From the discussion there are a lot of different things emerging. The research question for this thesis was: *How do employees experience their own emotional intelligence in an environment of change?* From the discussion it is apparent that all the participants have some kind of development in their EI. In doing the q sorting the employees are giving the impression that they experience their EI to be in a development phase. They feel like they have control of many of the abilities that EI consists of and use this through everyday situations at work. The fact that they are aware of the emotional specters around them at work shows that there is a focus on this in the workplace. Given that there are many statements salient for the views of the factors that consist of development for the future, it seems like the general view is that there is room for continuous growth. It is very interesting to see the differences between factor 1 and factor 2, as it can show two different stages of development the factors are in. All of this indicates that it is highly likely that the organizations are having an impact on the growth of their employees.


The differences in the factors have been extensively discussed. In conclusion the two factors appear to come from the same point of view, but still have some interesting peculiarities that separate them. Claiming that one of them works better than the other is both difficult and unconstructive. Both of them have their own way of doing things; according to theory both ways can results in good tactics and bad tactics. Factor 1 can have higher levels of EI because of the placement of statements, but this could also be true for factor 2 even though it has been discussed to lie a bit behind in development. There are a lot of abilities and elements in EI, and there is no sequence of succession to how these are developed. Some individuals are for example very good at noticing feelings in others, but not in themselves (Goleman, 2012). On top of that, it is not possible to know to what extent these employees have gone through development at work, and not everything is efficient in enhancing EI (Cherniss, 2000). There might be parts missing in some of the employees training that gives them a different sorting that others. However, towards the ending of this assignment, a conclusion that can be made is that between the factors there is a difference in awareness, understanding and management of emotions. One factor gives the impression of being more knowledgeable in the area, and is therefore using it on a higher level. The other factor seems to be in a development zone

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where, because of the position between a fixed and growth mindset, it is starting to develop and see the learning possibilities for the greater good.

**6.1 Limitations of the study**

According to research on questionnaires, perceived intelligence does not cohere with actual intelligence (Mayer, Salovey & Caruso, 2004). This study did not use an actual test of the participants EI, and therefore does not find the real EI of the employees. Self report measurements, such as questionnaires, probably have problems finding real EI as people can lie to appear better, or be oblivious of their knowledge. But, in q method the focus is at the subjective view of EI. Therefore, for this study, what participants think is the most important, more important than how high EI they really have. If they feel like they are very good at EI after working in their job, that is sufficient.

From the feedback of the participants and further work with the thesis I see that big quantities of the statements were very extensive, and that they should have been shortened. The participants also replied that a lot of the statements held two points of views, whereby they only agreed with half of the statement. This could have been resolved by shortening the statements, however with a design as the one in this thesis, there are bound to be some statements that feel half-way correct for the participants. For example in a statement that understands emotions but looks at it with a fixed mindset, factor 1 was more likely to disagree with the last part.

Member check was not utilized in this thesis in the conventional way. Due to this there was a different amount and kind of information gathered from the participants. Executing a traditional interview might have given more detailed answers. However, member check in q method usually happens in a later stage than the q sorting, which is not a problem for present implementation. Something interesting that appeared through the member checking was during the interview questions, one of the participants said that looking back at how he sorted, he regretted it. He did not know why he had put the statement he did in + 5 and that he disagreed with it. It is interesting, because if he had not looked at it right away he would not have known this, which means that letting participants immediately explain the reasons behind their choices can give more relevant and actual replies.

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**6.2 Future research**

There is a general disagreement from what EI is and the best way to measure it. This assignment applied q method with EI, which is different to previous measures. The findings are very interesting, where one can get the subjective view the participants have on the matter. In this thesis that resulted in two prominent views, instead of for example questionnaire replies where participants do not have the same freedom or possibility to show their opinion. For further studies it would be interesting to see how EI works with q methodology, to be able to compare it with present study. Particularly seeing as there is a wide disagreement in how to measure EI, I think further research with q methodology can show interesting notions in use of either statements or pictures.

**6.3 Closing comments**

During the process of writing this thesis I have learned an amount of things, where the process of learning itself I can barely even remember. It takes a lot of time, persistence and belief in being able to manage it to really finalize something like this. First of all I feel I have learned to listen to the notion of *Trust the process*. Even though there have been difficult periods when I have felt that I was getting nowhere with my thesis, there has continuously been a process where I have been moving ahead, even if I have not noticed it at times. Secondly, I have learned that as a researcher you cannot have control over everything that goes on with your work, but you can do your best with it. Waiting for participants to answer was a long and tedious time, but during this time I did a lot of work with the rest of the assignment that proved to help me a lot, maybe even unconsciously, to get through the analysis work and that which followed.

The thesis proved to be, even though wearisome, a very interesting piece of work to complete. I have learned so much from writing it, from theory, findings, and classmates, which counts for so much of my understanding of organizations now afterwards. This is information I will take with me when starting a job. It was really interesting going through the PQMethod program, waiting in (actual) anticipation finding the results of something you have worked with for so long. I found my factors very fascinating, and I love the development view they both have. I hope to find this myself in said workplace when that day comes.

The process for me has been, as suggested, full of ups and downs. The start of the work was slow, where I had problems finding my area of interest. Through a lot of work I was able to steer towards organizations and development. Since I left for a month to Mexico in March, I lost some working time, even though I worked on my statements. Due to this, my testing time started late and by the time I came back most of my friends were far ahead. The feeling of hanging behind everyone else can at times be demotivating, but I have found that I have become better at putting such feelings aside instead of dwelling in them. Through this I am wondering if I perhaps have been getting a higher emotional intelligence myself from this work, and also the work I have been doing through the first year in my master. Feelings like this were more salient for me before, but since I came back from Mexico and those feelings first appeared I noticed that it was not that bad. I continued my work from there, yet met some problems with participation. Getting the q sorts took a longer time than expected, and whilst many classmates were handing in their master thesis, I was getting my last participants. Surreal as it felt, it was OK. Because from here on my work went a lot more smoothly, I had had so much time to prepare for the analysis part, that when I finally started it, it went by extremely quickly. I did not even notice it myself until two days had past and I was already finished with the factor interpretation and starting the discussion part. Waiting for the participants to answer was frustrating at times, but looking back at it now I only see it as a part of the process, as mentioned before. During this I wrote all I could write in my thesis, and at the same time got unconsciously very ready for the next part.

What will I take with me after this work is completed? I think I will remember most of all the process. The magical process that makes you, consciously or unconsciously, ready for most of the things thesis writing can bring. I will also take with me all the information I have gained. It has been extremely interesting to write about something like emotional intelligence, which I think is getting more recognition and is becoming more and more important in people's everyday lives.

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**APPENDIX**

**Appendix 1** *List of statements*

**ACE- Self, growth attitude towards development, awareness of emotions**
1. I know when I am feeling sad, or happy or angry. And if I am not aware of how I feel I find ways to become conscious of it.
2. In my daily life I often feel like I get challenges when it comes to becoming aware of how I feel, but I love a challenge and am therefore continuously working with it.
3. I am often not conscious of my feelings, which can be quite annoying. Therefore I am working hard with paying attention to myself so I can really feel what I feel.

**ACF- Self, growth attitude towards development, understanding emotions**
4. When I am in a positive mood, I am able to come up with new ideas. My emotions help me develop.
5. Most of the time I understand my emotions as they appear. Sometimes it can be a hard task, but I feel I have grown and become better at it.
6. I often feel a lot of things, but I don't understand what it is I'm feeling. This makes me motivated to work harder to understand it.

**ACG- Self, growth attitude towards development, management of emotions**
7. I use positive thoughts to help myself keep trying in the face of obstacles. I know I can reach my goals if I only work hard.
8. When I experience frustration and stressful days, I motivate myself to keep going and focus on all the things I can learn from the specific situations.
9. I often feel like I can't keep myself together because I have too many things on my mind. But even though I feel like I can't manage it, I try my best to focus on what I can do to get it sorted out.

**ADE- Self, fixed attitude towards development, awareness of emotions**
10. I think I have always been able to know how I really feel. This isn't something I have learned, but just how I am.
11. When things are happening around me I usually have no problem knowing how I feel about it. I don't think I could get any better at being aware of how I feel though, because that is a nearly impossible task.
12. I don't think I have ever been very good at being aware of how I feel, and never will I be good at it.

**ADF- Self, fixed attitude towards development, understanding emotions**
13. I often have a lot of conflicting feelings at work, but even though I understand the reasons for these feelings I cannot change them as that is an impossible task.
14. In my daily life there are a lot of things happening which can put me in certain moods. Understanding my own feelings at these times is quite easy, but these feelings don't help me in any way and I feel like I am not getting anywhere with them.

15. I have so many feelings inside that I just never completely figure out. It's tiresome, especially because I think I will never be able to understand them.

**ADG- Self, fixed attitude towards development, management of emotions**
16. In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am.
17. When there is a bad day at work I try to motivate myself by imagining a good outcome. This usually helps me feel better at the specific time, but it doesn't help me to cope better with these situations in general.
18. When something goes wrong at work I immediately feel guilty for it and I can't control my feelings. I try to see what I can do to hinder something similar going wrong again, but I can never change how I really am so there is no use in trying.

**BCE- Others, growth attitude towards development, awareness of emotions**
19. I am noticing more and more other people's emotions and this helps me to continually learn about others and makes me gain higher personal skills.
20. I have been giving more attention to the non-verbal messages other people send and I have therefore become better at being conscious of the feelings of the people around me.
21. I am not very good at noticing other people's emotions, but I'm certain I can be if I work with it

**BCF- Others, growth attitude towards development, understanding emotions**
22. I do my best to understand other people's emotions. This leads me to getting better at understanding them, and also myself.
23. I get very engaged in other peoples stories, I almost feel as though I have experienced this event myself. I find this interesting since I strongly believe we can all learn from each other.
24. I don't know why sometimes people get angry and start criticizing each other, but I'm doing my best in trying to understand their feelings. This way I can grow and get better at understanding their reasons.

**BCG- Others, growth attitude towards development, management of emotions**
25. I help other people feel better with my own positive emotions. Everyone can feel better if they just put their mind to it.
26. I use my emotions to affect other people around me. Emotions are contagious and can help us handle and learn from the problems we have in our everyday life.
27. I often react to things in ways I afterwards wish I hadn't. But from these errors I learn so much and they help me handle similar situations better the next time they occur.

**BDE- Others, fixed attitude towards development, awareness of emotions**
28. By looking at their facial expressions, I recognize the emotions people are experiencing. This is a skill I've always had.
29. I don't think I can ever become any better than I am right now in being conscious of how other people around me are feeling.

30. I find it hard to understand the non-verbal messages of other people.  Even though I try to better notice them I end up feeling like there is no use in trying because this is something I will never fully understand.

**BDF- Others, fixed attitude towards development, understanding emotions**

31. I always see other people's needs and do my best to fulfill them. This will make them feel more comfortable, but also it is easier than trying to change what they need.

32. I compliment others when they have done something well, because it makes them feel better, even though I don't really see it helping them to continue on this path

33. When people get very upset at each other at work I feel like I should say something to them to help them sort it out. But I end up not doing it because it won't change anything anyways.

**BDG- Others, fixed attitude towards development, management of emotions**

34. Throughout a day at work I meet a lot of different people who are in many different moods. I always, and will always, deal well with this and I don't let them affect me in ways I do not want to be affected.

35. I handle all my relationships in the best way I know how to, and am able to manage my feelings well. I am glad I have this skill because I am certain this is something you cannot learn.

36. Often I find myself being angry with people who don't really deserve it. I often regret it afterwards, but I just can't seem to change

**Appendix 2** *Condition of instruction and agreement to participate*

*2.1 For the computer program*
I am a master student in counseling at the Norwegian University of Science and Technology and am now writing up my final thesis. The theme of the thesis is emotional intelligence and I'll be using Q methodological approach to investigate at least 15 employees' subjective experience of emotional intelligence, in cohersion with constancy and in relation to others. After doing factor analysis, I will do a member check with those representing the highest factor to check whether my understanding correspond the partcipants' understanding. Therefore, please reply to the questions you will be given at the end of the study, as fully as you can.

All information will be kept confidential and no individuals will be recognized in the final assignment. The information will be made anonymous and mail and name lists destroyed when the project is being finalized, within 15.06.2013.

*It is voluntary to join and you have the option to remove yourself from the study at any time along the way, without needing to give any reasons for this.*

If you wish to participate in the study, continue on to the next page. By doing this you are consenting to have received and understood the information given to participate in this study.

If you have questions please do not hesitate to contact me. My email address
is elgrue@stud.ntnu.no
You can also contact my supervisor Jonathan Reams at the Department of Adult Education and Counseling Science by email to jonathan.reams@svt.ntnu.no

*The study is reported to and approved by the Norwegian Social Science Data Services (NSD).*

Sort the items based on your experience as an employee in your organization. The theme of the survey is your subjective experience of emotional intelligence.

There are no answers that are more right or wrong than others, so try to be as open and honest as possible.

Thank you for wanting to participate!
Kindest regards,
Eeva-Leena Grue

*2.2 For sorting by hand*

Informasjonsskriv
Jeg er masterstudent i rådgivning ved Norges teknisk-naturvitenskaplige universitet og holder

nå på med den avsluttende masteroppgaven. Temaet for oppgaven er emosjonell intelligens og

jeg skal ved hjelp av Q-metodologisk tilnærming undersøke minimum 15 ansattes subjektive

opplevelse av emosjonell intelligens i relasjon med andre og syn på forandring.

Alle opplysninger vil behandles konfidensielt, og ingen enkeltpersoner eller arbeidssteder vil kunne gjenkjennes i den ferdige oppgaven. Opplysningene anonymiseres og lister destrueres når prosjektet sluttstilles, innen 15.06.2013.

Det er frivillig å være med og du har mulighet til å trekke deg når som helst underveis, uten å måtte begrunne dette nærmere.

Dersom du ønsker å delta i undersøkelsen, signerer du den vedlagte samtykkeerklæringen.

Har du spørsmål ta gjerne kontakt med meg på telefon eller e-post.

E-post: elgrue@stud.ntnu.no

Du kan også kontakte min veileder Jonathan Reams ved institutt for voksnes læring og rådgivningsvitenskap på telefonnummer 73 59 16 51.

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste (NSD).

Med vennlig hilsen

Eeva-Leena Grue

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Samtykkeerklæring:    Jeg har mottatt skriftlig informasjon og er villig til å delta i studien.

Signatur ……………………………. Telefonnummer …………………………..

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**Appendix 3** *Instruction for implementation*

*3.1 For the computer program:*
You will now go through three different stages. The first one will be sorting through 36 statements into three "groups": the ones you feel are most agreeable with you, the ones you are neutral to, and the ones you feel are least like you. After this you will go on to the next stage to place these statements on a range from +5 (Most like me) through to -5 (Most unlike me). 0 (Neutral) is where you put the statements you don't feel represent you, or the ones you don't feel you understand. Do not worry if you have many statements that you feel do not fit for you, just place them on values as close to 0 (Neutral) as possible. After you have finished this there will be some questions concerning your choices. Please fill these out as fully as possible!

*3.2 For sorting by hand:*

1. Les først alle utsagnene for å få en oversikt over hele innholdet.

2. Del så utsagnene i 3 noenlunde like grupperinger i samsvar med de betingelser som ligger i instruksjonen

      Gruppe a) de utsagnene som beskriver deg eller som er lik deg (til høyre)

      Gruppe b) de utsagnene som ikke beskriver deg eller som er ulik deg (til venstre)

      Gruppe c) de utsagnene som er mer nøytrale, som ikke gir så mye mening, virker

            tvetydige, tvilsomme, uklare eller motsigende (i midten)

3. Du skal nå gjøre mer detaljerte fordelinger, der du skal velge ut tallverdier på hvert utsagn fra en skala på +5 til -5.

4. Først legger du ut alle utsagnene i gruppe a) de som er lik deg – les så nøye gjennom dem igjen og velg ut et utsagn som er mest lik deg. Plasser utsagnet lengst til høyre (+5) i henhold til skjemaets mønster.

5. Deretter gjør du det samme med gruppe b) de som er mest ulik deg og plasserer deretter utsagnet som er mest ulik deg lengst til venstre (-5) i henhold til skjemaets mønster.

6. Gå så tilbake til de utsagnene som er mest like deg og velg nå to utsagn som fortsatt er svært lik deg og plasser dem ved siden av utsagnet som du plasserte lengst til høyre (+4).

7. Gjør nå tilsvarende for den andre gruppen b) og velg to utsagn og plasser dem på siden av utsagnet som du plasserte lengst til venstre (-4).

8. Når du kommer til tredje kolonne, plasser tre utsagn først under (+3), deretter tre under (-3). Fire utsagn plasseres så under (+2) og fire under (-2).
For kolonne +-1 og +-0 er det de små nyansene som avgjør i hvilken kolonne du plasserer utsagnene. Vær nøye og bruk god tid til å være så nyansert som mulig, pass på at du plasserer riktig antall utsagn i hver rubrikk.

9. Når du har fullført fordelingen og plasseringen, se over den på nytt og avgjør om du er enig med deg selv – hvis det fortsatt er noe du er misfornøyd med, juster plasseringene slik at du blir fornøyd. Plasser utsagnets nummer på skjemaet og lever dette.

Lykke til!

**Appendix 4** *Interview questions*

**1. Why did you choose to put this certain statement in (+5) Most like me? (please answer as fully as possible)**

**2. Why did you choose to put this certain statement in (-5) Most unlike me?**

**3. Are there some of the statements you felt were completely wrong for you, or that you did not understand? If yes, which, and why?**

**4. How did you feel it went to finish this sorting?**

**5. Gender**

☐ Male

☐ Female

☐ Do not want to answer

**6. Age**

☐ 20-30

☐ 31-40

☐ 41-50

☐ 51-60

☐ 61+

☐ Do not want to answer

**7. How long have you worked in this company?**

☐ Less than 1 year

☐ 1-3 years

☐ 4-6 years

☐ 7 or more years

☐ Do not want to answer

**Appendix 5** *Reliability with the usage of an internet based program*

How reliable is it to use an internet based q method program instead of the traditional paper and envelope method? Accordingly, doing research through a data based program can give lower response scores. However, validity of the q-sorts is also dependent upon the participant executing the sorting correctly, which is something the researcher can supervise if being present (Watts & Stenner, 2012). Some studies, on the other hand are also done where envelopes are sent in the mail and researcher is not present (Reber, Kaufman & Cropp, 2000). There is not always a possibility of being present through all sorting, which can give the test less validity. A computer based program will have certain rules that are applied in the same way to all participants, where faulty answers are not possible. This helps to assure that the test is followed through in a correct manner, and that no participants are being altered by the different messages a researcher can send. Also, a computer based program can be more interesting for a person to execute than sorting through pieces of paper, receiving higher feedback rates (Reber, Kaufman & Cropp, 2000). In addition, a study done on the comparison between paper-based q sorting and using a computer based program showed that many participants found the paper based to be clumsy, whereas the computer based program was easier to use due to it helping you through each step. It also found that there were no result differences in people using the paper-based sorting and the computer based sorting (Reber, Kaufman & Cropp, 2000). However, having participants who are or feel very uncomfortable with IT and computers will lead to having a disadvantage in using a computerized program.

Having a researcher present may give the possibility of asking questions for the sorting, something that is not as applicable when doing it through the internet. However, participants are given the email of the researcher from the beginning of, with the description of not to hesitate with contacting with any questions. Participants who are doing the computer based q program are more prone to read the instructions thoroughly and therefore understand better from the beginning what the program and sorting is about (Reber, Kaufman & Cropp, 2000). A program such as q assessor will also present opportunities like testing national wide, and also the sorting takes less time than it would by paper.

**Appendix 6** *Factor loadings*

|    | Name      | Factor 1   | Factor 2   |
|----|-----------|-----------|-----------|
| 1  | Truls     | **0.6151X** | 0.1192    |
| 3  | Aksel     | **0.6050X** | 0.1455    |
| 5  | Vivian    | **0.4470X** | 0.2070    |
| 6  | Knut      | **0.5824X** | 0.2138    |
| 9  | Mons      | **0.7156X** | 0.3411    |
| 10 | Marte     | **0.7014X** | 0.2416    |
| 12 | Birgitte  | **0.5637X** | 0.5289    |
| 14 | Oddleif   | **0.6911X** | 0.0374    |
| 16 | Johanna   | **0.8103X** | 0.2990    |
| 17 | Geir      | **0.8772X** | 0.2394    |
| 18 | Christina | **0.7500X** | 0.5466    |
| 2  | Tor       | 0.1275    | **0.7103X** |
| 7  | Sjur      | 0.2842    | **0.3681X** |
| 11 | Anette    | 0.5178    | **0.5881X** |
| 13 | Yngvar    | 0.1435    | **0.5786X** |
| 15 | Ole       | 0.1911    | **0.7215X** |
| 4  | *Fredrik* | *0.2170*  | *0.0351*  |
| 8  | *Emrik*   | *0.0230*  | *0.2326*  |
| %  | expl.Var. | 31        | 16        |

*The table shows the distribution of the participants on the two factors. The first participants are placed in factor 1, which can be seen by the X that defines it significantly. Secondly one can see the participants in factor 2. On the bottom are two sorts that did not apply to any of the factors and are therefore not important for the interpretation and results.*

**Appendix 7** *Reliability coefficient*

|  | Factor 1 | Factor 2 |
|---|---|---|
| **No. of Defining Variables** | 11 | 5 |
| **Average Rel. Coef.** | 0.800 | 0.800 |
| **Composite Reliability** | 0.978 | 0.952 |
| **S.E. of Factor Z-Scores** | 0.149 | 0.218 |

*The table shows the reliability coefficient, which shows the factors characteristics. It shows that the reliability is high, by 80%.*

# Appendix 8 *Approval from NSD*

**Norsk samfunnsvitenskapelig datatjeneste AS**
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

(NSD)

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7491 TRONDHEIM

Vår dato: 03.04.2013      Vår ref:33597 / 3 / MSI      Deres dato:      Deres ref:

## TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 27.02.2013. Meldingen gjelder prosjektet:

| | |
|---|---|
| 33597 | *How do Employees Experience their own Emotional Intelligence?* |
| Behandlingsansvarlig | *NTNU, ved institusjonens øverste leder* |
| Daglig ansvarlig | *Jonathan Reams* |
| Student | *Eeva-Leena Petrelius Grue* |

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema http://www.nsd.uib.no/personvern/meldeplikt/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 01.07.2013, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Vigdis Namtvedt Kvalheim

Marte Sivertsen

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**Appendix 9** *Matrix for factor 1*

**Most unlike me**                                                                  **Most like me**

| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
|----|----|----|----|----|----|----|----|----|----|----|
| 12 | 30 | 15 | 3 | 11 | 10 | 1 | 2 | 4 | 7 | 22 |
|    | 18 | 13 | 6 | 14 | 17 | 5 | 20 | 19 | 8 |    |
|    |    | 29 | 21 | 16 | 24 | 9 | 23 | 26 |    |    |
|    |    |    | 33 | 34 | 31 | 27 | 25 |    |    |    |
|    |    |    |    | 36 | 32 | 28 |    |    |    |    |
|    |    |    |    |    | 35 |    |    |    |    |    |

**Appendix 10** *Matrix for factor 2*

**Most unlike me**                                                    **Most like me**

| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
|----|----|----|----|----|---|----|----|----|----|----|
| 21 | 30 | 17 | 6  | 2  | 1 | 8  | 5  | 10 | 19 | 4  |
|    | 36 | 18 | 15 | 3  | 11| 25 | 7  | 16 | 22 |    |
|    |    | 29 | 26 | 9  | 14| 28 | 20 | 23 |    |    |
|    |    |    | 27 | 12 | 24| 32 | 34 |    |    |    |
|    |    |    |    | 13 | 31| 35 |    |    |    |    |
|    |    |    |    |    | 33|    |    |    |    |    |

**Appendix 11** *Distinguishing Statements for factors*

| Statement | Factor 1 | Factor 2 |
|---|---|---|
| 8. When I experience frustration and stressful days, I motivate myself to keep going and focus on all the things I can learn from the specific situations. | 4 | 1 |
| 26. . I use my emotions to affect other people around me. Emotions are contagious and can help us handle and learn from the problems we have in our everyday life. | 3 | -2 |
| 2. In my daily life I often feel like I get challenges when it comes to becoming aware of how I feel, but I love a challenge and am therefore continuously working with it. | 2 | -1 |
| 1. I know when I am feeling sad, or happy or angry. And if I am not aware of how I feel I find ways to become conscious of it. | 1 | 0 |
| 27. I often react to things in ways I afterwards wish I hadn't. But from these errors I learn so much and they help me handle similar situations better the next time they occur | 1 | -2 |
| 9. I often feel like I can't keep myself together because I have too many things on my mind. But even though I feel like I can't manage it, I try my best to focus on what I can do to get it sorted out. | 1 | -1 |
| 17. When there is a bad day at work I try to motivate myself by imagining a good outcome. This usually helps me feel better at the specific time, but it doesn't help me to cope better with these situations in general. | 0 | -3 |
| 10. I think I have always been able to know how I really feel. This isn't something I have learned, but just how I am. | 0 | 3 |
| 35. I handle all my relationships in the best way I know how to, and am able to manage my feelings well. I am glad I have this skill because I am certain this is something you cannot learn. | 0 | 1 |
| 36. Often I find myself being angry with people who don't really deserve it. I often regret it afterwards, but I just can't seem to change | -1 | -4 |
| 34. Throughout a day at work I meet a lot of different people who are in many different moods. I always, and will always, deal well with this and I don't let them affect me in ways I do not want to be affected. | -1 | 2 |
| 16. In a week I encounter many different types of situations, which can range all between stressful to relaxing days. This isn't really a problem for me since I have control over my emotions and nothing can change the way I feel or am. | -1 | 3 |
| 21. I am not very good at noticing other people's emotions, but I'm certain I can be if I work with it | -2 | -5 |
| 13. I often have a lot of conflicting feelings at work, but even though I understand the reasons for these feelings I cannot change them as that is an impossible task. | -3 | -1 |

| | | |
|---|---|---|
| 18. When something goes wrong at work I immediately feel guilty for it and I can't control my feelings. I try to see what I can do to hinder something similar going wrong again, but I can never change how I really am so there is no use in trying. | -4 | -3 |
| 12. I don't think I have ever been very good at being aware of how I feel, and never will I be good at it. | -5 | -1 |

*The table shows the distinguishing placement of the statements between factor 1 and 2*

**Appendix 12** *Concensus statements*

| No. | Statement | Factor 1 | Factor 2 |
|---|---|---|---|
| 3* | I am often not conscious of my feelings, which can be quite annoying. Therefore I am working hard with paying attention to myself so I can really feel what I feel. | -2 | -1 |
| 4* | When I am in a positive mood, I am able to come up with new ideas. My emotions help me develop. | 3 | 5 |
| 5* | Most of the time I understand my emotions as they appear. Sometimes it can be a hard task, but I feel I have grown and become better at it. | 1 | 2 |
| 6* | I often feel a lot of things, but I don't understand what it is I'm feeling. This makes me motivated to work harder to understand it. | -2 | -2 |
| 7* | I use positive thoughts to help myself keep trying in the face of obstacles. I know I can reach my goals if I only work hard. | 4 | 2 |
| 11* | When things are happening around me I usually have no problem knowing how I feel about it. I don't think I could get any better at being aware of how I feel though, because that is a nearly impossible task. | -1 | 0 |
| 14* | In my daily life there are a lot of things happening which can put me in certain moods. Understanding my own feelings at these times is quite easy, but these feelings don't help me in any way and I feel like I am not getting anywhere with them | -1 | 0 |
| 15* | I have so many feelings inside that I just never completely figure out. It's tiresome, especially because I think I will never be able to understand them. | -3 | -2 |
| 18 | When something goes wrong at work I immediately feel guilty for it and I can't control my feelings. I try to see what I can do to hinder something similar going wrong again, but I can never change how I really am so there is no use in trying. | -4 | -3 |
| 19* | I am noticing more and more other people's emotions and this helps me to continually learn about others and makes me gain higher personal skills. | 3 | 4 |
| 20* | I have been giving more attention to the non-verbal messages other people send and I have therefore become better at being conscious of the feelings of the people around me. | 2 | 2 |
| 22* | I do my best to understand other people's emotions. This leads me to getting better at understanding them, and also myself. | 5 | 4 |
| 23* | I get very engaged in other peoples stories, I almost feel as though I have experienced this event myself. I find this interesting since I strongly believe we can all learn from each other. | 2 | 3 |
| 24* | I don't know why sometimes people get angry and start criticizing each other, but I'm doing my best in trying to understand their feelings. This way I can grow and get better at understanding their reasons. | 0 | 0 |
| 25* | I help other people feel better with my own positive emotions. Everyone can feel better if they just put their mind to it. | 2 | 1 |
| 28* | By looking at their facial expressions, I recognize the emotions people are experiencing. This is a skill I've always had. | 1 | 1 |
| 29* | I don't think I can ever become any better than I am right now in being conscious of how other people around me are feeling. | -3 | -3 |

| | | | |
|---|---|---|---|
| 30* | I find it hard to understand the non-verbal messages of other people. Even though I try to better notice them I end up feeling like there is no use in trying because this is something I will never fully understand. | -4 | -4 |
| 31* | I always see other people's needs and do my best to fulfill them. This will make them feel more comfortable, but also it is easier than trying to change what they need. | 0 | 0 |
| 32* | I compliment others when they have done something well, because it makes them feel better, even though I don't really see it helping them to continue on this path | 0 | 1 |
| 33* | When people get very upset at each other at work I feel like I should say something to them to help them sort it out. But I end up not doing it because it won't change anything anyways. | -2 | 0 |
| 35 | I handle all my relationships in the best way I know how to, and am able to manage my feelings well. I am glad I have this skill because I am certain this is something you cannot learn. | 0 | 1 |

*The table shows statements that the factors have more agreement on. The symbol * shows that the statements that correlate significantly on a 0,01 level, the rest are on a 0,5 level.*