

From the Department of NEUROSCIENCE  
Karolinska Institutet, Stockholm, Sweden

IMPROVING LEADERSHIP  
THROUGH THE POWER OF WORDS AND MUSIC

JULIA ROMANOWSKA



**Karolinska  
Institutet**

Stockholm 2014

All previously published papers were reproduced with permission from the publisher.

Cover illustration by **Timo Rinnevou/Dagens Nyheter**

Published by Karolinska Institutet. Printed by *Åtta45*

© JULIA ROMANOWSKA, 2014

ISBN 978-91-7549-635-1

# Improving Leadership Through the Power of Words and Music

## THESIS FOR DOCTORAL DEGREE (Ph.D.)

By

**Julia Romanowska**

*Principal Supervisor:*

Prof. Töres Theorell  
Karolinska Institutet  
Institutionen för neurovetenskap

*Opponent:*

Docent Björn Wrangsjö  
Karolinska Institutet  
Institutionen för kvinnors och barns hälsa

*Co-supervisor(s):*

Prof. Gerry Larsson  
Försvarshögskolan  
Institutionen för säkerhet, strategi och ledarskap

*Examination Board:*

Prof. Gunn Johansson  
Stockholms Universitet  
Psykologiska institutionen

Dr. Walter Osika

Karolinska Institutet  
Institutionen för Neurobiologi, Vårdvetenskap och  
Samhälle

Docent Gunnar Ahlborg

Göteborgs universitet  
Institutionen för medicin

Dr. Anna Nyberg

Stockholms universitet  
Stressforskningsinstitutet

Prof. Göran Hermerén

Lunds universitet  
Institutionen för kliniska vetenskaper



“When you stand in front of me and look at me, what do you know of the griefs that are in me and what do I know of yours. And if I were to cast myself down before you and weep and tell you, what more would you know about me than you know about Hell when someone tells you it is hot and dreadful? For that reason alone we human beings ought to stand before one another as reverently, as reflectively, as lovingly, as we would before the entrance to Hell.”

Franz Kafka. Letter to Oskar Pollak, 1903.

## ABSTRACT

*Background.* Poor leadership is highly prevalent and associated with destructive processes in the workplace, including stress related ill health. Yet, the applied methods to improve leadership practices are rarely grounded in scientific research. The aim of this thesis is to test the effects of an art-based, yearlong leadership programme (Shibboleth) in comparison with a conventional programme. The Shibboleth concept was built upon a performance art, a collage of fragments of literary text and music, followed by writing sessions and group reflection.

*Hypotheses. I Effect on leaders:* Demanding art experiences were expected to force self-critical examination and break ingrained patterns of thinking and feeling, providing sharper self-awareness and awareness of moral responsibility, and mobilize courage to take stand and act in highly complex, unaccustomed and painful circumstances; *II Effect on employees:* The changes in the leaders' responsibility were, in turn, expected to activate positive changes in the co-workers, reflected not only in their psychological health, but also in biological processes/endocrine status.

*Method and Results.* In study **I** transferred effects of the leaders' participation in the intervention program on their co-workers' psychosocial and biological stress were investigated. The findings demonstrate improved mental health, enhanced self-esteem and courage to openly deal with unfair treatment as well as a higher concentration of the regenerative hormone DHEA-S in the attending leaders' co-workers, as well as in the leaders themselves, compared to the conventional group.

In study **II** effects on the leaders' intrapersonal and interpersonal aspects associated with poor leadership were explored. The findings demonstrate improved pro-social motivation (Agreeableness) and psychological resilience (Sense of Coherence) in the Shibboleth leaders, who were also considered by their co-workers to be more responsible (behaving less laissez-faire) and display higher capacity to cope with stress, compared to the conventional group.

In study **III** we examined whether the changes in leaders' behaviour were confirmed by corresponding changes in the level of self-awareness. Comparisons between leader's self-evaluation and the evaluative feedback of the co-workers demonstrate that the Shibboleth leaders abandoned the self-inflating position in favour of increased self-awareness and humility, which in turn was followed by improved behaviour. The oppo-

site result was noted in the conventional group.

In study **IV** the psychological processes taking place in the individual leader during the Shibboleth intervention were studied based upon written reflections during sessions, “course” evaluations and interviews using a qualitative method. The findings show that the participants experienced Shibboleth as a transformative power. The Shibboleth’s content and artistic technique was perceived as especially challenging and affecting in a way they had not experienced before. The leaders described their journey from the desire of affirmation of the self and one’s own interest towards a more open position trying to understand a world other than one’s own by adopting an *aesthematic approach* (a combination of *aesthetic*, *emotional* and *ethic* elements). They experienced a new consciousness they never felt before to assume responsibility for others, for themselves and for their leadership, which also raised their sense of self-esteem and feeling of reverence and gratitude for life. Long after the intervention ended, the etched memory images of Shibboleth worked as moral guidance in different situations. The findings are discussed in relation to the notion of *aesthematic*, which is introduced for conceptualisation of the impact core that constitutes the Shibboleth concept.

*Conclusion.* A transformative effect of a new, art-based leadership concept on the leaders and transferred beneficial effect on their co-workers was demonstrated. The findings indicate that the Shibboleth concept, by counteracting the destructivity of poor leadership, may prevent stress related ill health. The findings seem to be sustained and more pronounced at the long-term follow-up. The positive results for psychological, behavioural and biological outcomes are consistent and strengthen the findings. This is the first research to show that changes in behaviours in leaders through aesthetic experiences can have transferred effects on psychological and neurobiological resilience processes in followers leading to health-promoting effects. In addition to the empirical findings, this thesis presents a general theoretical approach through the notion of *aesthetics*, which may help to clarify the underlying conditions for successful training programmes in general.

## LIST OF SCIENTIFIC PAPERS

- I. **Romanowska J**, Larsson G, Eriksson M, Wikström BM, Westerlund H and Theorell T (2011). Health effects on leaders and co-workers of an art-based leadership development program. *Psychotherapy and Psychosomatics* 80(2): 78–87.
- II. **Romanowska J**, Larsson G and Theorell T (2013). Effects on leaders of an art-based leadership intervention. *Journal of Management Development* 32(9): 1004–1022.
- III. **Romanowska J**, Larsson G and Theorell T (2014). An Art-Based Leadership Intervention for Enhancement of Self-Awareness, Humility and Leader Performance. *Journal of Personnel Psychology* 13(2): 97.
- IV. **Romanowska J**, Theorell T, Karlsson G. The transformative power of Aesthetics: Aesthetics, Emotions and Ethics in a New Leadership Concept. Submitted.



## CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>13</b>
<b>1.1</b>	<b>Challenges of leadership development</b>	<b>16</b>
1.1.1	Infrequent research on leadership development programs	16
1.1.2	Complexity and ambiguity of the world – challenges for a modern leader	17
1.1.3	Simplification and instrumentality – the problems with established leadership development programs	18
<b>1.2</b>	<b>Poor leadership responsibility</b>	<b>19</b>
1.2.1	Over-emphasis of the positive in leadership	19
1.2.2	The destructiveness of poor leadership	20
1.2.3	Inability to withstand stress and the danger of losing reality awareness	21
1.2.4	Power and poor self-awareness and the danger of hubris	21
1.2.5	Power and inability for social sensitivity, and the danger of stereotyping	22
<b>1.3</b>	<b>Psychosocial and biological stress related health</b>	<b>23</b>
1.3.1	Poor leadership and psychosocial stress	23
1.3.2	Biological stress – anabolism and catabolism	24
<b>1.4</b>	<b>Art as prevention of poor leadership</b>	<b>25</b>
1.4.1	A need for a new leadership approach	25
1.4.2	Aesthetic experience as non-instrumental knowledge	26
1.4.3	The artistic core of Shibboleth	27
<b>2</b>	<b>THE CONCEPT OF EVALUATION IN THIS THESIS</b>	<b>29</b>
<b>2.1</b>	<b>Overall structure of the concept of evaluation</b>	<b>30</b>
<b>2.2</b>	<b>The concept of leader responsibility</b>	<b>31</b>
2.2.1	Pro-social responsibility	32
2.2.1.1	Agreeableness, a strong predictor of pro-social behaviour	32
2.2.2	Self-responsibility	33
2.2.2.1	SOC, a strong predictor of psychological resilience	33
2.2.2.2	Self-awareness, a strong predictor of humility and self-improvement	34
2.2.3	Leadership responsibility – leaders' behaviours evaluated by co-workers	34
2.2.3.1	Laissez-faire behaviour, a strong predictor of leadership responsibility	34
2.2.3.2	Capacity to Cope with Stress, a strong predictor of resilience to stress	35
<b>2.3</b>	<b>The concept of psychosocial and biological stress</b>	<b>35</b>
2.3.1	Performance-based self-esteem	36
2.3.2	Covert coping	37
2.3.3	Poor mental health	37

2.3.3.1 Emotional exhaustion	37
2.3.3.2 Sleep disturbance	37
2.3.3.3 Depressive symptoms	38
2.3.4 Biological stress	38
<b>2.4 The concept of “inside” perspective on Shibboleth</b>	<b>38</b>
<b>3 AIMS</b>	<b>40</b>
<b>4 METHODS</b>	<b>42</b>
<b>4.1 Overall study design</b>	<b>43</b>
<b>4.2 Participants and procedure</b>	<b>44</b>
<b>4.3 Pre-intervention</b>	<b>46</b>
<b>4.4 Shibboleth concept</b>	<b>46</b>
4.4.1 Shibboleth performance	47
4.4.2 Group reflection sessions	48
4.4.3 Written reflection sessions	48
<b>4.5 Conventional leadership program</b>	<b>49</b>
4.5.1 Lecture	50
4.5.2 Group discussion	50
4.5.3 Conversation in smaller groups	50
4.5.4 Group exercises	50
4.5.5 Individual assignments	51
<b>4.6 Data sources</b>	<b>51</b>
4.6.1.1 Quantitative data – leaders and co-workers	51
4.6.1.2 Quantitative data – only leaders	51
4.6.1.3 Qualitative data – leaders	51
<b>4.7 Ethical approvals</b>	<b>52</b>
<b>4.8 Measures</b>	<b>52</b>
4.8.1 Overall description	52
4.8.2 The concept of leader responsibility	53
4.8.2.1 Pro-social responsibility – Agreeableness using NEO-PI-R	54
4.8.2.2 Self-responsibility	54
4.8.2.2.1 Sense of Coherence using OLQ-13	54
4.8.2.2.2 Self-awareness, humility and self-improvement using SOA	55
4.8.2.3 Leadership responsibility using DLQ	56
4.8.2.3.1 Laissez-fair leadership	56

4.8.2.3.2 Capacity to cope with stress	56
4.8.3 The concept of psychosocial and biological health	56
4.8.3.1 Performance-based self-esteem	57
4.8.3.2 Covert coping	57
4.8.3.3 Emotional exhaustion	57
4.8.3.4 Sleep disturbance	58
4.8.3.5 Depressive symptoms	58
4.8.3.6 Poor mental health index	58
4.8.3.7 Biology: Hormone assays	58
4.8.4 The concept of “inside” perspective on Shibboleth	59
<b>4.9 Strategy of analysis</b>	<b>59</b>
4.9.1 Study I	59
4.9.2 Study II	60
4.9.3 Study III	61
4.9.4 Study IV	61
<b>5 SUMMARY AND RESULTS</b>	<b>62</b>
<b>5.1 Study I</b>	<b>63</b>
5.1.1 Summary	63
5.1.2 Figures: Hormones, poor mental health, coping and self-esteem	65
5.1.3 Outcomes	65
5.1.3.1 Biological outcomes	65
5.1.3.2 Psychological and behavioural outcomes	65
<b>5.2 Study II</b>	<b>66</b>
5.2.1 Summary	66
5.2.2 Figures: Personality and leader behaviour	67
5.2.3 Outcomes	68
5.2.3.1 Agreeableness and Sense of Coherence	68
5.2.3.2 Laissez-faire and Capacity to cope with stress	68
<b>5.3 Study III</b>	<b>68</b>
5.3.1 Summary	68
5.3.2 Figures: Self-other-rating agreement	70
5.3.3 Outcomes	71
5.3.3.1 Self-awareness	71
5.3.3.2 Humility	71
5.3.3.3 Self-improvement	71
<b>5.4 Study IV</b>	<b>71</b>
5.4.1 Summary	71

5.4.1.1	Theoretical implications of study IV	72
5.4.2	Figures: The overall structure of Shibboleth's characteristics	74
5.4.3	Outcomes	75
5.4.3.1	The elusive and exacting experience of the alien Shibboleth	75
5.4.3.1.1	Cognitive dimension	75
5.4.3.1.2	Aesthetic dimension	76
5.4.3.1.3	Emotional / bodily dimension	76
5.4.3.1.4	Ethical dimension	76
5.4.3.2	Aesthetic approach	77
5.4.3.2.1	Open up to the different	77
5.4.3.2.2	Free, associative processing	78
5.4.3.2.3	Liberation to something undreamt	78
5.4.3.2.4	Creative responses to the Shibboleth form	78
5.4.3.3	Emotive approach	79
5.4.3.3.1	Open to others' inner reality	79
5.4.3.3.2	Emotional processing, the journey inward	80
5.4.3.3.3	A new subjectivity emerges	80
5.4.3.3.4	Emotional response to the Shibboleth form	81
5.4.3.4	Ethical approach	81
5.4.3.4.1	Opening up for a critical approach	82
5.4.3.4.2	Self-examination and re-evaluation	82
5.4.3.4.3	Reorientation towards responsibility	83
5.4.3.4.4	Reflective responses to the Shibboleth form	85
5.4.3.5	The fantastic and never-ending in the midst of the elusive and hard to comprehend	86
5.4.3.5.1	Cognitive dimension	86
5.4.3.5.2	Aesthetic dimension	86
5.4.3.5.3	Emotional / bodily dimension	87
5.4.3.5.4	Ethical dimension	87
<b>6</b>	<b>DISCUSSION</b>	<b>88</b>
<b>6.1</b>	<b>Summary</b>	<b>89</b>
<b>6.2</b>	<b>Changes in the leaders</b>	<b>92</b>
6.2.1	Laissez-faire, self-awareness, humility and the link to moral responsibility	92
6.2.2	Pro-social responsibility and the link to psychological resilience	92
6.2.2.1	Agreeableness: "Voluntary behaviour to benefit another"	93
6.2.2.2	SOC: "How do people manage the lack of control of their lives"	94
<b>6.3</b>	<b>Changes in the co-workers</b>	<b>95</b>
6.3.1	Psychosocial resilience	95
6.3.2	Neurobiological resilience	96

<b>6.4 Neurobiological and psychosocial resilience, and moral responsibility</b>	<b>97</b>
<b>6.5 Methodological considerations</b>	<b>98</b>
6.5.1 Design	98
6.5.2 Methodology and analyses	101
<b>6.6 General discussion</b>	<b>103</b>
6.6.1 How could we understand the negative effects of the conventional program	103
6.6.2 How could we understand the positive effects of the Shibboleth program	107
6.6.2.1 Increased psychological complexity	108
6.6.2.2 Psychological complexity and leadership effectiveness	110
<b>7 THEORETICAL IMPLICATIONS OF THIS THESIS</b>	<b>112</b>
<b>7.1 The aesthematic, dialectical process</b>	<b>113</b>
7.1.1 Aesthematic shock: inspiration through a break with the familiar	114
7.1.2 Aesthematic appropriation: affirmation of life through the difficult	115
7.1.3 Aesthematic transformation: self-recognition through moral responsibility	117
7.1.4 Elusiveness and liminality through the Shibboleth's artistic techniques	118
7.1.4.1 The crucial and dialectical role of the artistic form and music	119
<b>7.2 Aesthematic responsibility in leadership</b>	<b>120</b>
7.2.1 Aesthetical responsibility – thinking beyond the expected	121
7.2.2 Emotional responsibility – a “paradox of resilience”	122
7.2.3 Ethical responsibility – a universalist way of thinking	122
<b>8 CONCLUSION AND FUTURE DIRECTION</b>	<b>123</b>
<b>9 ACKNOWLEDGEMENTS</b>	<b>127</b>
<b>10 REFERENCES</b>	<b>132</b>

## **LIST OF ABBREVIATIONS**

DHEA-S	Dehydroepiandrosterone sulfate
SOC	Sense of Coherence
DLQ	Developmental Leadership Questionnaire
SCL-90	Hopkins Symptom Checklist,
OLQ-13	Orientation to Life Questionnaire NEO-PI-R
SOA	Self-other Rating Agreement
NEO-PI-R	The Revised NEO Personality Inventory
SLOSH	Swedish Longitudinal Occupational Survey of Health
RCT	Randomized Controlled Trial design

# 1 INTRODUCTION





“A company can have all the advantages in the world – strong financial resources, enviable market position, and state-of-the-art technology – but if leadership fails, all these advantages melt away and the organisation – like the driverless car – runs down hill.”

(de Vries, 2001)

Finding ways that could counteract poor leadership entails prevention of severe human suffering. Possessing power essentially includes possessing the ability to cause destructiveness, which history has given us plentiful examples of. Failures in leadership carry a great heaviness and volume; if leadership fails, society and organisations fail. Developing leadership capabilities is therefore a serious and demanding responsibility.

The aim of this thesis was to investigate effects of a new approach to leadership development. A yearlong leadership concept, Shibboleth<sup>1</sup>, was evaluated in a prospective, randomised comparative study. This art-based concept was compared with a conventional leadership development program in four different studies, each study providing different perspectives. The aspiration was to fill the gaps that to date has been a key problem within the leadership development field as well as within research regarding the association between leadership and employees’ psychosocial and biological level of stress related health.

Arts are inseparable parts of our lives that bring joy and inspiration to us. Why else would we daily expose ourselves to music, poetry, fiction, theatre, paintings or movies? However, to what extent do aesthetic experiences change our ways of thinking and behaving in our lives? We are all aware of that leaders exert impact on our lives in one or another way. But, to what extent do they actually affect us and our values, our behaviours, and our health? Combining these two questions, which are fundamental for this thesis, the current research makes an effort to elucidate a small part of these complex influence processes and the relationship between them.

This thesis represents a new, cross-disciplinary research approach. Integrating disparate scientific disciplines – where multiple links and a chain of de-

---

<sup>1</sup> Literally: “ear of grain”. Figurative: a “ciphered mark” to pass a boundary, or a touchstone for going beyond one’s self, passing a necessary threshold.

dependencies is intended to be investigated and elucidated – do not reduce human experience to a more single description and may offer new insight, for example, a deeper understanding of how a social situation characterised by power imbalance (leaders versus co-workers) may impact biological reactions. Accordingly, several research areas are involved in this interdisciplinary attempt, for instance, neuroendocrinology, psychosomatic medicine, psychosocial stress related work environment, psychology, social psychology, leadership, leadership development, pedagogy, ethics, aesthetics, and perception. Different research traditions and methodologies are, consequently, represented: the natural science tradition, the behavioural and personality research as well as the humanistic phenomenological and hermeneutical research traditions.

To my knowledge, previous research has not attempted such a multidisciplinary investigation. This is the first research attempt to elucidate the chain of connections between the possible effects of aesthetic experiences on attitudes and behaviours (here, in leaders), and further transferred effects on psychosocial and neurobiological stress related health or in other words resilience processes in others (here, co-workers).

## **1.1 CHALLENGES OF LEADERSHIP DEVELOPMENT**

### **1.1.1 Infrequent research on leadership development programs**

Leadership carries with it a duty to assume responsibility for the wellbeing of organizations and people. However, the demands on leaders in modern world are beyond doubt exceptional. The increased level of complexity requires an increased level of complexity in leadership competencies. Hence, the expectation on established leadership education to initiate enduring, beneficial changes in leaders' attitudes, motivation and behaviour, are also great. According to de Vries (2001), an organisation cannot be successful when the leadership is poor.

The extensive investment in leadership development programmes worldwide bear witness to the belief in leaders as a critical factor to organisational success. However, in spite of a yearly expenditure of between 36 and 60 billion USD global on leadership training programmes (Burgoyne, 2004), the field of leadership training remains insufficiently evidence-based. The research on leadership programs is surprisingly infrequent, which stands in

great contrast to the huge body of research on leadership in general (e.g., Avolio et al., 2009; Day, 2001).

According to Jackson and Parry (2011) there is a blind faith in the usefulness of today's leadership programs. An assortment of methods to improve leadership practices is used often on scientifically unverified account. There are various assumptions about the effectiveness of the applied methods, despite the fact that evaluations of leadership interventions are rarely grounded in rigorous empirical research (Blume et al., 2010; Day, 2001; Jackson, & Parry, 2011). The few evaluations are often limited to participants' satisfaction estimates. Such estimates, however, do not prove the actual performance in the workplace. The participants can be quite fond of educational programmes, however, research shows a consistent inflation in self-assessments, as leaders tend to overestimate the effects of training on their performance (Eden, 1985; Taylor, et al., 2009). Moreover, despite the well-known adverse effects of poor leadership on employees' psychosocial well-being and health (eg., Aasland et al., 2010; Nyberg, 2009), evaluations of the transfer-effects of leadership training on co-workers' psychosocial and biological stress are, to my knowledge, scarce.

#### 1.1.2 Complexity and ambiguity of the world – challenges for a modern leader

Today's leaders have to operate in an increased level of complexity (e.g., Heifetz, 1994; Petrie, 2011; de Vries, 2001). The world has changed, it is becoming more exacting – more unpredictable, more ambiguous, more fragmentary, and contradictory. Internationalization is a fact and ethnic and religious aspects have increasing importance. People today, independently where they live, share the same world but do not interpret it the same way. Leaders are often faced with contradictory demands – one “truth” is in opposition to another “truth”. The problems of life are ethically challenging and rarely explicitly given. Facing this demanding complexity and often a painful social reality requires a broad range of complex competencies (e.g., Kegan & Lahey, 2009; McGuire & Rhodes, 2009; Pearce, 2007; Olivier, 2001). It requires such capabilities as a sound moral judgment grounded in insight into the complexity and limitations of human existence as well as grounded in the ability to distinguish right from wrong. It requires an ability of emotional responsibility to withstand and cope with uncertainty, ambivalence or anxiety grounded in a high level of self-awareness and stable self-esteem. It also requires an ability of imagination necessary to understand the world and interpret the multitude of

impressions in order to create order of the unstructured and find coherence and meaning.

#### 1.1.3 Simplification and instrumentality – the problems with established leadership development programs

”Today’s significant problems cannot be solved at the same level of thinking we were at when we created them”

Albert Einstein (unknown source)

While the nature of the challenges that leaders are facing is changing, the methods of development of leaders’ competences seem almost to stay the same (Petrie, 2011). There are several problems associated with conventional leadership development programmes (e.g. Jackson & Parry, 2011; Sturdy et al., 2006; Wenglén & Svensson, 2008). There are a several different approaches to leadership (Yukl, 2006). However, irrespective of theoretical basis, the different methods put their main efforts on strengthening leaders’ self-confidence in their role as leaders, developing, mostly by virtue of theories and standardized models and tools, analytic knowledge and instrumental, measurable skills (Gold et al., 2010). Such focus on “what” in leadership are so called horizontal types of development, which is based on “transmitted” competences from an expert – a kind of technical learning of new skills and abilities (Petrie, 2011). According to Goldsmith & Reiter (2007), “Many of our leadership programs are based on the faulty assumption that if we show people what to do, they can automatically do it.” However showing how things work is relevant for technical/logical problems, when it comes to ethical and emotional factor the challenges is much more complex. The focus on training social skills, which are believed to be necessary, is a form of social engineering and involves the element of indoctrination. Social engineering plays a crucial role in contemporary education in general (Füredi, 2009). Habermas (1975) described this process as an attempt to regenerate values administratively.

Emphasis on instrumental knowledge, “ready-made solutions”, management stereotyped jargon as well as confirmation through focusing on the positive leadership skills at the expense of reducing the negative may lead to an underestimation of the complexity of life and an overestimation of one’s own capabilities, giving a false sense of self-confidence and a dangerous feeling of being able to manipulate and control reality within standard procedures. The multifaceted human uniqueness and particulari-

ty, as well as human qualities of compassion, empathy and ethical considerations may disappear when such formulas are applied. In essence, there appears to be a dehumanizing tendency: to reduce human, ethical aspects to technical ones – adiaphorization according to Bauman (1995) – resulting in alienation of employees and possible escape from responsibility. Mintzberg (2005) claims that most management programs have dehumanizing effects, they teach the fallacy that leadership consists of applying formulas to solve complex situations. Argyris (1986, 1999) has discussed the phenomenon of “skilled incompetence”; leaders learn to distance themselves from taking responsibility, and to suppress negative feelings using routine behaviour (theories-in-use) in order to avoid conflicts with co-workers. Jones (2005) notes that leadership programs can perpetuate leaders’ self-preoccupation through emphasis on self-development and self-improvement at the expense of understanding their followers.

These possible undesirable effects on leaders of leadership/management programs may consequently have negative effects on their organizations and employees. Reduction of the complexity of life, overuse of wishful/positive thinking and the “ready-made perceptions”, and habitual lines of thought may result in deteriorated ability to make judgments. This may foster “laissez-faire” behaviour and bureaucratic workplaces in which negative phenomena (such as formalism/impersonality, rigidity, lack of a critical attitude, avoidance, indifference, relativism or defensive mechanisms) could develop and become institutionalized. Modern bureaucratic workplaces are often characterised by a significant avoidance of the assumption of personal responsibility (Diamond & Allcorn, 1984). Consequently, it is not surprising that some of the worst failures in leadership are: lack of judgment treating social/adaptive challenges grounded in the complexity of values, beliefs, loyalties, etc. as technical ones (Heifetz & Linsky, 2002), lack of psychological/emotional resilience to handle tough/stressful situations (Jackson & Parry, 2011) and lack of holistic view, not seeing the complex coherence.

## **1.2 POOR LEADERSHIP RESPONSIBILITY**

### **1.2.1 Over-emphasis of the positive in leadership**

The consequences of poor leadership entail distress for everyone who is influenced by it. Nonetheless, poor leadership is highly prevalent and cause destructivity and severe human suffering including ill health (eg., Aasland et al., 2010, Einarson et al., 2007; Nyberg, 2009). An extensive

overview of psychological research literature (Baumeister et al., 2001) provides overwhelming support to the notion that “bad is stronger than good”; the negative experiences in social interactions have a stronger impact on individuals than do positive events. This conclusion is also supported by empirical findings (Lincoln, 2000). Hetland et al. (2007) suggested that the negative aspects of leadership might have a great impact on stress and health among employees. Hence, averting poor leadership and minimizing its destructive potential should be a major responsibility, or even most important for the field of leadership research and leadership development. However, to date the focus is almost entirely on constructive leadership behaviours and its positive effects (Hunter et al., 2007; 78; Skogstad et al. 2007). Without knowing the dark sides of leadership, the nature of leadership cannot be understood and neither can adequate methods to develop leaders can be found. Such overemphasis of the positive in leadership is quite surprising considering the possibly devastating consequences of the problematic nature of leadership for the employees as well as the organizations as a whole (Rayner & Cooper, 2003; Tepper, 2000; Zellars, et al., 2002).

#### 1.2.2 The destructiveness of poor leadership

Research aiming to explore the connection between leadership and employee wellbeing/health is infrequent (e.g., Tepper, 2000). However, the investigations of the adverse consequences of destructive/poor leadership have begun to take shape (Einarsen et al., 2007; Tierney & Tepper, 2007; Tepper, 2007ab; Kellerman, 2004; Kelloway, et al., 2005). Hence, the focus has mainly been on manifest destructive leadership such as tyrannical behaviours or active aggressive behaviours etc. (Ashforth, 1994; Skogstad et al., 2007). Nonetheless, destructive leadership may also consist of indirect aggression, a passive or avoidance behaviours, named a *laissez-faire* leadership. The *laissez-faire* leadership, according to Goodnight (2004) is the worst style of leadership and the least effective. Defined as abdication from responsibilities (Bass, 1990), the destructiveness of *laissez-faire* is not about harmful actions, but about the harm that occurs due to lack of action. Such leadership behaviour has the potential to undermine organisations as well as co-workers’ wellbeing (Einarsen et al., 2007; Tollgerdt-Andersson, 1996). Among poor leadership styles, *laissez-faire* has been found to be the most prevalent destructive leadership behaviour highly ineffective (e.g. Goodnight, 2004) with strong negative effects on workplaces causing development of destructive processes such as interpersonal

conflicts and bullying, and is clearly the worst leadership style with regards to mental illness and distress among employees (Aasland, et al., 2010; Hoel & Salin, 2003; Hyde et al., 2006; Skogstad et al., 2007). A conflict may escalate into bullying when leaders deny its existence, resulting in high levels of psychological distress not just among those who are involved but also among those observing the bullying (Skogstad et al., 2007). According to conflict theory, bullying occurs when unsolved conflicts escalate to high level, combined with a power imbalance between the victim and the offenders (Zapf & Gross, 2001). Hence, this supports the notion that laissez-faire leadership creates a basis for bullying at work (Hoel & Salin, 2003).

#### 1.2.3 Inability to withstand stress and the danger of losing reality awareness

Another regressive force inherent in leadership, which might be one of the underlying causes of laissez-faire behaviour, is inability to withstand psychological stress such as conflicts, ambiguity or others stressors. Leaders have to acknowledge and deal with own emotion, the whole spectrum of difficult feelings, and deal with the emotions of others. An inappropriate regulation of feelings in leaders has effects on the organisation as a whole and is both far reaching and long lasting (de Vries, 2001). Research indicates a clear link between leaders' stress tolerance and the ability to operate effectively (e.g., Bass, 1990). When we encounter a situation that does not match our previous experiences, or when setbacks or other stress factors arise, it can be difficult to face reality without getting caught up in primitive defensive processes. The extent to which people cope with their surroundings is closely related to their ability to stay in touch with reality (de Vries, 1990). Stress influences ethical decisions and is likely to reduce people's pro-social behaviours, and motivation to take others' interest into account (Jex et al., 2003). Stress has a negative influence on people's moral actions as well as on capacity for self-regulation and self-control (Selart, & Johansen, 2011).

#### 1.2.4 Power and poor self-awareness and the danger of hubris

The link between the two aforementioned poor behaviours (laissez-faire behaviour and inability to withstand psychological stress) and self-awareness is of particular interest. The social psychology literature provides ample evidence of the positive effects of self-awareness (e.g., Hoyle, et al., 1999; Kernis, 2003). The importance of self-awareness for being able to improve one's performance through self-regulation is an evident

theme throughout leadership literature and practise (e.g Avolio & Gardner, 2005; Goleman, 1998; de Vries, 1990). People who don't know themselves get locked into dysfunctional behaviour and are poor judges of other people (de Vries, 1990), which can be devastating if one is in a position of power. Several outcome measures regarding leadership effectiveness are related to self-awareness (Atwater et al., 1995; Fleenor, et al., 2010; Van Velsor, et al., 1993). However, today's leaders have to operate in an increasingly complex and challenging environment. In such an emotionally and ethically demanding reality, people tend to escape self-awareness in order to avoid unpleasant feelings, or find the illusion of control through easy solutions (Heatherton, & Baumeister, 1991).

Combining insufficient self-awareness with power might have destructive consequences. An inability to introspection and self-re-examination may lead to overestimation of own capabilities, especially if one own the power. The acquisition of power sometimes results in excessive pride and arrogance, whereupon a leader creates own reality, blind to any possible negative consequences, many leaders take for granted that "they can transgress the rules for common mortals" (de Vries, 1990). Hubris, an inflated sense of self-importance and distorted reality has been a recurring theme in leadership. Hubris can be seen as an offshoot of unbridled narcissism, a key force behind the desire for leadership and power (de Vries, 1990). According to de Vries, many leaders have a good bit of the narcissist in them and such self-centred leaders can't imagine how the world looks through others' eyes. There is substantial evidence that self-overconfidence reduces attempts to act and is associated with poor performance. Leaders who overestimate their abilities have been found to have the lowest level of leader effectiveness (Arvonen, 2006; Atwater & Yammarino, 1997; Church, 1997).

#### 1.2.5 Power and inability for social sensitivity, and the danger of stereotyping

A regressive force inherent in leadership, which might be also one of the underlying causes of laissez-faire behaviour, is pro-social inability or tendencies to anti-social behaviour: an impaired capacity of human qualities in relationships with others, such as lack of empathy, compassion, willingness to help or repair – in short, decreased interpersonal sensitivity and inability to understand and care for others. There is a great danger when power and prestige, self-interest and selfishness are more important than the common good and the well being of other people. One of a leader's most important duties is ability to perceive/be aware of obstacles, dif-



difficulties and emotional needs that their co-workers face in their work situation (e.g., Judge et al., 2004; de Vries, 1990). However, research indicates a strong evidence for a negative relationship between power and interpersonal sensitivity; people in position of high power often form a relatively shallow understanding of visual, cognitive, and emotional perspectives of others, compared to the less powerful and in addition tend to act in a self-interested manner (Anderson et al., 2003; Fiske, 1993; Galinsky et al., 2008, 2006; Keltner et al., 2003; Russell & Fiske, 2010). Moreover, those in position of power tend to rely more on stereotypes (Fiske, 1993; Fiske & Dépret, 1996; Russell & Fiske, 2010) and stereotyping is often precursor of prejudices towards a group. Hogeveen et al. (2014), through examination of neural mechanism in the brain, support the assumption that high power appears to reduce interpersonal sensitivity. Guimond et al. (2003) provide strong evidence for a causal relation between dominant social position and level of prejudice: The participants who were led to believe through a false feedback that they had a good ability for leadership and for high responsibility expressed more prejudice afterwards than those led to believe otherwise. The mere fact of believing to be in a dominant social position was sufficient to generate prejudice and in-group bias. All these experiments consistent suggest the inverse correlation between power and empathy.

### **1.3 PSYCHOSOCIAL AND BIOLOGICAL STRESS RELATED HEALTH**

#### **1.3.1 Poor leadership and psychosocial stress**

Experience of stress causes suffering and diseases. Research has shown that stress plays an important role in the development of our more common diseases (Stansfeld, 2006; McEwen, 2008). Stress related diseases are a main public health problem (Lecrubier, 2001; Levi, 2005) and are the major cause of premature death in Europe (WHO, 2001). Stress can be described as a reaction that occurs in response to threat of psychological or social kind. Psychosocial stress is described as a psychological, somatic and physiological reaction when different brain areas respond to the stress by inducing energy mobilization of bodily processes needed to overcome the stressors. Ill health occurs, according to the Cognitive Activation Theory of Stress, when the stress reaction becomes chronic, and when there is a lack of constructive coping (Ursin, 2004). Long-term psychosocial stress inhibits the immune system (Kiecolt-Glaser et al., 2002) and lowers the body's regeneration activity (Theorell, 2009; Robles & Carroll, 2011) causing different symptoms or disease states such as exhaustion disorder

(Glise et al., 2012), depression (Siegrist, 2008), anxiety (Stansfeld & Candy, 2006), cardiovascular disease (Kivimäki et al., 2012; Rosengren et al., 1991) impaired sleep (Åkerstedt, 2006; Åkerstedt et al., 2007) and also accelerated aging (Åkerstedt, 2006; Epel, et al., 2004; Chandola et al., 2006; Wolkowitz et al., 2010).

Stress-related ill health associated with the work environment is increasing according to a report by the Swedish Council on Health Technology Assessment (SBU, 2014). The work environment is a frequently reported source of chronic psychosocial stress with stressors such as unresolved conflicts, unfair treatment, lack of opportunities to influence etc. (Levi et al., 2000; Hertting et al., 2004; Theorell et al., 1990, 1991). Several common diseases, such as mental illness, coronary heart disease, and degenerative musculoskeletal diseases may be initiated or accelerated by experiences of stress at work (Marmot, 1996). Research on health effects of the psychosocial work environment has shown that leadership style, leaders' attitudes and behaviours, influences the health of employees and that the negative aspects of leadership may have great impact on stress causing the development of stress related diseases among employees (Gilbreath & Benson, 2004; Nyberg et al., 2008; Nyberg et al., 2009; Kuoppala et al., 2008). Several studies have reported significant associations between leadership and among other, employee burnout or emotional exhaustion (Hetland, et al., 2007; Nyberg et al., 2005; Sheridan & Wredenburgh, 1979; Melchior et al., 1997; McCain, 1995).

### 1.3.2 Biological stress – anabolism and catabolism

The consequences of long-term psychosocial stress may be reflected in the regulation of the neuroendocrine system, and is reflected by changes in i.e. hormone secretion. In general, long-term stress lowers the body's regeneration activity reducing the ability to regenerate cells and tissues (Robles & Carool, 2011; Theorell, 2009). In studies on biological effects of psychosocial stress the focus has been on catabolic processes, in particular on cortisol. Cortisol is a steroid hormone with catabolic effects. It is released in situations that demand energy and facilitates the handling of stressors. Repeated pronounced elevation of the blood concentration of cortisol could contribute to pathological processes. In addition long lasting periods of excessive energy demands without periods of recuperation may result in a flattening of the circadian cortisol variation as well as in low concentration overall and a decreased cortisol response to challenges (Chrousos et al. 1992, Yehuda et al. 1993, Sapolsky et al. 2000). DHEA-S (dehydroe-

piandrosterone sulfate) on the other hand is an anabolic hormone. DHEA-S has a protective and regenerative effect important for the maintenance and restoration of health. DHEA-S has been shown to be immune enhancing (Khorram, et al., 1997; Suitters et al., 1997), has anti-inflammatory properties (Ramírez et al., 2007; Altman et al., 2008), and beneficial effects on the cardiovascular system as well as beneficial effects on mood (Sripada et al., 2013). One of the consequences of long-term psychosocial stress may be a reduced capacity to produce DHEA-S (Lennartsson, 2013). Decreased concentrations of DHEA-S are strongly correlated with premature aging (Theorell, 2009). Low levels of DHEA-S have been shown to be associated with both subjective perception of poor health (Berr et al., 1996) and with different disease states, for example, depression (Goodyer et al., 1996; Barrett-Connor et al., 1999). The hormones DHEA and DHEA-S play a significant role in the regeneration of tissues in the body (Theorell, 2009). Recent research (Lennartsson, 2013) demonstrates that individuals, who experienced prolonged stress at work, had markedly lower levels of DHEA-S and were less to mobilise DHEA-s in acute stress situations than individuals who reported no stress; thus, lower levels of DHEA-S may constitute a link between psychosocial stress, ill health, and accelerated ageing.

## **1.4 ART AS PREVENTION OF POOR LEADERSHIP**

### **1.4.1 A need for a new leadership approach**

As it appears from the review of the literature above, the consequences of poor leadership can be devastating. There is a need for a countervailing power against the destructive leadership forces. How can we help leaders develop a deeper sense of moral responsibility and courage to encounter and cope with the complexity of the actual reality, and prevent the tendencies of indifference or selfishness? How can we help leaders to develop a higher level of self-awareness and prevent them from getting trapped in blindness, “ready-made perceptions”, wishful thinking or hubris, and maintain their capacity for reality-based decision-making and action? To uncover “blind spots”, bring into awareness what one shields oneself from, and to identify one’s own avoidance and absence of actions may require a higher level of introspection than to realize the consequences of one’s manifest and directly observable harmful actions.

A new concept for leadership development is needed, in order to provide a broader humanistic perspective and prepare leaders to cope with highly

complex, extraneous or painful situations. A new concept that is capable to influence leaders in a deeper way, fostering (self) criticism and a deep sense of humanism, and concern and respect for others. It is not enough to master a toolbox with simplistic standard solutions or rely on the regulatory framework. There are no “short-fixes” when it comes to developing managers effectively (Mabey & Ramizes, 2005). A real change in behaviour can only come from a deeply rooted change in the individual (Mukherjee, 1998). As Pearce (2007) argues, leadership programs of the 21st Century should emphasize the importance of identity, multi-level approaches, creativity, emotions and spirituality. According to Eisner (2004) a new conception of education is needed that has a greater focus on valuing than measuring, on surprise than on control, on distinctions than on standard and on the imaginative/metaphorical than on the factual/literal. He speaks about art experience as a source in improving educational practice. For Haslam et al. (2012) leaders who are skilled and effective are “those with a rich appreciation of poetry and prose, a detailed knowledge of the collective culture”. Olivier (2001), who has brought the world of theatre into the field of leadership development, believes that arts have much to teach managers about creativity, imagination, vision, communication and dealing with insecurity; dramatic art deepens leaders’ self-awareness and improves their ability to cope with uncertainty.

#### 1.4.2 Aesthetic experience as non-instrumental knowledge

“People nowadays think that scientists exist to instruct them, poets, musicians, etc. to give them pleasure. The idea that these have something to teach them — that does not occur to them “

Wittgenstein in *Culture and value*.

Consistent with numerous authors, I argue that strong art experiences may constitute a countervailing power against destructive leadership forces giving insight into the complexity of the surrounding world, and fostering introspection, self-criticism and an ability to distance oneself from oneself. Arts mediate emotional and ethical knowledge of fundamental human significance and are searching for the truth of the human condition (e.g., Adorno, 1973b). Maslow (1964, 1970) believed that affective aspects of aesthetic experiences are of utmost importance in human life. Strong cultural experiences take into account emotional resources, which are deeper than the ones we normally use.

The duty of art is to handle human experiences that are impossible to tack-

le with cognitive and rational methods (Broch, 1982). According to Ricoeur (1991b), art shows unexpected sides of our existence without “explaining it into pieces” through theoretical systems and makes us understand the self and the world in the new way; It is with fantasy we receive and create new pictures for a deeper human existence, a new way to understand the world. For Nussbaum (1995) art is a way to make resistance against each reductive conception about human beings; It aids us to cultivate a spectrum of feelings such as compassion that make us experience the world in a more realistic way. Nussbaum emphasizes the fundamental role of feelings and fantasy in moral judgment; we explore the border between the rational and irrational feelings, which help us to foster judgment. As Eisner (2004) argues, when there is no science to lead the way, art provides a way for understanding beyond words; it teaches us to learn to judge in absence of rules, to appraise the consequences of one’s choices and to revise and remake them. According to Kant (2003), decision-making is deeply rooted in aesthetic sensitivity. A leader who possesses the ability to connect impressions, knowledge and intuitions into a single whole – the general’s “inner light” of strategic vision – moves from the domain of knowledge into the domain of art (Clausewitz, 1999). For Sartre (1940) vision is not built through analysis, it is a whole and it appears spontaneously.

#### 1.4.3 The artistic core of Shibboleth

”Imagination gives us images of the possible that provide a platform for seeing the actual, and by seeing the actual freshly, we can do something about creating what lies beyond it...”

Eisner, 2004

The Shibboleth’ artistic core is based on experimental performance art. By virtue of a reinforcing combination of a demanding content (conveying harrowing human experiences) and a challenging artistic technique (fragmented and without an explicit continuous and logical context) the experience of the Shibboleth performance poses demands on different qualities of perception and imagination. Such experiences were hypothesised to break ingrained patterns of thinking and feeling and thereby force critical evaluation leading to increased awareness of moral responsibility. According to Sklovskij (1971), the duty of art is to prevent the usual, “automatic” perception and liberate our perception and sensations through making things consciously more difficult. New cognitive and emotional contexts

can be created between the feeling and the thought, between the ethic and the aesthetic.

## **2 THE CONCEPT OF EVALUATION IN THIS THESIS**

## 2.1 OVERALL STRUCTURE OF THE CONCEPT OF EVALUATION

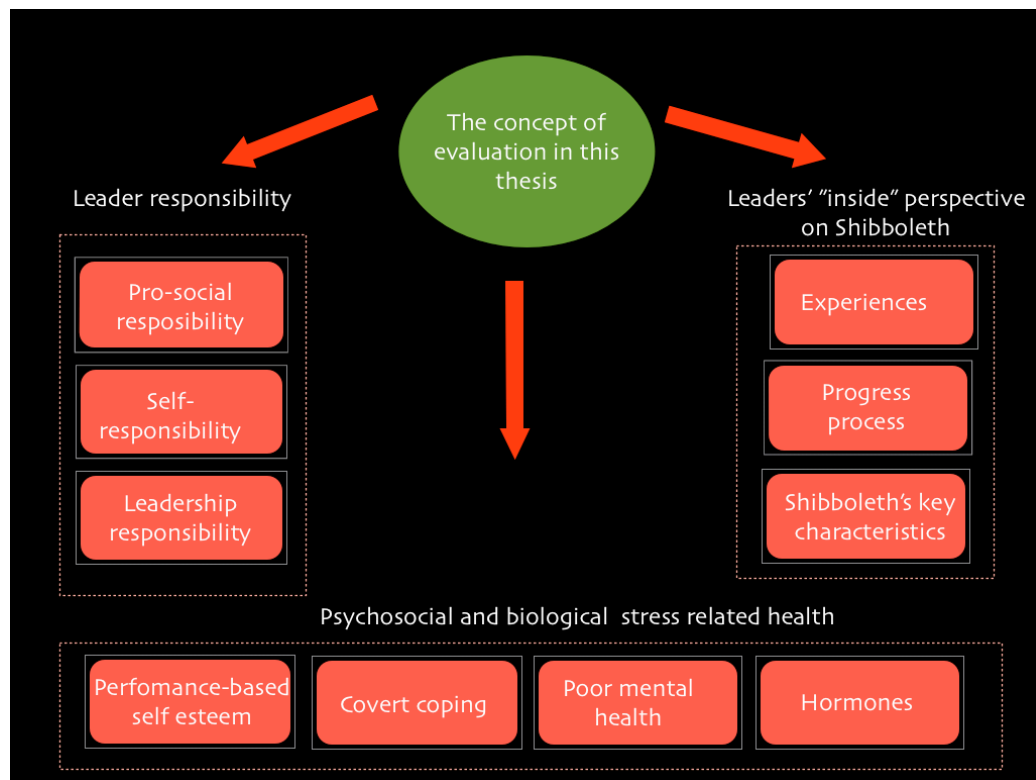


Figure 1 Overall structure of the concept of evaluation

The hypotheses of the current thesis were two; one regarding the direct effects of leadership training on the participating leaders, and one that refers to the transferred effects of the leaders' training on the co-workers. The expectation was that the Shibboleth concept would have a stronger ability than the conventional leadership program to counteract poor leadership, which in turn, should induce resilience processes in the co-workers in terms of improved psychosocial and biological stress related health. Corresponding to the two hypotheses, two concepts for statistical evaluation were chosen, and were supplemented with a third concept of an "inside" perspective on Shibboleth:

- 1) The concept of *Leader responsibility* including pro-social responsibility, self-responsibility, and leadership responsibility
- 2) The concept of *Psychosocial and biological stress*
- 3) The concept of *"inside" perspective* on Shibboleth

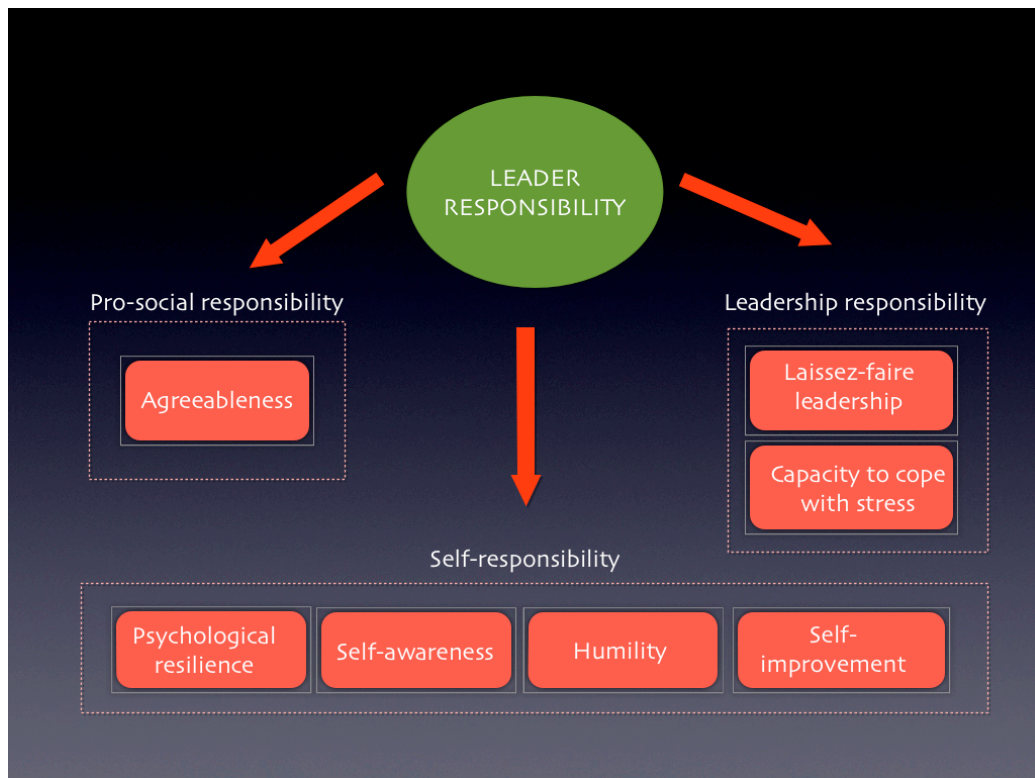


## 2.2 THE CONCEPT OF LEADER RESPONSIBILITY

Based on the above review of scientific research, the present thesis focuses leaders' ability to assume responsibility. The principal research question in this thesis was whether the Shibboleth concept, its form and content, could be more effective than a conventional one at increasing leaders' responsiveness to complex human situations and their willingness to assume responsibility, mobilizing readiness to act. Such increased responsibility is assumed to entail deeper changes in leaders' attitudes and values. More specifically: exposing leaders to challenging and deeply touching art experiences, which give insight into human complexity and limitations, was hypothesised to break ingrained patterns of thinking and feeling and force a process of self-critical examination and self-reinterpretation, resulting in enhanced self-awareness, humility and willingness to self-improvement. This increased awareness of moral responsibility was expected to mobilize courage and readiness to take stand and act in highly complex, extraneous and painful social circumstances, which, in turn, would increase leaders' psychological resilience to stress.

Thereby, as predictors of responsibility in leaders, three different kinds of responsibility were chosen. These three are intimately related, each aspect combining both behavioural, emotional and ethical facets, however with various emphasis on each of them:

1. Pro-social responsibility was operationalized by Agreeableness, a strong predictor of pro-social motivation/behaviour
2. Self-responsibility was operationalized by Sense of Coherence, a strong predictor of psychological resilience, and by self-awareness a predictor of humility and self-improvement
3. Leadership responsibility manifested in behaviours: operationalized by Laissez-faire leadership, predictor of leaders' responsibility and Capacity to Cope with Stress, predictor of resilience to stress



**Figure 2 The concept of leader responsibility in this thesis**

It is argued that Sense of Coherence, self-awareness, Agreeableness, Laissez-faire leadership and Capacity to Cope with Stress are particularly relevant given our general research question. The concept of leader responsibility can be summarized as follows:

## 2.2.1 Pro-social responsibility

### 2.2.1.1 *Agreeableness, a strong predictor of pro-social behaviour*

Agreeableness (Graziano & Eisenberg, 1997) is a complex adaptive pro-social disposition that predicts social supportive behaviour and deep understanding of other people, their mind (thoughts, emotions and motives) and their conditions and acts. Both narcissism (Kovacs, 2011) and psychopathy (Jakobwitz & Egan, 2006) have a strong negative correlation with Agreeableness. The two poles of Agreeableness, antagonism/antisocial tendencies versus pro-social tendencies, contrasting such characteristics as altruism, compassion, empathy, nurturance, consideration, humility and cooperation with hostility, aggressiveness, cynicism, callousness, manipulation and indifference to others (Graziano & Eisenberg, 1997).

Agreeableness involves social-cognitive, emotional, motivational and behavioural elements. It corresponds to motivation and emotional readiness to maintain interpersonal relationships and to take responsibility and deal with

interpersonal conflicts. Agreeable people are more emotionally responsive in social situations and better able to regulate negative emotions during conflicts, specifically the regulation of frustration and anger (Graziano et al., 2007b; Jensen-Campbell & Graziano, 2001; Tobin et al., 2000). Agreeableness has been shown to be substantially related to social-cognitive processes (empathic imagination): seeing the world through the eyes of others (perspective taking), imagining the suffering of others, but even to reason about the content of another's mental state and to predict other persons actions (Costa & McCrae, 1992a; Graziano et al., 2007b; Nettle & Liddle, 2008). Furthermore agreeable people seem to be more tolerant and less prejudiced and discriminatory (Akrami, 2005; Graziano et al., 2007a), and they show a greater acceptance of both the self and the others (Hurley, 1998). Finally, when power is combined with a pro-social orientation, this leads to improved empathic ability (Côté et al., 2011).

### 2.2.2 Self-responsibility

#### 2.2.2.1 *SOC, a strong predictor of psychological resilience*

The salutogenic concept Sense of Coherence, SOC (Antonovsky, 1987) is a strong predictor of mental resilience to stress. Sense of Coherence refers to a complex adaptive personality disposition that predicts ability to a deeper understanding of oneself, one's own circumstances and one's place in the world. It also predicts motivation and emotional readiness to take responsibility and to deal with stressful and demanding life experiences using a variety of strategies, which, in turn, leads to new understanding. Sense of Coherence has a strong negative correlation with "the victim mentality" (Fenichel, 1945; Zur, 1994). SOC is defined (Antonovsky, 1987) as a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that the world is comprehensive, manageable and meaningful. *Comprehensibility* (cognitive element) refers to the extent to which individuals perceive stimuli deriving from inside or outside themselves as clear, ordered, structured and consistent. The cognitive perception makes it possible to anticipate and find future events structured, predictable and explicable. *Manageability* (behavioural element) refers to the extent to which individuals experience life situations as bearable or manageable, or even as new challenges. Individuals base the feeling of manageability on their experiences of control (their own or others) over the environment and they trust that the challenges posed by everyday life can be met. *Meaningfulness* (emotional and motivational element) refers to the extent to which individuals feel that life is making

sense on an emotional and not just a cognitive level. It refers to the sense of importance and value inherent in events and the feeling that these are worthy of investment and engagement. A person who has a high Sense of Coherence is deeply rooted in reality, experiences one's self as a coherent part of the world and is more likely to realize the importance of emotions (Kalimo & Vuori, 1990; Vuori, 1994). Individuals with high SOC have a realistic, deciding, outward judgment of good or bad, while maintaining an inward focus on the facts applicable to immediate circumstances (Du Toit et al., 2005). In general resilient people deal with emotionally difficult problems proactively, and give themselves time to self-reflection (de Vries, 1990).

#### *2.2.2.2 Self-awareness, a strong predictor of humility and self-improvement*

Self-awareness, humility and self-improvement are predictors of effective leader functioning (e.g Avolio & Gardner, 2005; Arvonen, 2006; Goleman, 1998; de Vries, 1990). Defined as a process of introspection to understand the multifaceted nature of the self and make meaning of the outside world, self-awareness provides a solid basis for leaders' decisions and actions (Gardner, et al., 2005). Hence, self-awareness is not just about the ability to understand one's own feelings, motives, values, strengths and weaknesses, it also includes the understanding of the world around you. Self-understanding occurs always in the light of the others, in relation with the others, according to Ricoeur (Ihde, 1971). Consequently, comparisons between self-evaluation and the evaluative feedback of others (here co-workers) may identify the discrepancy between the actual reality as it is perceived by others and self-perception. Such comparison is posited to be an indicator of self-awareness (Atwater & Yammarino, 1997). High agreement between self-evaluation and the evaluative feedback of others indicates a high level of self-awareness and self-underrating may indicate sense of humility. The Control Theory links self-awareness and self-regulation (Carver, & Scheier, 1981). Numerous researchers have emphasized the significance of self-perception to achieve self-regulation and self-improvement (e.g., Bass, 1985; Gardner, et al., 2005; Avolio & Gardner, 2005).

#### **2.2.3 Leadership responsibility – leaders' behaviours evaluated by co-workers**

##### *2.2.3.1 Laissez-faire behaviour, a strong predictor of leadership responsibility*

Laissez-faire leadership (Bass, 1990) is defined as avoiding leadership duties and responsibilities. It is a French expression and means "leave it alone". Leaders exhibit indifference or a kind of cowardice, avoiding to take stand in difficult and important questions, avoiding making necessary

decision or avoiding to take responsibility for decisions. This also means a lack of supportive leadership; no attempt is made to motivate subordinates, or to recognize and satisfy their needs. As was mentioned earlier, laissez-faire is associated with stressful environments and ambiguity, high levels of dysfunctional interpersonal conflicts and bullying (Hyde et al., 2006; Skogstad et al., 2007; Tollgerdt-Andersson, 1996).

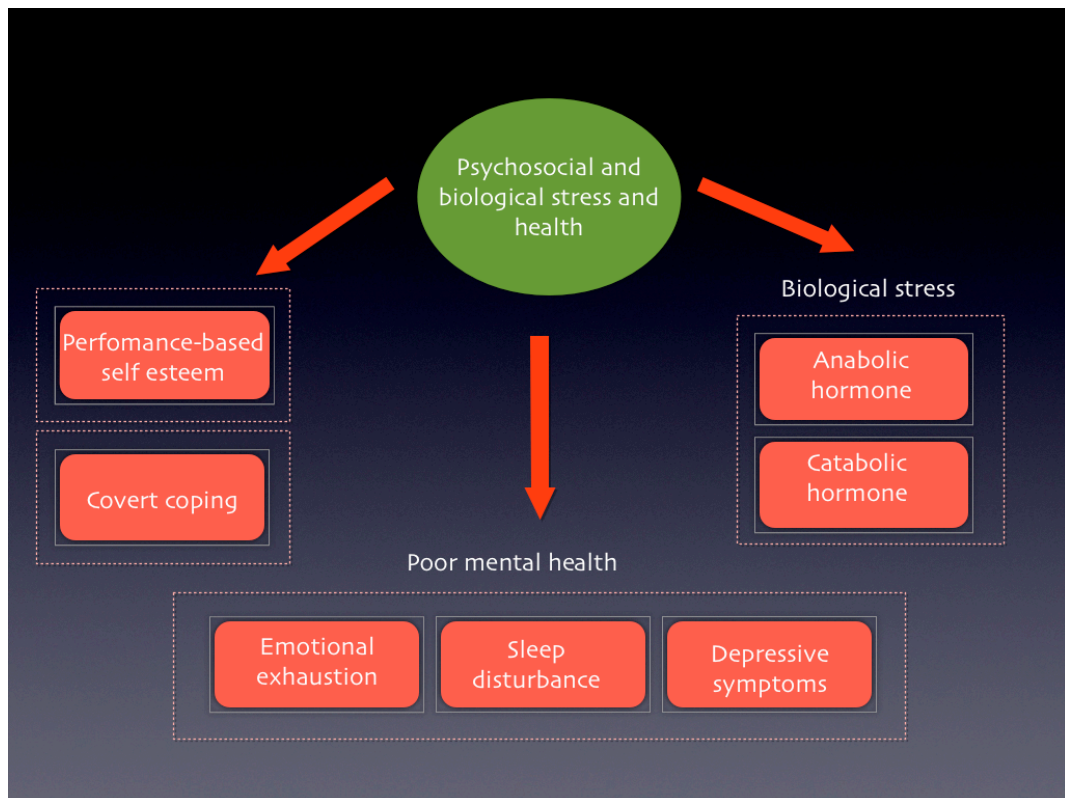
#### *2.2.3.2 Capacity to Cope with Stress, a strong predictor of resilience to stress*

Capacity to Cope with Stress refers to two aspects. The first one is problem-focussed coping (Lazarus, 1991, 1999) which involves addressing the problem that causes distress and includes the ability to grasp new information during stress, to overview ambiguous situations or to handle different issues simultaneously, etc. The second one is emotion-focussed coping skills, which aims at ameliorating the negative emotions associated with the problem (Lazarus, 1991, 1999). Examples of this are positive reappraisal, distancing, relaxation, etc. Capacity to Cope with Stress can be seen as a “negative capability” (Grint, 2010) namely, the ability to remain comfortable with uncertainty and ambiguity.

### **2.3 THE CONCEPT OF PSYCHOSOCIAL AND BIOLOGICAL STRESS**

As predictors of stress related health in the co-workers, research in the present thesis has investigated both several aspects of psychosocial as well as biological responses to stress. Regarding our research question, if the Shibboleth concept would affect the leaders to assume more responsibility, it should improve the total psychosocial climate in the work groups resulting in beneficial changes in the co-workers. More specifically, the changes in the leaders’ attitudes and behaviours were expected to activate beneficial attitudes and behavioural changes in their co-workers and be reflected not just in their stress related psychological health, but also in biological processes/endocrine status.

Five aspects of psychosocial responses to stress were investigated and two aspects of biological stress. These variables seem to be of particular importance and some of them have been identified to correlate to poor leadership style. It is argued that self-esteem, covert coping and poor mental health (comprising emotional exhaustion, sleep disturbance and depressive symptoms) are particularly relevant given our general research question as well as DHEA-S (a anabolic hormone) and cortisol (a catabolic hormone). These aspects are of course intimately inter-correlated.



**Figure 3 The concept of psychosocial and biological stress health in this thesis**

Psychosocial and biological stress measured in the present thesis can be summarized as follows:

### 2.3.1 Performance-based self-esteem

Performance-based self-esteem refers to one type of contingent self-worth where self-esteem primarily built on accomplishments and “doing” rather than on “being” (Hallsten et al., 2005). According to Hallsten et al, (2005) performance-based self-esteem constitutes a vulnerability factor for high psychological strain and distress. Contingent self-esteem or performance-based self-esteem can be correlated to emotional exhaustion (Pfenning & Husch, 1994 in Schaufeli & Enzmann, 1998) and depressive mood after failure (Crocker et al., 2003). People with low self-esteem tend to less actively cope with setbacks (Schuetz, 1998). Research has shown that the relationship between work stressors and distress is almost entirely mediated through self-esteem (Cole et al., 2001). According to Brooker & Eakin (2001) and Stansfeld & Candy (2006), conflicts and poor social support and relations at work give rise to poor self-esteem. It can be assumed that the way leaders act towards employees may be critical for the employees’ sense of self-esteem.

### 2.3.2 Covert coping

Covert coping is an indicator of patterns of avoidance in the work environment occurring when one does not show the "aggressor" that one feels unfairly treated (Leineweber et al., 2011). According to Harburg et al. (1973) covert coping refers "to a strategy of walking away from the conflict dealing with it indirectly and introvertly". There is evidence to show that covert coping is related to signs of coronary heart disease, high blood pressure, as well as increased rates of sickness absence (Theorell et al., 2000; Härenstam et al., 2000). Moreover, covert coping is strongly related to increased risk of cardiovascular disease and risk of future heart attack or heart-related death (Leineweber et al., 2011).

### 2.3.3 Poor mental health

#### 2.3.3.1 *Emotional exhaustion*

Emotional exhaustion is considered to be the most essential aspect of burnout and has also been found to be the most strongly related to long-term psychosocial work stress (Maslach & Jackson 1981; Brenninkmeijer & VanYperen, 2003; Schaufeli, 1993). According to Hallsten et al. (2005) burnout occurs after unsuccessful self-esteem strivings. Emotional exhaustion has also been found correlated to performance-based self-esteem (Pfenning & Husch, 1994 in Schaufeli & Enzmann, 1998). As mentioned earlier, several studies have reported association between leadership and employee burnout or emotional exhaustion (Hetland et al., 2007; Nyberg et al., 2005; Sheridan & Wredenburgh, 1979; Melchior et al., 1997; McCain, 1995).

#### 2.3.3.2 *Sleep disturbance*

Sleep is easily disturbed and among the first symptoms to show when people are exposed to long-term psychosocial stress (Åkerstedt, 2006; Åkerstedt et al., 2007). Sleep disturbance results in lack of recovery and energy restoration (Kecklund & Åkerstedt, 2004). Recovery during sleep is particularly important for restoration (Robles & Carroll, 2011; Everson et al., 2005). Thus, impaired sleep is an important link between long-term stress and increased stress-related adverse health (Lennartsson, 2013). Sleep disturbance in the long run may turn into manifest disease (Ford & Kamerow, 1989; Nilsson et al., 2004; Ferrie et al., 2007).



#### 2.3.3.3 *Depressive symptoms*

Depressive symptoms are regarded as a serious mental consequence of problematic psychosocial work environments particularly when there are disturbed social relationships. There is scientific evidence supporting the hypothesis that long-term psychosocial stress may play a significant role in the development of depression (Siegrist, 2008). Negative/poor social support, particularly from supervisor, can predict depression (Wang & Patten, 2001; Gilbreath & Benson, 2004; Westerholm et al (2008). Westerholm et al. claim that also a relational injustice can activate the development of depression in employees. A recent report (SBU, 2014) presents bullying, conflicts, relational injustice, low social support and job strain as strong predictors of depressive symptoms. Depressive symptoms have furthermore been found correlated to performance-based self-esteem (Crocker et al., 2003). Consequently, it can be assumed that the leaders' attitudes and behaviours may be critical for a possible development of employees' depressive symptoms.

#### 2.3.4 Biological stress

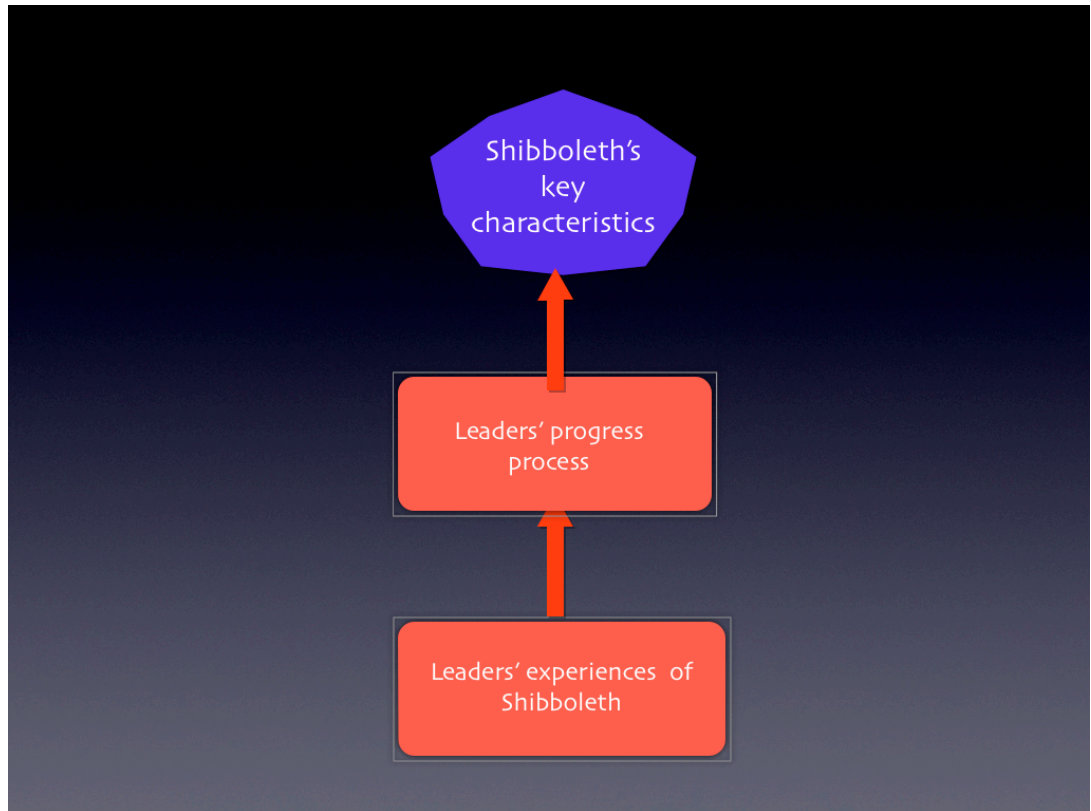
We utilized anabolic as well as catabolic hormones as neurobiological predictors of work related psychosocial stress. The consequences of long-term psychosocial stress have been shown to influence both cortisol and DHEA-S. DHEA-S and cortisol could be used as markers of regenerative and protective (anabolic) activity. According to the hypothesis the secretion of both cortisol and DHEA-S was expected to develop in a beneficial way as a result of the Shibboleth intervention. There are studies that show that both cortisol (Theorell et al., 2001) and DHEA-S levels could be markedly improved as an effect of interventions aiming to reduce psychological stress or improve psychosocial conditions (Hasson et al., 2005; Johansson & Uneståhl, 2006; Arnetz et al., 1983; McCraty et al., 1998; Antoni, 2003; Carlson et al., 2004).

### 2.4 THE CONCEPT OF “INSIDE” PERSPECTIVE ON SHIBBOLETH

The statistical examination of the putative changes in the leaders and their co-workers induced by Shibboleth cannot clarify why and how the effects have occurred. What is hidden by the statistics may be revealed through a detailed analysis of the psychological processes taking place in the individual leader both during the intervention program as well as after it ended. Such “inside perspective” may provide a deeper understanding of the psychological development processes in each participating leader and the



meaning it has had for her and him. Thereby, the key characteristics of the Shibboleth concept that constitute its impact core seen through the eyes of each leader will be elucidated. Discovering this key structure that shaped the participants' experiences gives necessary knowledge of the conditions that underlie the previously observed transformative effect. Such a systematic investigation can help clarifying the underlying conditions for successful training programmes in general.



**Figure 4** The concept of “inside” perspective on the Shibboleth

### **3 AIMS**

The overall aim of this thesis was to investigate the capability of an experimental, art-based leadership concept, Shibboleth, to counteract poor leadership and thereby prevent human suffering. The specific aims of each study were:

**Study I:** to investigate the putative impact of the Shibboleth concept on the leaders' and transferred effects on their co-workers' psychological, behavioural and biological level of stress.

**Study II:** to investigate the impact of Shibboleth on the leaders' intrapersonal and interpersonal development. Two aspects of personality, pro-social motivation and psychological resilience, as well as two aspects of behaviour evaluated by the co-workers, laissez-faire leadership and inability to cope with stress, were examined.

**Study III:** to investigate the impact of Shibboleth on the leaders' level of self-awareness, humility and self-improvement.

**Study IV:** to investigate the leaders' subjective experiences of Shibboleth and the meaning it had for them. Such investigation of psychological processes taking place in the individual leader aims to gain knowledge about how the putative effects of Shibboleth could occur, and thereby elucidate the characteristics that constitute the impact core of the Shibboleth concept.

## 4 METHODS

#### 4.1 OVERALL STUDY DESIGN

The Shibboleth concept was investigated in a prospective, randomized, controlled study, where it was compared with a conventional leadership development program. The aspiration was to explore putative effects of the two programmes not only on the leaders themselves but also *transferred effects to the leaders' co-workers* (who did not attend the intervention programs) with regard particularly to stress related health development. Thus, beyond the participating leaders' subjective evaluations of the intervention, their psychological and behavioural changes were evaluated both by the participants themselves as well as their co-workers. In addition to these three individual levels, we examined transferred effects of leadership training on the organizations concerned; A triangulation method combining biological, psychological and behavioural outcome measures was utilised. Statistical as well as qualitative data were collected. Finally, two evaluation occasions were performed which made it possible to follow up the long-term effects of the two programs. Data was collected on three occasions:

1. Pre-test, before the study started
2. Post-test I, 12 months after the baseline (approximately two month after the end of the intervention)
3. Post-test II, 18 months after the baseline (approximately nine/ten months after the end of the intervention)

Initially, all participating leaders attended a conventional leadership training lasting for two day. Afterwards, the two respective groups were formed and their interventions started. Both programs included twelve three-hour sessions during ten months.

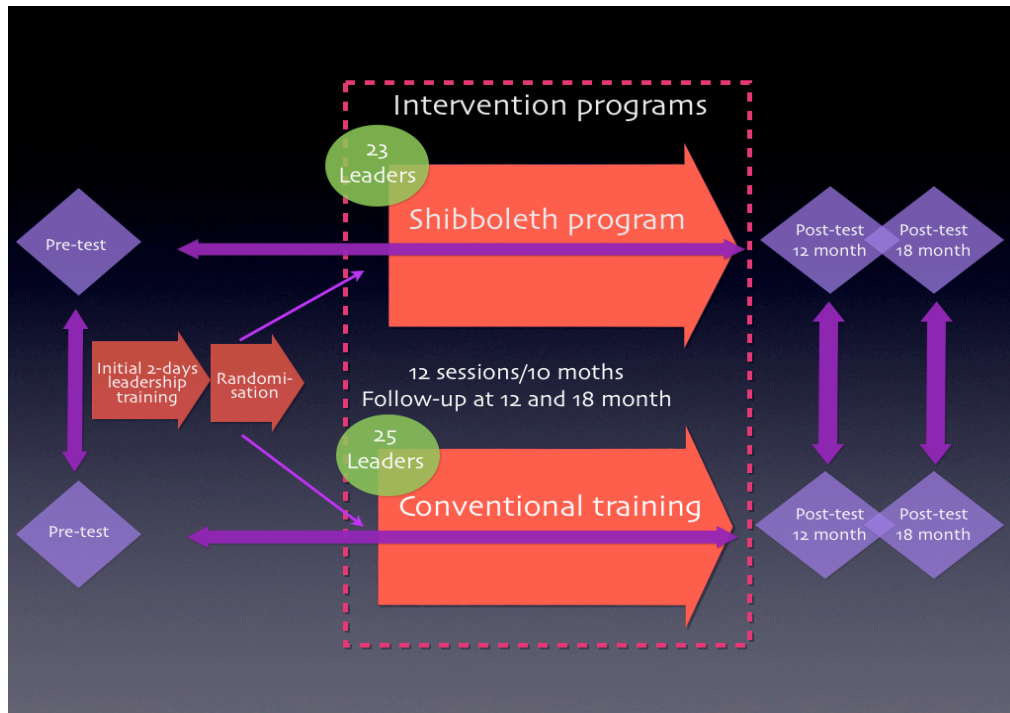


Figure 5 Overall study design

## 4.2 PARTICIPANTS AND PROCEDURE

Inclusion criteria for participating were a managerial position with at least four subordinates. 50 leaders were recruited, who represented a wide variety of professional fields. Recruitment was made through different channels; voluntary organizations at the Swedish Armed Forces, Reserve Officers Union and the Swedish Criminal Investigation Department – 13 persons, The National Swedish Trade Union for Leaders – 15 persons, advertisement in a daily newspaper – 20 persons. Among others, the following professional fields were represented: education, medical care, police culture, religious service, business, information technology, etc. All subjects were informed that they would be randomly allocated to one of two different leadership programs; however, they were not informed about the content of these programs. If they did not accept the planned randomization and the fact that repeated tests and examinations with drawing of venous blood would take place on three occasions during a period exceeding one year, they were asked not to participate. The objectives of the study were explained to all participants and written consent was obtained from them and their co-workers.

A blinded randomization was made. Sex, occupation, and age were matched in 25 pairs of participants. The members of each pair were randomized into either Shibboleth or conventional intervention. There was no

accumulation of leaders within one organization. The researchers who performed the randomization were blinded during the process. Sex distribution was equal in the two groups, 15 females and ten males and the average age was 48 in the two groups. Despite the preparations, before the two interventions had started and their contents were known, two subjects in the art group withdrew. At this stage it was not possible to perform a new randomization. The number of participants was based on a similar intervention study showing that approximately 20 individuals in each group may give enough statistical power (Wikström, et al., 1993).

Each participating leader was asked to select *four of their co-workers*. The co-workers did not participate in the intervention programs themselves. Their role was to *rate* behaviours of their leaders before the study started, after the end of the intervention and nine months later. In addition, possible psychological and biological stress related health changes in the co-workers themselves were also evaluated. If changes in the co-workers had been induced, these would provide indirect support that significant changes in leader behaviour had occurred.

The leaders and their subordinates had to fill in a questionnaire concerning psychological health and to leave a blood sample before the study started, after the end of the interventions (at 12 months) and finally 9 months later. The time for blood sampling was in the morning between 8 and 10 o'clock. The subjects were asked to eat a normal breakfast. Licensed nurses drew blood samples in the supine position from an antecubital vein. The specimens were centrifuged after half an hour and the samples were sent to the laboratory at the Karolinska Hospital. For biological data and self-rated psychological health the numbers at baseline were 108 (23 leaders, 85 co-workers) in the Shibboleth group and 123 (25 leaders, 98 co-workers) in the conventional group.

The leaders themselves rated their behaviour and an additional set of psychological tests was conducted in order to examine possible changes in the leaders' intrapersonal and interpersonal development. Individual diaries from each session in the Shibboleth group were collected. This enabled us to follow the psychological processes induced in the leaders during the whole education program.

After the education ended, all the participants were asked to evaluate ("course" evaluation) the intervention program on two occasions, at 12

months and finally 9 months later. In addition interviews were performed also on two occasions, at 12 months and finally 9 months later. The interview data represent eight subjects randomly selected in the first follow-up and are supplemented with five more in the second follow-up (21 interviews altogether). The interviews were recorded and transcribed.

Due to strong discomfort one participant decided to leave the Shibboleth program after a few sessions. Two other participants did not like the concept, but continued to participate. Three participants in the conventional group were lost because they were unwilling to continue. Consequently the corresponding co-workers of the leaders that left the program also were lost.

### **4.3 PRE-INTERVENTION**

Initially, all participants attended a developmental leadership program lasting for two days. This standard concept developed by The National Swedish Defence College (Larsson, 2006) is theoretically based on transformational leadership. Three different groups were formed for this purpose and the participants had the opportunity to choose an appropriate course date. At this stage this grouping had no correlation to the two randomised groups (Shibboleth and conventional). This initial leadership training was aimed to provide all participating leaders with the same pre-understanding of the leadership subject and as far as possible to create equal conditions between the two intervention groups by balancing any differences before the start of their respective intervention programs (Shibboleth and conventional).

### **4.4 SHIBBOLETH CONCEPT**

The elements of this method have been applied previously as a pilot project in conventional programs. An interview study showed that the Shibboleth method had benefited the participants' ability to make active choices, which could change their own and their surrounding situation (Johansson, 2006).

Prior to the start of the intervention the participants did not receive any information about the content of the program or about the other participants; nor did they get an opportunity to introduce themselves. No self-enhanced efforts, ready-made solutions, or instrumental attempts other than the artistic were conveyed. Each intervention session were performed according to following pedagogical model. Time estimation is approximate:



- a written reflection session lasting a few minutes
- watching a Shibboleth performance, 60–70 min
- a written reflection session lasting a few minutes
- guided group reflection, 40 min
- free talk in smaller groups, 30 min
- guided group reflection, 30 min
- a written reflection session lasting a few minutes

After a few days the participants received a discussion summary and the moderator's reflections about the performance. Four out of the twelve performances were repeated after six months. The content of the performances had no obvious connection to leadership subjects. The performances, except the fourth and the last one, had not been created especially for this leadership education. The performances had been shown in an art context without connection to leadership before they were used in this research project. The fourth performance (before the three-month long summer break), and the last performance was a summing up, meta-performance: the group's past process and discussions were reflected through well chosen, appropriate texts taken from earlier performances interspersed with participants' and moderators own statements and reflections during group discussions.

#### 4.4.1 Shibboleth performance

The artistic core of the Shibboleth concept, the Shibboleth performance, is an new concept comprising a collage of short and often contrasting phrases of poetry, prose, documentary texts and philosophical reflections interspersed with (recorded) music into an artistic whole. In an intensive ensemble of contradiction, the music and the text flowed in a polyphonic stream with continuous changes between the different art genres. This artistically condensed texture of the performance is dreamlike; complex, fragmented and nonlinear, with unexpected shifts of different moods. Two actors, completely unadorned, read only the text alone on a stage, alternately in an animated undulating and rhythmical manner, with rapid and unpredictable oscillation between each other. The text phrases in each performance were based on quotations from various text sources (from three to 20 different authors), which were subsequently cut and pasted together to form a new piece with a new meaning. Among others, the following writers were represented: Fernando Pessoa, Georges Perec, Elfriede Jelinek, Fyodor Dostoyevsky, Etty Hillesum, Franz Kafka, Edmond Jabès, Emil Cioran, Vladimir Majakovskij, etc. The performances could contain

up to 35 different music pieces; mostly art music from baroque to more avant-garde, but even world music such as romani, klezmer or fado music. The music linked the text phrases into an artistic whole and carried the performance; sometimes music was an integrated whole with the text and sometimes an independent element. Through unique, deeply moving or harrowing life destinies and testimonies, a broad spectrum of universal human experiences, disadvantage, injustice and suffering was portrayed: genocide (the Holocaust, the Gulag, and Rwanda), humiliation, abuse of power, multiple personality, sexual assault, loneliness, etc. But also their opposites: love, compassion, resistance, believes in God, courage, dignity, meaningfulness, etc.

#### 4.4.2 Group reflection sessions

There were two reflection sessions in the whole group guided by a moderator. The first session (40 min) was held after the performance, followed by chat in smaller groups (30 min), and finally a sum-up guided reflection in the whole group (30 min). Beyond the sentence “what is on your mind”, no other instructions were conveyed to the participants. No references to leadership or to participants’ professional or personal concerns or interests were made. The participants were given the opportunity to freely express their reactions, thoughts and feelings and their associations or interpretations. A moderator carefully guided the group, but the participants decided the focus of discussion and choice of topics. The topics raised by participants in group were e.g.: good and evil, meaningfulness, free will and personal responsibility, the courage to stand up for one’s belief and to intervene when somebody gets humiliated, what makes it possible for ordinary people to become mass murderers, etc.

#### 4.4.3 Written reflection sessions

Written reflection was initiated by the sentence “write down what is on your mind”, no other instructions were conveyed to the participants. The three short sessions of writing lasted a few minutes. The participants were asked to write:

- in the beginning to switch focus and to raise the level of attention (the leaders rushed to the meetings directly after a workday)
- directly after the performance, to capture their first spontaneous impressions and interpretations and to prepare for and facilitate further group reflection (the group size of about 20 people was not optimally suited for reflection)

- at the end, after group discussions, they got the opportunity to summarize impressions but also to close the meeting and return to the initial mode.

These written reflections (diaries) were anonymous (tagged by the participants in an unidentifiable way) were collected after each session and were given back to participants on the subsequent occasion.

#### **4.5 CONVENTIONAL LEADERSHIP PROGRAM**

The conventional leadership program was based upon The Swedish National Defence College's pedagogical model (Lindholm, 2006). The theoretical approach was transformational leadership (Burns, 1978; Larsson, 2006). Numerous studies have shown that transformational leadership is positively related to performance measures and that it is also related to good employee health (Berson & Avolio, 2004; Gerstner & Day, 1997; Howell and Avolio, 1993). The program conveyed leadership values based upon practical experiences in Scandinavian leadership training, which means that the emphasis was on democracy, employee participation, group functioning, communication, feedback, etc. The conventional program's overall purpose was to counteract poor leadership: through theoretical knowledge and training of practical skills, increase the participant's readiness to be more proactive in practice and initiate improvement processes at their workplace. Emphasis was put on practicing the newly learnt behaviour and knowledge in their organizations during the intervention program.

Prior to the start of the intervention the participants received detailed information about the whole programme: purpose, overall goal and sub-targets and specified content of each session with references to the course literature. They also received a list of each other's e-mail addresses and the two teachers' contact. In the beginning of the education program, each participant was given an opportunity to a deeper personal presentation to the group during approximately 15 min.

Each intervention session were performed according to the following pedagogical model. The time estimation is approximate:

- a lecture, 50 – 60 min
- discussion in the whole group, 30 min
- conversation in smaller groups, 40 – 60 min
- group exercises, 30 – 40 min

- summing-up reflection, 30 min
- individual assignments

The last session was a summing up of the whole program: theoretical review of “cores” in the course, summary of the group’s past process and group discussions.

#### 4.5.1 Lecture

The intent was to gain understanding of contemporary leadership principles and theories. Various psychological and sociological explanatory models describing how organizations, groups and individuals function together have been introduced. The lectures typically concerned organizational and leadership theories, including the psychodynamic perspective, social/group psychology, learning processes and pedagogy, decision-making and sense-making processes, change and network management, and communication techniques, and other components in a leader toolbox (Ashkenas et al., 1998; Bolman & Deal, 1997; Brehmer, 2005; Clemensson, 2003; Svedberg, 2007). Established metaphors were introduced to describe and explain various mechanisms and problems within leadership topics (Albinsson, 1998; Andersson & Johansson, 1997).

#### 4.5.2 Group discussion

After the theory lecture there was a joint reflection involving the whole group on the topics in the lecture. The purpose of group discussions was to apply the aforementioned theories and tools to the actual world and the participants’ own experiences. Participants were asked to describe their personal leadership experiences from their organizations with regard to the subject in the lecture.

#### 4.5.3 Conversation in smaller groups

During the free dialogue in small groups the main principle was to focus on the individual participants’ professional issues and needs. The participants could exchange their professional experiences, problems and considerations. They also received and gave feedback to each other and could discuss different points of views and different solutions to their experienced leadership situations.

#### 4.5.4 Group exercises

Participants received practical training on a variety of leadership situations. They were faced with unexpected and unclear, adaptive exercise sit-

uations that required forming own imagination and judgment of what is the meaning of the task and what the results may be, and how it should be implemented. An example of such situations was a task to organize the group in order to optimize group competence, which means to practice responsiveness to and understanding of each other's capabilities (Hane & Wennberg, 2004). The participants also practiced other situations such as to be listeners or to be moderators in a focus group etc.

#### 4.5.5 Individual assignments

Individual assignments were given and discussed in the following group discussion. Thereby, during the whole program, the participants had the opportunity to practice the new learned methods and behaviours in their workplaces and to report back on the next meeting.

### 4.6 DATA SOURCES

#### 4.6.1.1 *Quantitative data – leaders and co-workers*

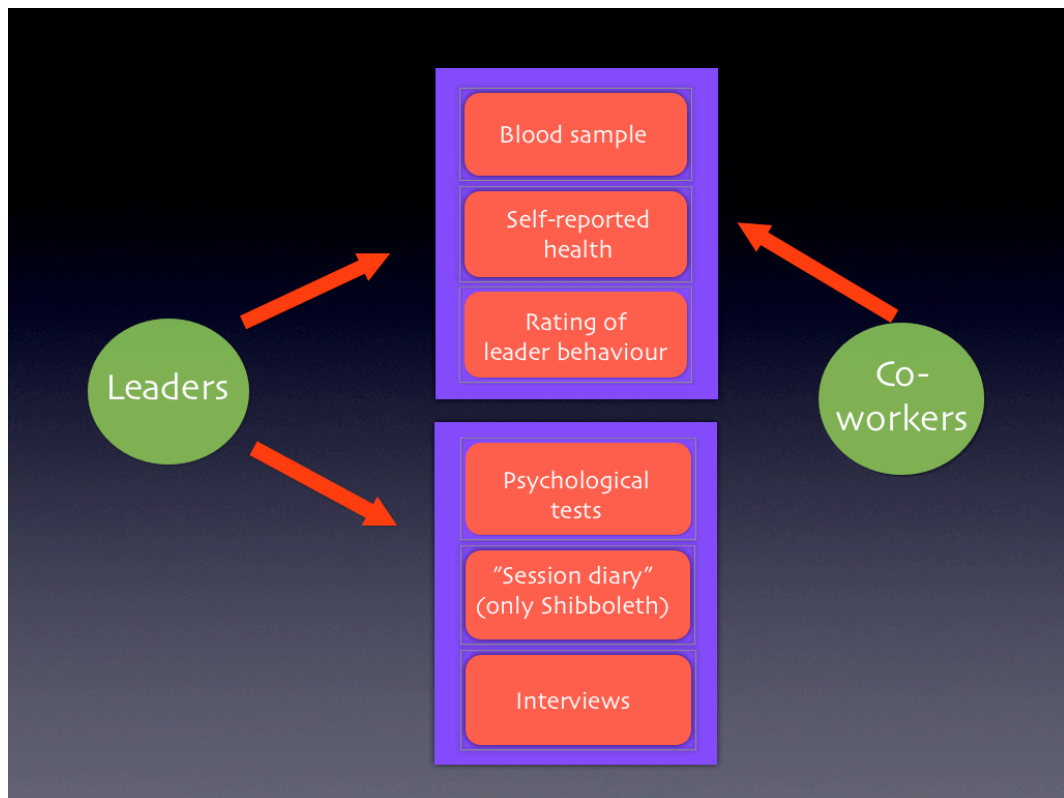
- Blood samples for the measurements of hormones:
  - Cortisol, a catabolic hormone
  - DHEA -S, a anabolic hormone
- Questionnaire data for the measurements of self-reported poor health, self-esteem, and coping strategy
- Behaviour assessments (leaders self-rating and co-workers rating of their leaders) for the measurements of Laissez-faire leadership, Capacity to cope with stress, self-awareness, humility and self-improvement

#### 4.6.1.2 *Quantitative data – only leaders*

- Psychological tests for the measurements of pro-social motivation
- Psychological tests for the measurements of psychological resilience

#### 4.6.1.3 *Qualitative data – leaders*

- “Diary”, the written reflection during each Shibboleth session
- Interviews
- Written course evaluations



**Figure 6 Data sources**

## **4.7 ETHICAL APPROVALS**

The Regional Ethical Review of Research Board at the Karolinska Institutet approved this study. Participation was voluntary. Confidentiality and anonymity were assured. Individual, personal feedback was provided to all participated leaders with regard to their progress during the study. Everybody who left blood samples got information about findings in their blood status at baseline and at follows up. For all those who were somehow involved in the study, information meetings about findings were held on two occasions.

## **4.8 MEASURES**

### **4.8.1 Overall description**

The research presented in this thesis represents an interdisciplinary approach and thereby builds upon different research traditions; natural science tradition, behavioural and personality research, leadership research as well as humanistic, qualitative research. This cross-disciplinary approach is of course reflected in the selection of methods, instruments and variables for evaluation.

Study **I** take its point of departure in natural science and the chosen variables are based on research of health effects of the psychosocial work environment and research of physiological effects of psychological stress.

The chosen instruments and dimensions in studies **II** and **III** take their starting point in behavioural research and research in personality as well as leadership and leadership development research.

Study **IV** is based on humanistic, qualitative research and combines a phenomenological, psychological and hermeneutical research tradition.

#### 4.8.2 The concept of leader responsibility

In studies **II** and **III** the impact of the intervention programs on the leaders' intrapersonal and interpersonal development with respect to pro-social responsibility, self-responsibility and leadership responsibility were investigated:

- Pro-social responsibility:
  - Agreeableness using NEO-PI-R personality inventory (study **II**)
- Self-responsibility:
  - Sense of Coherence using OLQ-13, Orientation to Life Questionnaire (study **II**)
  - Self-awareness, humility and self-improvement using SOA, "self-other rating agreement" and DLQ, Development Leadership model questionnaire (study **III**)
- Leadership responsibility:
  - Laissez-faire leadership using DLQ, Development Leadership model questionnaire (study **II**)
  - Capacity to Cope with Stress using DLQ, Development Leadership model questionnaire (study **II**)

According to the Development Leadership model, DLQ (Larsson et al. 2003), Sense of Coherence and Agreeableness can be regarded aspects of "basic prerequisites." These affect the potential to develop "desirable competencies" such as Capacity to cope with stress. The combination of individual basic prerequisites and competences are labelled leader characteristics and shapes, in interaction with a multitude of contextual characteristics, leadership behaviours, including Laissez-faire leadership. It is argued that Sense of Coherence, Agreeableness, Capacity to cope with stress and Laissez-faire leadership are particularly relevant given our gen-

eral research question.

#### *4.8.2.1 Pro-social responsibility – Agreeableness using NEO-PI-R*

Agreeableness, which promotes pro-social behaviour, is a major interpersonal dimension in the five-factor model of personality (Costa & McCrae, 1992b; Graziano & Eisenberg, 1997). The Big-Five Personality includes the following factors: Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness (McCrae & Costa, 1996, 1999). Of the five dimensions, only Agreeableness and Extraversion deal with social interaction. While Extraversion is about social impact, Agreeableness deals with motives for maintaining positive interpersonal relations; therefore Agreeableness is in focus in the present research (Jensen-Campbell & Graziano, 2001). In contrast to the other four factors in the model, which show substantial genetic influence, Agreeableness seems to have a low estimated heritability and thereby has been shown to be influenced by socialization processes (Bergeman et al., 1993; Koestner et al., 1990). Based on this we expected to influence Agreeableness.

A personality inventory NEO-PI-R (Costa & McCrae, 1992b) was used to measure Agreeableness. NEO-PI-R is “the most elaborated and empirically validated model” and probably the most widely accepted model of personality structure (John & Srivastava, 1999). We used the official Swedish version of the Revised NEO Personality Inventory (McCrae & Costa, 1996). Agreeableness consists of six facets: Trust, Straightforwardness, Altruism, Compliance, Modesty and Tender-Mindedness. Each facet is assessed by eight statements/items, 48 items altogether. The items were scored in accordance with the NEO-PI-R manual. Each item was scored on a five-point Likert scale with two endpoints “Strongly disagree” and “Strongly agree.” Individual raw scores were computed and converted to standard scores for males and females. In the Swedish NEO-PI-R version T-score norms show results in comparison to the Swedish general population considering the age group and gender.

#### *4.8.2.2 Self-responsibility*

##### *4.8.2.2.1 Sense of Coherence using OLQ-13*

The Sense of Coherence questionnaire (Antonovsky, 1987) was used to measure personality factors, which promote coping with demanding situations. SOC is expected to be heritable and stable over time. However, changes in SOC through drastic life events have been found (Kivimäki et



al., 2002; Schnyder et al., 2000). Based on this we expected to influence SOC. SOC consists of three components – comprehensibility, manageability, and meaningfulness. The reliability and validity of the SOC have been demonstrated across cultures, social classes, ethnic, gender and age groups. The empirical evidence based on a systematic review of the contemporary research in different groups within many areas of practice supports the theory (Antonovsky, 1993, 1996; Eriksson & Lindstrom, 2005, 2006; Feldt et al., 2007). We assessed SOC using the short version 13-item Orientation to Life Questionnaire (OLQ-13). Each item was scored on a seven-point Likert scale with two endpoints “1= Never happened” and 7 = “Always happened.” The total scores on the OLQ are obtained by adding the scores obtained on each of the three dimensions. Antonovsky’s intention was to use the SOC questionnaire as a measurement of the whole, not examining the three subscales separately. The sum of the scores ranged from 13 (weak SOC) to 91 (strong SOC).

#### *4.8.2.2.2 Self-awareness, humility and self-improvement using SOA*

To operationalize the hypothesis regarding increased self-awareness, humility and self-improvement in the leaders, the “self-other rating agreement” was applied. The co-workers ratings of the leaders’ Laissez-faire leadership and Capacity to cope with stress using DLQ were compared with the leaders self-ratings of the same.

The “self- other rating agreement”, SOA (Atwater & Yammarino, 1997), is posited to be an indicator of self-awareness. The SOA defines self-awareness as the degree of congruence between a leader’s self-ratings and others’ ratings of the leaders – the greater the agreement, the greater the self-awareness. The SOA has been used similarly in previous research (Demerouti et al., 2011). The use of the SOA is widespread and has spurred a wealth of research (e.g., Fleenor et al., 2010). We utilize the comparison between leaders’ self-ratings and co-workers’ ratings of leaders. As self-ratings alone are likely to be biased in the inflated direction (Ashford, 1989; Yammarino & Atwater, 1993), co-workers estimates are considered to be more accurate and necessary in the evaluation of leaders’ performance (Bass, 1990; Halverson et al., 2005).

The direction of disagreement (over- or under-rating) is of great importance. Self-overvaluation – higher self-ratings than other-ratings – indicates distorted self-awareness and an inflated sense of self-importance which is deemed to mirror hubris or narcissism (Judge et al., 2006). Given

the increased self-awareness, also tendencies to hubris should be reduced.

The SOA appears to be related to several constructive performances, including leadership effectiveness (e.g., Fleenor et al., 2010). The Control Theory links the self-other agreement to self-awareness and self-regulation (Carver, & Scheier, 1981). Numerous researchers have emphasized the significance of self-perception to achieve self-regulation and self-improvement (e.g., Bass, 1985; Gardner et al., 2005).

#### *4.8.2.3 Leadership responsibility using DLQ*

The Development Leadership model, DLQ questionnaire (Larsson, 2006), was used for the measurements of Laissez-fair leadership and Capacity to cope with stress. The co-workers have rated leaders' behaviours. DLQ was constructed to measure the developmental leadership model (Swedish version of transformational leadership) and has been adopted for use in the Swedish Armed Forces. DLQ has acceptable psychometric properties and is empirically supported. Each item was scored on a nine-point Likert scale with two endpoints 1 = "Never or almost never happened" and 9 = "Very often or always happened".

##### *4.8.2.3.1 Laissez-fair leadership*

Laissez-faire leadership (Bass, 1990) is defined by avoiding leadership duties and responsibilities. The frequency of leaders' expressed laissez-faire behaviour was assessed by means of five items (avoid taking a stand on important issues; indifferent, perform duties without bother; avoid responsibility when a task must be done; avoid making necessary decisions; do not take responsibility for decisions). A mean score was calculated of the sums of the co-workers for each leader.

##### *4.8.2.3.2 Capacity to cope with stress*

Capacity to cope with stress refers to two aspects: problem-focussed coping and emotion-focussed coping skills (Lazarus, 1991, 1999). The frequency of leaders' expressed laissez-faire behaviour was assessed by means of five items in the DLQ (three problem-focussed coping and two emotion-focussed coping). A mean score was calculated of the sums of the subordinates for each leader.

#### **4.8.3 The concept of psychosocial and biological health**

The impact of the intervention programs on stress related psychological, behavioural and biological development in the leaders as well as their co-

workers was examined in study I. Such investigation would elucidate the putative chain of subsequent influences from the intervention programs to the leaders and, in turn, from the leaders to co-workers. In accordance with our general hypothesis the leaders would improve their ability to assume responsibility, which should improve the total psychosocial climate in the work groups both for the leaders themselves and for the co-workers. A wide spectrum of variables was explored, psychological, behavioural and biological:

- Performance-based self-esteem
- Covert coping
- Poor mental health: emotional exhaustion, sleep disturbances and depressive symptoms
- Biologic stress: the plasma concentration of stress related hormones, catabolic (cortisol) and anabolic (DHEA-S)

The SLOSH questionnaires were used for the measurements of performance-based self-esteem, covert coping and poor mental health.

#### *4.8.3.1 Performance-based self-esteem*

Performance-based self-esteem has been established as an important correlate of burnout among employees (Hallsten et al., 2005). A short index was used which comprised 4 items. However, factor analysis (with rotation) showed that only 2 items had acceptable loadings (10.5). Therefore only the first 2 items (“I think that I sometimes try to prove my worth through my work” and “My self-esteem is far too dependent on my work achievements”) were used. Performance-based self-esteem has 2 items scored from 1 to 5 with higher scores signifying more performance-based self-esteem.

#### *4.8.3.2 Covert coping*

Covert coping is an indicator of patterns of avoidance in the work environment occurring when one does not show the “aggressor” that one feels unfairly treated. The validity of the index has been established in previous research (Theorell et al., 2005). The covert coping scale is made up of 8 items, each scored from 1 to 4 with higher scores signifying more covert coping.

#### *4.8.3.3 Emotional exhaustion*

Emotional exhaustion has been established as the most central aspect of burnout (Maslach & Jackson, 1981) and the most important dimension of

the Maslach Burnout Inventory, standardized for use in Sweden (Leiter & Maslach, 1999; Hanson et al., 2008). The emotional exhaustion scale has 5 items, each scored from 1 to 6 with higher scores signifying less emotional exhaustion.

#### *4.8.3.4 Sleep disturbance*

Sleep disturbance occurs when people are exposed to long-term stress. We used the summary measure of sleep disturbance from the Karolinska Sleep Questionnaire. The validity of the questionnaire has been established in extensive research (Åkerstedt et al., 2002). The sleep disturbance scale includes has 4 items, each scored from 1 to 6 with higher scores signifying more disturbed sleep.

#### *4.8.3.5 Depressive symptoms*

Depressive symptoms are regarded as a serious mental consequence of problematic psychosocial work environments. The scale used in the present thesis was taken from the Hopkins Symptom Checklist, SCL-90 (Lipmann, 1986). The subscales focus on 6 items corresponding to the 6-item Hamilton Depression subscale, using clinical validity as the primary selection criterion (Bech, 2008; Hanson et al., 2008). The depressive symptoms scale comprises 6 items, each scored from 1 to 5 with higher scores signifying more depressive symptoms.

#### *4.8.3.6 Poor mental health index*

For the test of the main mental health hypothesis the 3 aforementioned (emotional exhaustion, sleep disturbance and depressive symptoms) scores were regarded as items in a new summary score based upon 15 items. Exploratory factor analysis indicated that they formed 1 dimension and a summary mean (mean of averages of 15 items) was calculated. An average was calculated from the items included in each dimension. For each score, if 20% of the items were missing, the whole score was regarded as missing; e.g. for dimensions which contain 2–4 items no missing response was accepted.

#### *4.8.3.7 Biology: Hormone assays*

Blood samples were collected for the measurements of serum concentration of the two stress related hormones, cortisol and DHEA-S. Cortisol and DHEA-S were analysed by means of electrochemical luminescence immunoassay using Modular 170 from Roche. For cortisol the within-assay

coefficient of variation was between 1.0 and 1.7%, and the total coefficient of variation between 1.4 and 2.2%. For DHEA-S the within-assay coefficient of variation was between 1.5 and 3.2% and the total coefficient of variation between 2.2 and 2.7%.

Cortisol excretion has been established as an important indicator of energy mobilization. In particular, the morning serum or plasma concentration of cortisol has been found to be sensitive to adverse work environments (Theorell T, 2009).

DHEA-S is a steroid with anabolic/regenerative effects (de la Torre 1994). It belongs to a group of steroids with increasing excretion/concentration during improving life conditions and vice versa. Good psychological environments also may increase level of DHEA-S (Arnetz et al. 1983).

#### 4.8.4 The concept of “inside” perspective on Shibboleth

As a complement to the statistical analyses, in order to gain a deeper understanding of the psychological processes induced in each leader during the intervention program and also after it ended, the leaders’ descriptions of their subjective experiences of Shibboleth were investigated in study **IV**. The *experience structure* and the structure of *progress process* were elucidated. This investigation reveals *the key characteristics* that constitute Shibboleths’ impact core as it appears to the leaders. A detailed, qualitative analysis was based upon written reflections (“diary”) during each session and retrospectively written “course” evaluations, as well as interviews from follow-up, 12 and 18 months after start.

### 4.9 STRATEGY OF ANALYSIS

#### 4.9.1 Study I

Analyses of covariance for psychosocial and biological related health, ANCOVA for repeated measures, were performed to investigate the group differences, using initial value as covariate. In the hormone analyses age was added as a covariate since in particular DHEA-S has a highly significant negative correlation with age. Greenhouse Geisser corrections were used in the calculation of significance levels. Adjustment for gender had no influence on the group effects. Since there were no baseline differences between the groups, only 2-way interactions were presented. Four different analyses were conducted:

1. The main analysis included assessments at baseline and 18 months after the start, with the leaders and their corresponding co-workers together
2. The second analysis included only subordinates, with assessments at baseline and 18 months. It was considered to be of importance to separate the co-workers from their leaders since they had not themselves participated in the intervention program. There were too few leaders for an analysis of leaders only.
3. The third analysis focused leaders and their co-workers, and included all three assessments (baseline, 12 and 18 months) in one analysis.
4. Finally, all subjects who participated in the biological or questionnaire evaluation regardless of whether they fulfilled our criteria for participating in the whole study evaluation, were analysed. Leaders and their subordinates were analysed together with assessments at baseline and 18 months. This analysis is closer than the other ones to the “intention to treat principle”.

#### 4.9.2 Study II

The group differences in development of Agreeableness and SOC were analysed by ANCOVA for repeated measures. There were no significant baseline differences between the groups. Two different analyses that are presented:

1. Main analysis; this analysis is in accordance with the main research question and includes assessments at baseline and 18 months after the baseline, nine months after the end of the intervention
2. An analysis that included assessments at baseline and at 12 months

For the DLQ data – Laissez-faire leadership and Capacity to cope with stress – only one comparison was made, between baseline and 12 months. First of all, it was not possible to perform subordinate assessments on leaders who had changed work groups after the 12-month follow-up although their individual psychological data could still be used. Second, DLQ data were collected anonymously. Demands on anonymity were very strict for subordinate evaluations of leaders. Assessments were expressed as collective means from a given leader’s rating subordinates. After 18 months it was not possible to guarantee that the group of assessing subordinates was identical to the one doing the baseline assessments for the same leader since subjects had reportedly been added to replace drop outs.

#### 4.9.3 Study III

For SOA (self-other-rating agreement) the group differences were analysed by MANOVA mixed model tests. Three analyses were made for comparison of the two groups' development over time (pre- and post-measurements) regarding changes in:

- comparison of agreement between leaders' self-ratings and subordinates' ratings of leaders
- comparison of leaders' self-ratings
- comparison of co-workers' ratings of leaders

#### 4.9.4 Study IV

A combined phenomenological-psychological and hermeneutical method (Karlsson, 1993) was used, which aimed at making explicit the meaning structure of the participants' concrete descriptions of their experiences. This analysis can be described in three points:

- The phenomenological analysis of consciousness-as-intentionality (Husserl, 1977, 2012) divides experience analytically into a subject and an object pole. The subject constitutes the object pole, i.e., the subject bestows meaning upon the object. The intentionality is a general point of departure, in that all descriptions of experience are interpreted in terms of how the subject constitutes the object for the acts of consciousness.
- The phenomenological researcher is interested in the meaning of experiences, in light of the phenomenon being studied. The specific facts that the subjects' descriptions contain e.g., a weight loss, are not of interest in themselves; the aim is to discover the meaning that it had for the person to lose weight, for instance, taking responsibility for one's own health.
- The phenomenological analysis is based upon the experience itself. One can say that phenomenology uses an "inside perspective", in the sense that one tries to avoid explaining experience with concepts and frames of reference that fall outside of the experience. A phenomenological analysis seeks to be as faithful as possible to the phenomenon in question. However, it is not a mere phenomenal description; one does not just reiterate experience, but rather specifies the necessary constituents (structure) needed for that particular phenomenon to be what it is.

## **5 SUMMARY AND RESULTS**



## 5.1 STUDY I

### 5.1.1 Summary

We hypothesized that the Shibboleth program would have a stronger beneficial effect than the conventional one on stress related psychosocial and biological variables in the leaders as well as their co-workers. The general hypothesis was that the leaders after some delay would take more responsibility in difficult social situations, which should improve the total psychosocial climate in the work groups, both for the leaders and for their co-workers giving health rewarding effects. Our main research question therefore concerned leaders and co-workers together and was formulated for long-term comparison (at 18 months, 9 months after the intervention ended) because we expected secondary influences from the Shibboleth program effects on leaders to co-workers to be delayed.

The hypothesis was confirmed and the findings showed a more beneficial long-term effect of the Shibboleth intervention compared to the conventional approach on the leaders as well as their co-workers. Positive results for psychological, behavioural and biological parameters strengthened the findings. Nine months after the intervention ended, both the leaders attending the Shibboleth intervention and their co-workers reported decreased poor mental health (emotional exhaustion, sleep disturbance and depressive symptoms), as well as enhanced self-esteem and covert coping. Moreover, a higher serum concentration of the regenerative/anabolic hormone DHEA-S was observed in the Shibboleth leaders and the co-workers compared to the conventional group. No corresponding development was observed in the leaders in the conventional program and their co-workers.

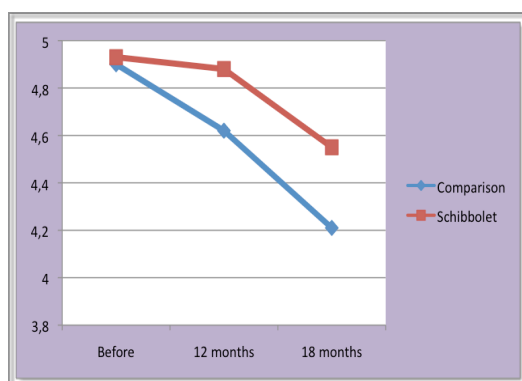
The findings in the co-workers only (without leaders) demonstrate a significant differential development in the two groups of co-workers after the intervention programs. Both the co-workers of the leaders in the conventional group and the co-workers of leaders in the Shibboleth group showed changes in their attitudes and behaviours as well as in mental and biological health. However, the changes in the co-workers in the Shibboleth group demonstrated a positive development in contrast to the co-workers in the conventional group. The Shibboleth co-workers experienced an improved self-esteem; an enhanced belief in their own worth not only based on performance. Their coping strategies in difficult, conflict situations improved; according to themselves they developed more courage to openly

deal with unfair treatment not only in their relationship to the managers but also in their relationship to colleagues. They became happier, got more energy and slept better. In addition, all these psychosocial changes were also reflected and confirmed by changes in their stress endocrine status, indicated by the level of regenerative hormone DHEA-S.

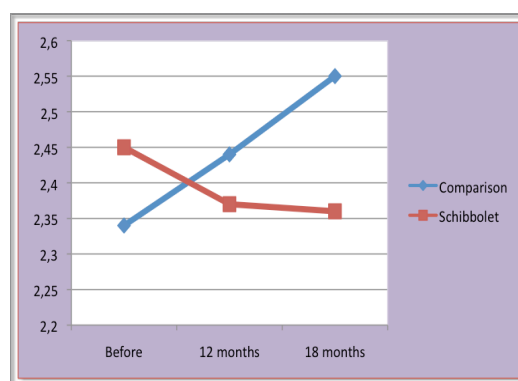
The total picture of the changes is logically consistent. The positive findings in the co-workers demonstrate a powerful, transferred effect in them of their leaders' participation in the Shibboleth intervention program. The findings indicate that the Shibboleth intervention induced beneficial changes in the leaders' attitudes and behaviours and that these changes are likely to have influenced their relationship with their co-workers in such a way and to such an extent that this could explain the changes that the co-workers reported in themselves as well as the changes in their hormone concentration.

**The art-based intervention, in contrast to the conventional program, was shown to generate beneficial psychological and biological processes in both the leaders and the co-workers. This is the first research to show that the link between changes in behaviour (in leaders) by virtue of aesthetic experiences could be reflected by transferred effect in psychological and neurobiological resilience processes (in followers) leading to health-promoting effects.**

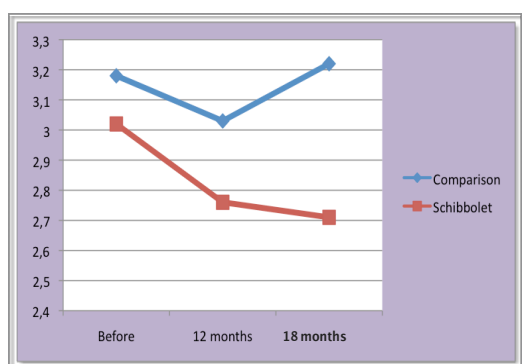
### 5.1.2 Figures: Hormones, poor mental health, coping and self-esteem



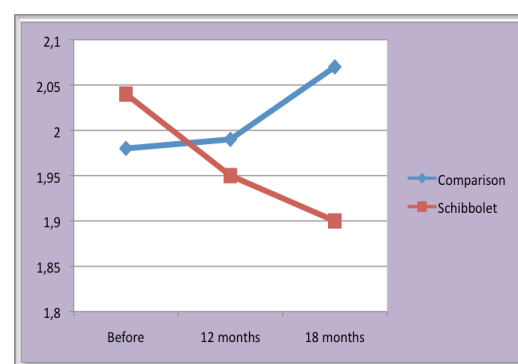
**Figure 7 DHEA-S**



**Figure 8 Poor mental health index**



**Figure 9 Performance-based self-esteem**



**Figure 10 Covert coping**

Figure 6 – 9. Results of ANCOVA interaction analyses. Main analysis includes assessments at baseline and 18 months after the start, with the leaders and their corresponding co-workers together. Poor mental health = sum of emotional exhaustion, sleep disturbance and depressive symptoms.

### 5.1.3 Outcomes

#### 5.1.3.1 Biological outcomes

For serum DHEA-S, regardless of analysis version there was a significant interaction with benefits to the Shibboleth group. After 18 months DHEA-S concentration was significantly higher in the Shibboleth group than in the conventional group (main analysis:  $p=0.003$ ). In both groups there was a decrease in DHEA-S, but there was significantly smaller winter/fall deterioration in the Shibboleth group. See Figure 6. There were no significant interaction effects for serum cortisol.

#### 5.1.3.2 Psychological and behavioural outcomes

Regardless of analysis version (1–4) there was a significant interaction; after 18 months the Shibboleth group showed a decrease and the conven-

tional an increase in the total poor mental health ( $p=0.014$ ), performance based self-esteem ( $p=0.005$ ) and covert coping ( $p=0.007$ ) See Figure 7- 9.

## **5.2 STUDY II**

### **5.2.1 Summary**

We hypothesized that the Shibboleth intervention would have a deeper effect than a conventional one on the leaders' intrapersonal and interpersonal development. More specifically, the Shibboleth intervention would have effects on two aspects of personality, Agreeableness and Sense of Coherence (social responsibility and self-responsibility) as well on two aspects of behaviour, Laissez-faire (leaders responsibility) and Capacity to cope with stress.

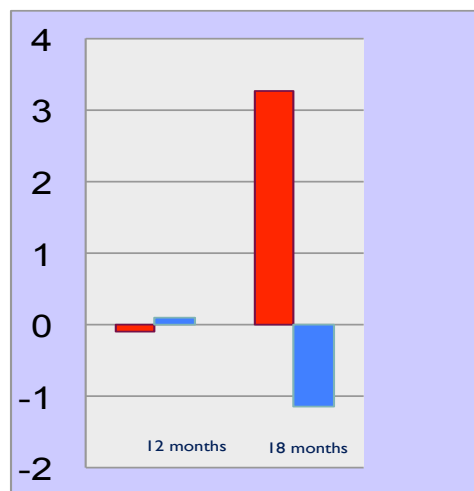
The findings support a positive response to our research question. Positive results for both personality variables and behavioural variables strengthened the findings. In the long-term follow-up the leaders in the Shibboleth group showed improvement in Sense of Coherence and Agreeableness. At the 12-month follow-up, the leaders in the Shibboleth group were also considered by their co-workers to be more responsible and use less laissez-faire leadership, as well as to have a higher capacity to cope with ambiguity and stressful situation. No such development was observed in the leaders attending the conventional program. The differential changes in the leaders in the two groups confirm and are logically consistent with the differential changes in the co-workers observed in study I. A necessary condition for making the conclusion that the differential changes observed in the co-workers were caused by the two programs is of course that the respective training programs have differently affected the leaders in the two groups.

The findings demonstrate increased intrapersonal and interpersonal competence in the leaders after the Shibboleth intervention. The findings regarding Agreeableness and Sense of coherence suggest that the leaders became deeper rooted in reality and improved their understanding of the surrounding world and other people (empathic imagination). The beneficial effects on the co-workers (from study I) indicate an improved understanding in the leaders of the co-workers' perspective and obstacles, and increased supportive behaviour and concern for the co-workers. The findings regarding Laissez-faire and Capacity to cope with stress suggest that the leaders extended their resources and motivation to cope with complex-

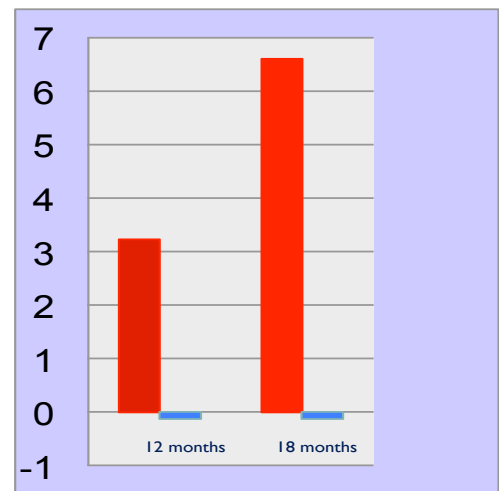
ity confronting stressors and anxieties. Furthermore the findings indicate an increased moral judgment and courage to take responsibility and deal with interpersonal conflicts or to take stand and intervene when something is wrong or when somebody is humiliated, which may have prevented escalation of bullying, for instance.

**The art-based intervention, in contrast to the conventional program, was shown to influence leaders' willingness to assume responsibility, which was expressed in their readiness to act, take stand and make decisions in important questions, as well as to improve their psychological resilience and capacity to deal with stressful situations.**

### 5.2.2 Figures: Personality and leader behaviour

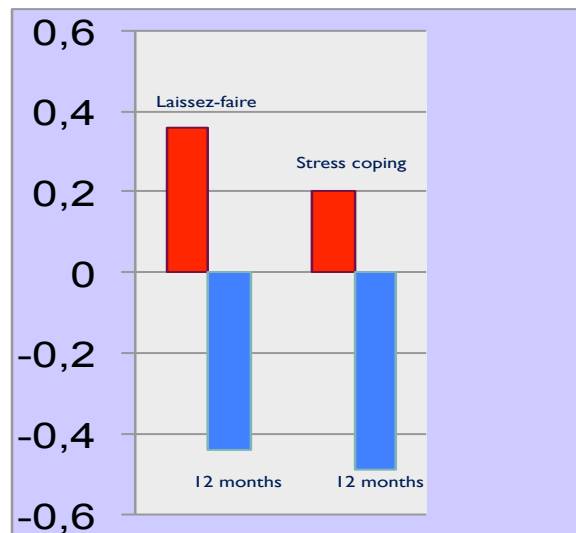


**Figure 11 Sense of Coherence**



**Figure 12 Agreeableness**

Figure 10 – 11. Results of ANCOVA interaction analyses (group x period). Analysis includes assessments at start, 12 and 18 months after the start with the leaders. The blue bar represent the conventional group and the red one the Shibboleth group.



**Figure 13 Laissez-faire and Capacity to cope with stress**

Figure 12. Laissez-fair and Capacity to cope with stress. Results of AN-COVA interaction analyses (group x period). Analysis includes assessments at start and 12 months after the start, with the leaders. The blue bar represents the conventional group and the red one the Shibboleth group.

### 5.2.3 Outcomes

#### 5.2.3.1 Agreeableness and Sense of Coherence

After 18 months there were significant two-way interactions with regard to Agreeableness ( $p=0.045$ ) and Sense of Coherence ( $p=0.019$ ); the Shibboleth leaders showed an increase in both Agreeableness and Sense of Coherence while the conventional group showed a decrease in Sense of Coherence and no changes in Agreeableness. See Figure 10 and 11.

#### 5.2.3.2 Laissez-faire and Capacity to cope with stress

After 12 months there were significant two-way interactions with regard to Laissez-faire ( $p=0.005$ ) and Capacity to cope with stress ( $p=0.048$ ); the Shibboleth group showed a decrease in Laissez-fair and an increase in Capacity to cope with stress while the conventional group showed the opposite. See Figure 12.

## 5.3 STUDY III

### 5.3.1 Summary

We hypothesized that deeply touching art experiences would break ingrained patterns of thinking and feeling, thereby forcing a process of critical (self)-examination and self-reinterpretation resulting in enhanced self-

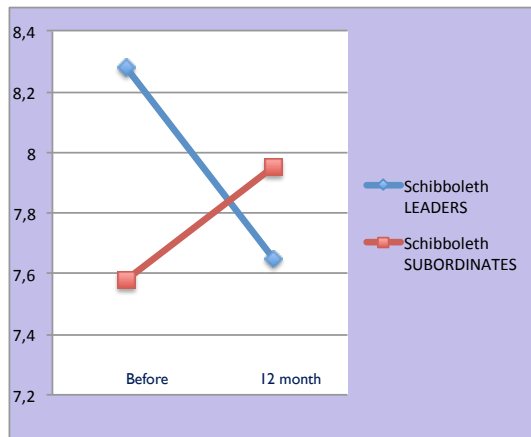
awareness and humility. Subsequently, the novel ways of understanding the world and the self would mobilize the willingness to self-improve providing novel ways of acting and resulting in reduced laissez-faire tendencies and improved stress coping. To operationalize the hypothesis, a comparison was made utilizing leaders' self-ratings and co-workers' ratings of their leaders' Laissez-faire leadership and Capacity to cope with stress. We hypothesized more congruence between Shibboleth leaders' and co-workers' ratings giving less self-overrating in leaders and resulting in decreased poor leadership.

The findings support a positive response to our hypothesis and demonstrate a striking difference in the development between the two groups. Regarding laissez-faire, in post-measurements the co-workers to Shibboleth leaders perceived that their leaders' behaviours had improved – leaders displayed less indifference and avoidance, as well as more courage to take stands, make decisions, and assume responsibility for actions and choices. Contrariwise, Shibboleth leaders' self-ratings declined, which altogether turned their initial self-overestimation into a smaller underestimation and resulted in greater agreement between leaders' self-image and subordinates' perception of them. These changes indicate that leaders abandoned the self-inflating position in favour of increased self-awareness and humility, which could mobilize behavioural adjustments perceived by subordinates as enhanced dedication and responsibility. Quite contrasting results were noted in the conventional group.

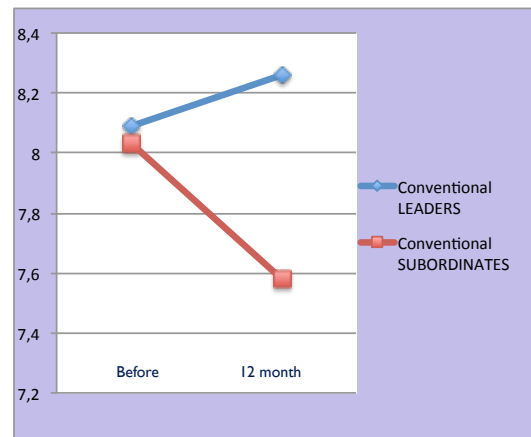
**The art-based intervention, in contrast to the conventional program, was shown to influence leaders' self-awareness in the direction of more realism and decreased hubris tendencies, possibly triggering the process of self-improvement.**

### 5.3.2 Figures: Self-other-rating agreement

Results of MANOVA mixed model tests with time (pre/post) within-subject variance and group between subject variance.



**Figure 14**



**Figure 15**

**Figure 14.** Laissez-faire: Leaders versus co-workers in Shibboleth. Comparison between leaders' self-ratings and co-workers ratings of their leaders. While co-workers' ratings of leaders increased (less laissez-faire) the leaders' self-rating decreased resulting in increased congruence and humility (less self-overrating) in leaders.

**Figure 15.** Laissez-faire: Leaders versus co-workers in the conventional group. Comparison between leaders' self-rating and co-workers' ratings of their leaders. While co-workers' ratings of leaders decreased (more laissez-faire) the leaders' self-rating increased resulting in increased disagreement and more self-overrating in leaders.



**Figure 16.** Laissez-faire: Leaders versus leaders in the two groups. Comparison between leaders' self-ratings in the Shibboleth groups and leaders' self-ratings in the conventional group.



### 5.3.3 Outcomes

#### 5.3.3.1 *Self-awareness*

There were significant two-way interactions with regard to Laissez-faire behaviour ( $p = .0001$ ). The agreement between leaders' and their co-workers' scores increased in the Shibboleth group after the intervention. Contrariwise, the disagreement increased in the conventional group.

#### 5.3.3.2 *Humility*

There were significant two-way interactions with regard to Laissez-faire behaviour ( $p = 0.027$ ). Shibboleth leaders' self-overrating switched to slight underrating after the intervention. Conversely, the conventional leaders moved from agreement toward major overrating.

#### 5.3.3.3 *Self-improvement*

Significant two-way interactions are observed for both laissez-faire ( $p = .005$ ) and capacity to cope with stress ( $p = .048$ ). Co-workers' ratings of Shibboleth leaders' improved. Contrariwise, the subordinates' ratings of the conventional leaders had deteriorated after the intervention year.

## 5.4 STUDY IV

### 5.4.1 Summary

The statistical examinations of the effects of Shibboleth show what has happened with the leaders and their co-workers but do not reveal why and how such changes occurred. A general point of departure in study IV was to make explicit the subjective processes taking place “inside” the individual participating leader during the intervention as well as after it had ended. Such investigation would reveal what statistical analyses are not able to express, namely what conditions that are needed for the effects of Shibboleth on the leaders and secondarily on their co-workers to occur. A detailed, qualitative analysis of the participating leaders' concrete descriptions of their experience elucidate the psychological processes and the meaning the Shibboleth experiences had for the leaders. The results of the analysis specify the necessary key characteristics that constitutes Shibboleth's impact core. The findings are discussed in relation to the notion of *aesthetics*, which is introduced for conceptualisation of the impact core that constitutes the Shibboleth concept.

The findings show that the participants experienced Shibboleth as a trans-

formative power. The findings are identified not only directly after the end of the intervention but also nine months later, indicating long-term effects. However, the change process was perceived as exacting but simultaneously creative. Encountering Shibboleth entailed a drastic break with the familiar and was both a negative and a positive experience. The participants described their journey from the desire of affirmation of the familiar, of the self and one's own interest towards a more open, communicative position trying to understand a world other than one's own by adopting an *aesthematic approach* (a combination of *aesthetic*, *emotional* and *ethic* elements). They described ways in which they changed their way of thinking and behaving in life; they described an existence that had become more vulnerable, more solemn and more demanding. At the same time they perceived themselves as more capable and more judicious when intervening in the world. The leaders described a new consciousness they never experienced before; to assume responsibility for others, for themselves and for their leadership, which also raised their sense of self-esteem and feeling of reverence and gratitude for their life. Long after the intervention ended, the etched memory images of Shibboleth work as moral guidance in different situations emerging a new understanding. The “strange” Shibboleth is also recognised as life itself and reflects the appropriation process: mysterious, unpredictable, where suffering and joy, good and devil, “rape” and freedom all take place. The aesthematic position that the participants took mirrors life's requirements and they carry it with them as a model of relating to the world; an acceptance that it is difficult to find given patterns for one's existence and that implementing an open approach can order existence.

**The participants experienced shibboleth as a transformative power. They described a new willingness to assume responsibility for others, for themselves and for their leadership, which also raised their sense of self-esteem and feeling of reverence and gratitude for the life. We interpret the findings as an expression of a mental growth towards a more complex and integrated “self” in which the realisation of one's own ability co-exists with awareness of one's own limitations.**

**A theoretical contribution of this study is a novel conception of Aesthetics, which can help clarifying the underlying conditions for successful training programmes in general.**

#### 5.4.1.1 *Theoretical implications of study IV*

In addition to the empirical findings, the theoretical implication of study IV is the contribution of a novel notion, *aesthetics* and two concepts, which

are based on it. The theory of aesthemetics will be presented in more detail in discussion section.

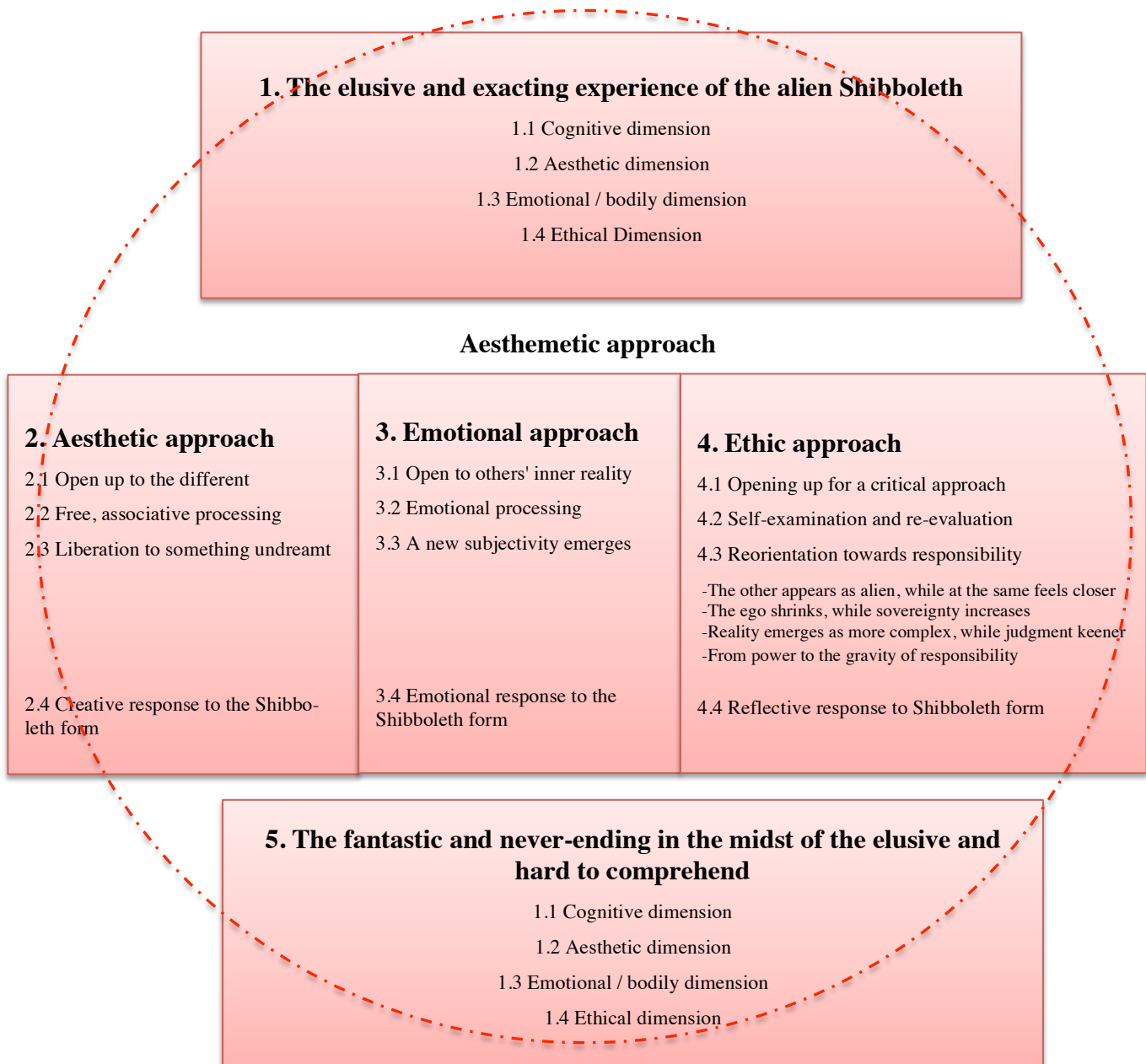
1) *The concept of the aesthemetic, dialectical process*, by which the Shibboleth's transformative impact core is conceptualised, constitutes of four characteristics (See figure 19):

1. Aesthemetic shock: inspiration through a break with the familiar
2. Aesthemetic appropriation: affirmation of life through the difficult
3. Aesthemetic transformation: self-recognition through moral responsibility
4. Elusiveness and liminality through the Shibboleth's artistic techniques

2) *The concept of the aesthemetic responsibility in leadership* by which the leaders' approach induced by Shibboleth is conceptualised, constitutes of four characteristics (See figure 20):

1. Aesthetical responsibility
2. Emotional responsibility
3. Ethical responsibility

#### 5.4.2 Figures: The overall structure of Shibboleth's characteristics



**Figure 17 The overall structure of Shibboleth's characteristics**

The first main characteristic 1) *The elusive and exacting experience of the alien Shibboleth*, was followed by the *Aesthematic approach* which contains three inseparable interacting main characteristic: 2) *Aesthetic approach*, 3) *Emotional approach* and 4) *Ethical approach*. The three characteristics within the *Aesthematic approach* contain the same inner structure (subcategories). The final main characteristic, 5) *The fantastic and never-ending in the midst of the elusive and hard to comprehend*, corresponds with the first one and can be seen as a dialectical manifestations of the two contrasting sides' simultaneous validity entailing the same inner structure

(sub-categories). The order in which the five characteristics are presented does not imply a strict chronological or causal sequence; the different characteristics may coexist in varying combinations throughout the whole process however and can be seen as a progress in a spiral motion.

#### 5.4.3 Outcomes

Here follows a brief description of the observed structure of the leaders' experiences. Each main characteristic begins with a synopsis that is then developed in the following sub-dimensions. Each dimension is introduced by an overall quotation. All used quotations come from the participants' raw data.

##### 5.4.3.1 *The elusive and exacting experience of the alien Shibboleth*

"I understand nothing! It's hard to not understand!"

In the meeting with Shibboleth, the participants were confronted by an alien situation of "otherness" that violates a given order. It is difficult to grasp and comprehend a situation beyond one's own sphere of experience, a situation that requires distancing oneself from everyday reality. The challenging alienness is a very pronounced characteristic and is present throughout the whole programme. Thus it is essentially not about being subjected to something new, but about something that must be understood in a different way. The participants were confronted here with a challenging experience that appeals to the senses and where a common-sense approach is inadequate. The elusive and exacting alienness can be understood in that Shibboleth addresses various dimensions of experience: cognitive, aesthetic, emotional/bodily and ethical. These dimensions are of course related. When something is perceived as demanding, challenging and scary, there is also a difficulty in cognitively accommodating it.

##### 5.4.3.1.1 *Cognitive dimension*

"What does this have to do with leadership?? Nausea."

Shibboleth clashes dramatically with the participants' understanding of leadership. There is no connection to the topic of leadership and Shibboleth is perceived as being in contradiction with leadership training. They cannot behave in a habitual and self-fulfilling way and have a hard time letting go of performance requirements. They want to understand the relevance of the programme in advance, but open pedagogy without predefined learning goals or any introduction of content gives no guidance. They cannot use Shibboleth as a service function and are irritated by not getting methods and

theories and tools for learning to manage people, neither does it nurture any specific skills. There was no room for self-confirming exchanges of experience, which made it impossible to place oneself in a social hierarchy. They encounter the resistance of the artistic form that requires conformity; Shibboleth does not adjust in accordance with the wishes of the participants. The situation that gives no immediate need-satisfaction is experienced as manipulation and breeds resistance.

#### *5.4.3.1.2 Aesthetic dimension*

“The texts were deeply probing and compounded. It was intense, a mixture at various levels, like hearing different voices, like Sheol, it does not follow a certain line as in a book or at the theatre.”

The Shibboleth performance was experienced as inaccessible and provocative. The participants were awash with wrenching, interwoven sensations of various kinds that were difficult to perceive automatically. The performances were perceived to break the traditional dramaturgy with its dense, non-linear narratives, polyphony and unpredictable breaks in thought. The participant is incapable of defining the impact Shibboleth has on them. The impressions it makes touch on an undefined, non-linguistic form of sensation that finds resonance on a deeper level and which “is not within normal consciousness”.

#### *5.4.3.1.3 Emotional / bodily dimension*

“It was terrible, horrible ... so many emotions that came up.”

The content and form evoke strong emotional reactions that are difficult to control and distance oneself from. The feelings are so challenging that they are hard to endure and verbalise. They can rather find expression in bodily reactions. It can also express itself as a strong repudiation as when someone leaves the room in the midst of a performance.

#### *5.4.3.1.4 Ethical dimension*

“How will this lead to something valuable for my development?”

The Shibboleth's theme that reflects the “very dramatic interplay and conflicts” clashes with the participants' leadership values and is perceived as not useful. Even though the expected ethical code was not taught Shibboleth was perceived as a “morally binding manipulation” and a “violation”. The participants were defenceless thrown and shaken by the alien issues, and recoil in an ethical aloofness; these human experiences do not concern

them but the others, “psychopaths“, or belong to another time or place. The participants express scepticism over their own management’s ability to embrace Shibboleth’s moral commitment – “the step is huge“.

#### 5.4.3.2 *Aesthetic approach*

“At first we were pre-programmed... we immediately wanted to get back to the purpose. Bam, then it would be quickly and neatly packaged! But I was not packaged like that; I got to use my imagination, to associate in a different way.“

The participant may not embrace Shibboleth with an entrenched perception. A change of attitude is required and the participants adopt an aesthetic approach; an empathic receptivity where one participates with the senses and the power of imagination. One overcomes resistance and allows oneself to be surprised. This opens up an associative processing where thoughts and emotions flow freely. By virtue of the aesthetic approach, there is a shift from an instrumental attitude towards an openness that means liberation into something unimagined. The artistic form and music brings out the imagination of the participant.

##### 5.4.3.2.1 *Open up to the different*

“They would not believe me at work... My workplace is full of stunted souls.“

The discrepancy that arises when the participants transition from the expectation of the obvious to being exposed to the unfamiliar induces, besides feelings of resistance, a delightful “surprise that opens up another world“. To receive this world, participants wage a kind of liberation struggle, setting aside their instrumental “self“ and liberating themselves from a common-sense approach. They invest in an experience contract – a recognition that Shibboleth’s ‘mind games and musical play’ is worthy of being played seriously. The participant submits to the experience without seeking satisfaction in an instant comprehensibility. One suspects also that control and logic will invalidate the experience itself and prevent reaching a different kind of insight than the obvious, conceptual knowledge; what Shibboleth says, it does not say in a literal way. An overwhelming feeling of surprise follows. This wonder spurs the participants to go beyond the routine and adopt a new approach.

#### 5.4.3.2.2 *Free, associative processing*

“Here, your imagination can run wild... it’s not a predetermined track I’m going on, but totally free!”

The participant opens up to associative thinking, which means that connections in the psyche are made without an explicit and controlling “I” appearing. Thoughts without conscious connection that reference the forward and backward appear after each other and are apparently managed unnoticed as a series of associations, as material for reflection and processing. Thoughts move between different spheres – the human existential predicament, the deeply personal or the professional situation. Shibboleth unfolds its world of references other than the participants’ own, and the participants follow the line of thought that has opened up and can be led into own inner dialogue. The internal, personal dialogue is interwoven with the associations of other people during the joint reflection. The participants are challenged by the “multifaceted” and deeply struck by the fact that the very same performance can be perceived so “diametrically differently”.

#### 5.4.3.2.3 *Liberation to something undreamt*

“I felt freedom. And no matter how f\*\*\*ing freaked out I was at any time, Shibboleth was even more freaked out.”

From this non-self-controlling approach, a new, liberating experience emerges. The affirmative attitude involves an unexpected courage to handle an uncontrollable situation. A very strong sense of liberation arises. The feeling of freedom comes when something new beyond the given manifests itself, a liberation into something unpredictable. The participant is freed from the shackles of habitual thinking and everything’s readability, transparency and rationality. The Self hovers “in the pendulum between consciousness and unconsciousness, between understanding and just being” like being in an “awake, conscious dream”. This mysterious obscurity that one wants to decipher gives freedom of thought. Shibboleth’s imaginary sphere, in its enigmatic nature, paradoxically bestows a space that is perceived as more real and multifaceted than reality itself. The participants find an ability to go beyond themselves.

#### 5.4.3.2.4 *Creative responses to the Shibboleth form*

“The art form is intrusive, the combination of text and music, it made me think differently.”



The collage technique and the unpredictability of the voice composition, which override causal and chronological order, require a different mode of thought that mobilises the creative imagination of the participants. The thought oscillates between different levels, searching for clues to discern patterns in a kind of tapestry-like thinking. One “tried to see the connections” and was seeking to link various passages. The participant is forced to perform “mental gymnastics”, create continuity, open up to the epic “self”. The synthesising power of imagination produces a meaningful whole. One sees clear “inner images” and the music plays a significant role in the picture-creation. The participants marvel at the freedom of choice in games of imagination. One associates with “words that are not even said but which you intuitively pick up and put in your own words” as if one hears the unspoken. One marvels at one’s ability to create words, as if the thing is writing itself. The diary notes testify to a poetic way of writing.

#### 5.4.3.3 *Emotive approach*

“The strongest experience is that it’s so emotional.”

The emotional charge in the Shibboleth experience is very pronounced. The participants take in the various characters’ reality and are affected by their suffering. Their empathic response begins their own inner journey, and on this journey they have all different experiences such as painful, scary or beautiful. They have feelings they have never experienced before and a new perspective on their lives and the world emerges. The artistic forms and music have a significant impact on the emotional response.

##### 5.4.3.3.1 *Open to others’ inner reality*

“All strong feelings were there and I lived within that, which was being told.”

The performances – “some really terrible, some fantastically beautiful” – take the participants on “amazing journeys through other people’s eyes and thoughts” and there one participates in “another person’s inner journey”. It is not the facts that are noticeable on these journeys; rather, seeing the unspoken that “one intuitively picks up.” The participant encounters “life’s contrasts and contradictions” and takes in the various characters’ conflicted inner realities and sometimes tests hypotheses about their mental state. One opens up to other people’s multifaceted inner lives and seeks to give them a voice in “travel diary”. To be confronted with the injustice and suffering of others arouses a “range of emotions” and the participant

is struck by the fact that “it touches on so much”. One is struck by a deep sense of the sanctity and justice of life, and feelings of guilt and shame are aroused. Feelings of solidarity and a sense of belonging occur and one wants to relieve the suffering of others.

#### 5.4.3.3.2 *Emotional processing, the journey inward*

“If you go into it you have to go down into darker emotions and vulnerability, you can get very scared. I and a few others in the group have experienced it.”

Taking part in others’ painful reality raises an “inner journey like no other”, and on this journey one meets one’s own vulnerability. The participant endures distressing feelings and seeks out the as yet undiscovered. One tries to make the painful meaningful. The participants expose themselves and are made aware of their buried wounds. One opens up to the difficult question of how faithful one has been in one’s life. The weaving together of the deeply personal and the universal seems to have a sheltering power during the meeting with their own pain. It is as if the personal is also the most unique and it is within us all.

#### 5.4.3.3.3 *A new subjectivity emerges*

“By having the chance to experience all these emotions in one evening, I had a chance to see life from a different point of view.”

The participant, by embracing their pain, experiences growth. Out of the pain that is uncovered, something new is born. New emotional meanings and connections, “feelings I had never experienced before” create a richer spectrum of experience. The participant finds access to a new and growing mental sphere. The past is now lit in a new light, and participants are experiencing a different “I”, as if it were someone else. It is not only one’s own subjectivity that emerges in a new way, but also the world and other people are revealed in an epiphany as if one were seeing for the first time. And when the self and the world emerge anew, which means that the previously is revealed, new unimagined possibilities in life are offered: “A lot has happened within me tonight. I actually feel that I could leave everything I have and start from a completely different place in life.”

Despite the presence of pain and suffering, Shibboleth constitutes a place for life-giving hope and strength. A stream of thoughts, feelings, text and music creates a dynamic mental movement, “a completely new force” that

gives sense of vitality, desire, curiosity, and a presence. The participant experiences closeness and love of life. Shibboleth's imaginary space feels like "home" where one can get in "contact with oneself" and can "practice being oneself" and "grow more as a person". The participants experience "their personal depths" and are affected in their "innermost" being. And when they meet more of their true selves, it brings an overwhelming sense of self-affirmation and self-esteem. They feel in harmony with themselves – something that suddenly presents itself. The participant also feels "much more harmonious" and feels that Shibboleth has restorative effects.

#### 5.4.3.3.4 *Emotional response to the Shibboleth form*

"The emotions it aroused, I have never experienced before... the combination of text and music draws you in."

Shibboleth is seen as a "powerful tool, because it evokes such strong feeling". The form is experienced dialectically; it both breaks down defences and provides relief. Here, music has a crucial role. The music is perceived as "very strong" and one "cannot defend oneself against music in the same way as one can with words". It prevents participants from "intellectualising and distancing themselves" and reaching the wordless, most painful layers inside, "where words do not seem to be enough". The music gives a "bubbling sensation of euphoria, yet jarring, painful discomfort". One's own grief finds a face in the music. Sometimes the music feels like "almost the only positive" and when "the words are dreadful" the music feels "wonderful" and when "the jaws bite together and freeze" then "one defrosts in the warm music".

#### 5.4.3.4 *Ethical approach*

"There must be room for ethical questions, human fellowship, not only measurable knowledge."

The emotional response gets an ethical turnaround; a connection is opened between the aesthetic power of imagination and the emotional response, which, in its cognitive dimension, culminates in ethical considerations regarding the human condition. This reflection of how life should be lived offers the participants an opportunity for a critical questioning of reality and the illusion of their lives. Their gaze is turned inward in self-examination of their own lives; the self's relation to itself, to the other, and to the world. The participants re-evaluate their previous position choices. A feeling of being a part of common humanity emerges alongside a new self-

consciousness about their own responsibility for their existence, for others and for their leadership. A life illuminated in this way is a changed life. The participants enter the world in harmony with their new understanding of themselves and of others as a kind of signpost, which makes it possible, or even necessary, to be accountable through action before the call of reality. The artistic forms and the music have a significant impact on the ethical response.

#### *5.4.3.4.1 Opening up for a critical approach*

“Questions about ethics, humanity, what it is to be human, left a deep impression on me.”

To open up to other people’s reality and suffering belongs in the world of ethics. The power of the pain suffered by the participant must be followed by an approach that “really sits down and thinks through: what does what I just heard mean? These things I have never encountered before.” The participant enters into a space for reflection about “things I never touched upon before with others”. One is struck by questions about evil, dignity, courage etc. but it is not moral solutions one seeks. The participant follows the different threads in human moral complications. A desire to capture the ethical relevance, how things really are, is awakened. This provides a critical eye for questioning the reality one witnesses and one’s own illusions. The critical approach also includes reflection on other participants’ reactions.

#### *5.4.3.4.2 Self-examination and re-evaluation*

“We heard a lot about contrasts... then I started looking at myself... because then values were set against each other in an almost unnatural way... what is good and evil? When do I choose it?... Like these concentration camps we read about, the troops, does one make the choice later or now?”

To confront the stories of other people is to confront one’s own, as if seeing oneself through the eyes of other’s. Receiving this appeals to the participant’s concrete reality and demands a personal response. One examines where one finds oneself as a human being. Hypothetically, one tackles the difficult questions about one’s possible stance in extreme situations. The moral imagination listens to reality’s voice and the participants think about their own ability to reduce suffering. With a self-questioning gaze, the participant examines “stereotypical values that have never been reconsidered” and penetrates his or her “own mental life” as never before. As in a moral awakening, “hidden biases” are discovered that reveal something new. One

finds the courage to approach it “as one may not dare to see for oneself”, and remains in dialogue with one’s conscience.

#### 5.4.3.4.3 *Reorientation towards responsibility*

“My whole life has been affected by the course.” “This programme has made me dare to decide to take life seriously and that to live fully is an obligation.”

The participants testify in strong terms about their changed lives, a “different attitude to oneself, to others and to situations”. It also includes a new consciousness and thinking. The participants express an enhanced, committed attitude to life and a reverence for the sanctity of life. An awareness that values “pervade everything you do”, and that our humanity and freedom is linked to an ethical responsibility emerges and provides a new understanding of “what it means to be human”. This understanding is embodied in an action – to act in the world, here and now. The participant reconnects the world of experiencing to the reality of responsibility and moving within the dialectical world of reality. Below are the most pronounced changes.

#### ❖ *The other appears as alien, while at the same time as someone who feels closer*

The participants express a deep insight into others’ “otherness”. The other appears as a “diametrically” different from oneself. This insight gives birth to a new conscious effort to not reduce the others’ uniqueness to a mere reflection of oneself. The participant makes an effort to “look deeper into people”, “try to understand other people’s ideas”, “tune into co-workers’ emotions”. This act of listening creates increased tolerance and a new understanding, and one strives to make the individual in a specific situation one’s starting point. The participant “feels greater respect” for co-workers and is “more humble when facing them as individuals, regardless of performance... I can separate their results from their human value”. This reverence involves an altruistic sense of care. The participant “becomes more involved in the social problems of co-workers’ and initiates various activities for the benefit of the co-workers. This understanding of others’ differences that encourages care, frees the participant from feeling separated from co-workers. The co-worker gets closer and the participant feels confident to disclose their authenticity. The participants are also overcome by a deep sense of common humanity.

#### ❖ *The ego shrinks, while sovereignty and self-recognition increases*

While the distance to the co-workers declined, the distance from oneself increased. Participants experience a more balanced view of their own importance. A surprising sense of being freed from a need to self-aggrandise is revealed. While the “ego” has shrunk, the sense of sovereignty has increased. One “places demands on how one wants to be treated” and is strongly aware that personal freedom frees one from feeling like “a victim because I have always choices to make.” Shibboleth has helped participants discern the meaningful and “get things in the right proportion”. It represents an obligation to change one’s way of living in the world and take responsibility for one’s wellbeing.

But sovereignty manifests itself not only as responsibility for oneself, but also as the moral integrity and courage to intervene in the world when one hears the call from reality. The new awareness of “the importance of standing up for one’s opinions... to dare to intervene” is very pronounced. The participant hears strongly an ethical call. The participant feels that “Shibboleth has given me a lot of courage” and dares to intervene when “co-workers are badly treated by their team managers. I question my colleagues”. One dares to resist peer pressure. To exceed one’s limits and be open to revealing one’s innermost, one’s values gives an overwhelming sense of self-recognition.

❖ *Reality emerges as more complex, while a sense of security grows and judgement becomes keener*

Strong awareness of the multifaceted nature of the human entails a responsibility to relate to human complexity and one “does not shy away from the provocative, evil or soiled. One has to manage everything as a fellow human being and as a manager.” One seeks to meet others in ways previously perceived as unpleasant. One opens one’s eyes to others’ vulnerability. Greater awareness of the complex and of the complicated does not increase vulnerability; rather, the feelings of freedom and security grow stronger. The participants perceive themselves as “standing firmly on the earth in reality as it is” and as “better able to handle intensive situations and maintain perspective, so that I can be where I am”. It is easier to perceive the relevance of different situations and “weed out what is not important and prioritise the right way... If there is a fuss with a co-worker, why should I get excited about it when I know that someone has been in a gas chamber?” The strong power of judgment also means a new awareness of the reality of evil that involves a clearly articulated ethical turning point. This new perspective on the issues of evil is now regarded productively from the point of view of man’s freedom and the choice to resist. There is a drastic shift in

the basic ethical position of the participant. From earlier not being able to accommodate the gulf between the destruction that is happening and what one desires should happen – that one refuses to see actual evil as inevitable, but as something that cannot triumph and as something one has the freedom to refuse to participate in.

❖ *From power to the gravity and vulnerability of responsibility*

The insight into the seriousness of having power emerges strongly and the participant acknowledges power's inherent ability to cause suffering. Again, we see a fundamental shift in the participant: from thinking in terms of power to thinking in terms of responsibility. The participant feels "a responsibility to humanity I have not experienced before". Destructive leadership "must be resisted, daily" and when making an executive decision "so maybe, despite everything, human sorrow or misery outweigh harm to the business. I try to balance these all the time." And this responsibility cannot be rationalised away or handed over to someone else. The new "ethical sensibility" and responsibility's deep gravity seems heavy and lonely to bear when faced with a unique person in a unique situation. But it also gives strength.

5.4.3.4.4 *Reflective responses to the Shibboleth form*

"This has got closer to me, in a way I have not experienced before. I could not be indifferent, one is simply forced to deal with what is presented."

The artistic form is perceived as counteracting the repressive mechanisms that turn on when confronted with the "nasty" and the participant is forced to abandon the position of indifference. The form is perceived as "a prerequisite for the discussions, which evoke so much." The music again plays a crucial role in the deepening of reflection. The music "by being a total contrast" to the text "revealed the sometimes absurd" that provides a reflective "additional effect". In an epiphanic experience, the music reveals participants' own tendency to be seduced. Even the stage performances with their unadorned readings make the spoken word to stand out more. The participant retains a reflective stance without losing himself/herself in the emotionality "unlike when you get very emotional while looking at a movie, laughing, crying. Between the sessions I reflected". One "challenges oneself" to "concentrate 100%". And when the brain and heart really make an effort to understand the extent of human suffering ceases to be an abstraction that protects from reality: "My airway suddenly felt very constricted,

1,000 needles pushed their way into the back of my head and I could almost see the gas in front of me.”

5.4.3.5 *The fantastic and never-ending in the midst of the elusive and hard to comprehend*

“It went from thinking ‘what is this’ to ‘how good this is!’”

The participants come to Shibboleth with their view coloured by their pre-understanding. Shibboleth is perceived as a useless impossibility, “a violation”. A year and a half later, the participants look back, now with their eyes coloured by Shibboleth. Their perception has changed and the past is illuminated by the light of the new. In the Shibboleth’s space, amid the elusive and hard to understand, the participants had experiences that they “had never had before”. They met the unimagined “fantastic” that gave them “goose bumps” and filled them with a “sense of something big, magical, a huge closeness and community, extremely beautiful, strong, painful and memorable at the same time. To dare to be human, to dare to see, feel” and to dare to listen “to everything that is in me, of good and evil, heaven and hell.” The participants find it hard to understand what they participated in and to see “the full extent and consequences” of Shibboleth. Something “has been touched” which is experienced beyond words; this is something “that lives on” and “lies and rumbles on” as if it were never-ending, “something was set in motion that will continue”.

5.4.3.5.1 *Cognitive dimension*

“It seems like we always have to have a purpose and goal.”

The participants reported on their initial instrumental position. The traditional leadership courses stand in opposition to Shibboleth: “I can no longer even advise my poor newly hired managers to join them... When a new method comes, you are supposed to follow it slavishly. But... people are not so square... We had never mentioned anything negative about each other as one might do in other damned courses... However, the weaknesses of humanity are described by Shibboleth itself... so why do you have to point them out? Such courses drain me, when others tell me what I’m like.”

5.4.3.5.2 *Aesthetic dimension*

“That our life is a shibboleth is so true.”

The “alien” Shibboleth is now assimilated within the participants as a kind of sense of recognition of life. Shibboleth speaks and acts through them as



if life took on a clearer form through Shibboleth. Shibboleth's "contrasts and extremes, contradictions", "its mixture of laughter and pain" is "life in its breadth, the whole spectrum", "both farce and tragedy" and likewise existence without "reasonable dramaturgy" or "a clear framework" and "one being torn between feelings all the time". The aesthetic position that the participants took mirrors life's requirements and they carry it with them as a model of relating to the world. Since "control is a illusion" and "life consists of a lot of components and one must allow oneself to be carried", it means an acceptance that it is difficult to find given patterns for one's existence and that implementing an open approach can order existence.

#### 5.4.3.5.3 *Emotional / bodily dimension*

"You have spoken to my nerves, my innermost... my skeleton, my molecules"

The participants carry with them as a companion into the world traces of Shibboleth that are "etched within". These emotion-bearing marks that "often pop up in my mind" – words like "instructions for gas vehicles: cargo has the natural tendency to accumulate in the back", "jasmine, the sky and the ability to love many" or "the song 'Gracias a la Vida'" – continue to produce emotions that provide guidance and enable new ways of acting in the world. The participant expresses a strong physicality, as if the experience reached their being's innermost point

#### 5.4.3.5.4 *Ethical dimension*

"Strange that we are influenced... without knowing it... For my part, so very much has happened...it's a little scary because in itself it is not a choice, but a real revelation, how does one explain?"

The ethical sensitivity is now a deeply integrated part of the participant's judgment. The participants feel like they are having an inner conversation. The participants express a deep sense of hope that grew out of Shibboleth; that people can preserve "the courage to live, despite the incomprehensible" and retain their dignity and a strong belief in humankind despite horrific conditions. And the participants themselves express a new sense of reverence to life: "This immense love and gratitude for life, it's something I have never experienced before. Not on this level."

## **6 DISCUSSION**

## 6.1 SUMMARY

The hypotheses of the current thesis were two; one regarding the direct effects of leadership training on the participating leaders, and one that refers to the transferred effects of the leaders' training on the co-workers. Corresponding to the two hypotheses, two concepts for statistical evaluation were chosen, and were supplemented with a third concept of an “inside” perspective on Shibboleth:

Concept I: *Leader responsibility*, including pro-social responsibility, self-responsibility, and leadership responsibility, was evaluated in studies **II** and **III** through the following predictors:

- Agreeableness, a predictor of pro-social responsibility
- Sense of Coherence, a predictor of resilience (self-responsibility)
- Self-awareness, a predictor of humility and self-improvement (self-responsibility)
- Laissez-faire behaviour, a predictor of leadership responsibility, and Capacity to Cope, a predictor of stress resilience and leadership responsibility

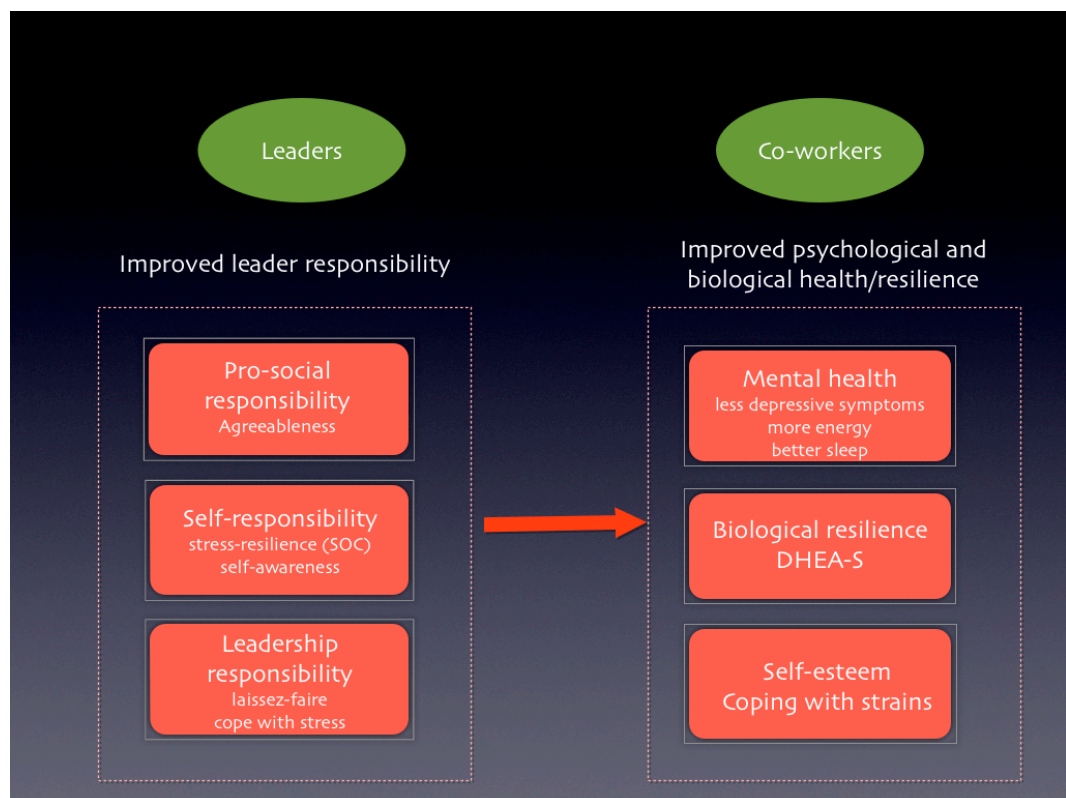
Concept II: *Psychosocial and biological stress* related to work environment and/or to leadership style, was evaluated in study **I** through the following predictors:

- Performance-based self-esteem
- Covert coping, avoiding behaviour strategies when facing injustice and unfair treatment at work
- Poor mental health comprising emotional exhaustion, sleep disturbance and depressive symptoms
- Biological resilience predictors: DHEA-S (a anabolic hormone) and cortisol (a catabolic hormone).

Concept III: *The “inside” perspective on Shibboleth*, as a complement to the statistical analyses, was investigated in study **IV** through analyses of the psychological processes induced in the leaders during the intervention program and also after it ended. The analysis elucidates the key characteristics of the Shibboleth concept that constitute its impact core seen through the eyes of each leader.

The two hypotheses were confirmed by the quantitative studies (study I, II, III) and reinforced by the qualitative study IV. The main findings in this research can briefly be described as follows: Both intervention programs af-

affected the leaders' behaviours and attitudes. Leaders changed, as did their co-workers. However, the effects were quite different in the two groups. While the Shibboleth program initiated positive changes in the leaders (improved leader responsibility), quite opposite effects were observed of the conventional program. This pattern of differential changes in the leaders was logically consistent with the observed corresponding differential changes in the co-workers in the two groups – improved psychosocial and biological stress and health/resilience in the Shibboleth co-workers contrary to the conventional co-workers, which reinforce the results.



**Figure 18 Overall results in Shibboleth group**

The findings regarding the *Shibboleth* group are presented in figure 18 above and seem to be coherent and understandable. Already in the first follow-up changes in the leaders' behaviours (laissez-faire and Capacity to Cope with stress) were observed by their co-workers; the co-workers' ratings of their leaders improved, showing decreased indifference and avoidance, more responsibility and dedication, and more courage to take stands in critical situation and a higher capacity to cope with stress etc. Contrary to the co-workers, the leaders themselves rated their own laissez-faire behaviour as increased, which altogether turned the initial self-overestimation into a smaller underestimation resulting in greater agreement between the lead-

ers' self-perception and the co-workers' perception of them. The changes indicate that the leaders abandoned the inflated position in favour of increased self-awareness and humility. This enhanced reality awareness was followed by mobilization of the self-improvement processes providing behavioural adjustments, which was perceived by co-workers as increased responsibility. In addition, and first in the long-term follow-up (18 months), personality tests demonstrated a significant improvement in pro-social responsibility (Agreeableness) and psychological resilience (Sense of Coherence) in the Shibboleth leaders, compared to the conventional leaders.

At the same time, also first in the long-term follow-up, significant changes in the co-workers became visible. Compared to the conventional group, improvement in coping strategies, performance-based self-esteem, and mental health (decreased emotional exhaustion, sleep disturbance and depressive symptoms) as well as higher concentration of the regenerative/anabolic hormone DHEA-s were observed. These changes in the co-workers indicate that increased leader responsibility and resilience, in turn, induced improvement processes in the co-workers themselves resulting in long-term health-promoting effect. In great accordance with the statistical findings the "inside" perspective showed that the leaders experienced Shibboleth as a transformative power. They described ways in which they had changed their way of thinking and behaving in life. They described a new consciousness they never felt before to assume responsibility for others, for themselves and for their leadership, which also raised their sense of self-esteem and feeling of reverence and gratitude towards life. These findings are identified not only directly after the end of the intervention but also nine months later (at an 18 month follow-up), indicating long-term effects.

Moreover, the theoretical implication of this thesis is a contribution of a novel notion of *aesthetics* (combination of *aesthetic*, *emotional* and *ethic* dimensions) by which the Shibboleth's transformative impact core is conceptualised. The concept of *aesthetics* can help clarifying the underlying conditions for successful training programmes in general.

The findings in this thesis will be discussed in the light of previous research.

## 6.2 CHANGES IN THE LEADERS

### 6.2.1 Laissez-faire, self-awareness, humility and the link to moral responsibility

The *Shibboleth* leaders' laissez-faire behaviour decreased (increased responsibility) followed by decreased over-estimation, which even turned to a small under-estimation (increased self-awareness and humility). On the contrary, the *conventional* leaders showed increased laissez-faire behaviour (decreased responsibility) followed by increased over-estimation (decreased self-awareness and humility). Previous research is in accordance with the present findings. Krishnan (2003) found a link between laissez-faire and under/over-estimation and also a link to morality; under-estimators scored the highest on moral leadership and effectiveness while over-estimators scored the highest in laissez-faire and the lowest in moral leadership. Several authors report that under-estimators are perceived as the most effective leaders (Arvonen, 2006; Atwater et al., 1995; Church, 1997; Van Velsor et al., 1993). Brutus et al. (1999) found an interesting positive relationship between a high level of awareness (high SOA) and empathy. Empathy was the only personality trait that predicted pronounced agreement between others' ratings and self-ratings. Goldshalk & Sosik (2000) provide empirical support for the assertion that under-estimators are more motivated by concern for others, altruism and humility. These links are in accordance with our findings. The leaders in the *Shibboleth group* significantly improved in Agreeableness. Empathy, concern for others, altruism and humility are the hallmarks of Agreeableness.

### 6.2.2 Pro-social responsibility and the link to psychological resilience

The findings in the *Shibboleth* leaders showed changes in Sense of Coherence (SOC) and Agreeableness, despite that both Agreeableness (pro-social responsibility) and Sense of Coherence (resilience to stress) are personality traits and as such are expected to be heritable and stable over time. Indeed, both have been documented in previous literature to be sensitive to strong life experiences or sensitive to psychosocial interventions. Changes in SOC through drastic life events have been found; negative experiences have been shown to weaken SOC (Kivimaki et al., 2002; Schnyder et al., 2000), whereas positive events have resulted in increased SOC (Karlsson et al., 2000). Intentional modification of SOC through a therapeutic intervention has also been found (Lillefjell & Jakobsen, 2007; Weissbecker et al., 2002). Moreover, a positive change in leadership, towards a good organizational climate, enhances SOC (Feldt et al., 2000).

Agreeableness seems also to be influenced by socialization processes (Bergeman et al., 1993; Koestner et al., 1990). The positive changes in both SOC and Agreeableness are in accordance with findings by Ruise-lova (2000) who also reported the positive correlation between SOC and Agreeableness. This correlation shows a clear pattern, which strengthen the results.

Both SOC and Agreeableness have a unique combination of cognitive, emotional, and motivational as well as behavioural aspects. Both indicate responsibility, moral behaviour, adaptability and emotional regulation and both are associated with positive health effects. Below is more detailed description of these two.

#### 6.2.2.1 *Agreeableness: "Voluntary behaviour to benefit another"*

The Shibboleth leaders showed improvement in Agreeableness, while in the conventional leaders no difference was found. The findings suggest that the Shibboleth leaders moved in direction towards more pro-social motivation, engagement, responsiveness and adaptability. Agreeableness, a strong predictor of empathy, altruism, modesty and cooperation is evident in its close connection with community, the desire to contribute to something bigger than the self (Ashton & Lee, 2001; Digman, 1997). Agreeableness is a key component of cooperative behaviours and creative problem solving, and is also correlated with maintained relations despite problems (Berry et al., 2000; Van de Vliert & Euwema, 1994). Of the Big Five dimensions, Agreeableness is the most closely correlated with constructive dealing with conflicts and is negatively correlated with "walking away" from conflicts (Graziano, et al., 1996; Jensen-Campbell et al., 2003; Jensen-Campbell & Graziano, 2001; Suls et al., 1998). Evidence indicates that of all the Big Five traits, Agreeableness is also most predictive of quality of group interaction and actual performance in work teams (DeRue, et al., 2011; Mount et al., 1998). Agreeableness also includes a willingness to accommodate others' wishes (Digman, 1990; Hahn & Comrey, 1994). According to McCrae and Costa (1996), the primary motivational orientation of agreeable individuals is altruism; high empathic concern for other peoples' interests and condition, and willingness to act upon this concern and help regardless of risking negative consequences for one self. Agreeable individuals feel a sense of connectedness with an extended range of persons (Graziano & Eisenberg, 1994; Graziano et al., 2007; McCrae & John, 1992). Furthermore, the positive correlation between Agreeableness and health behaviours has been confirmed (Booth-Kewley

& Ross, 1994; McCrae & Costa, 1991).

DeRue et al. (2011) found Agreeableness to be the most important trait predictor among the Big Five traits, positively associated with satisfaction with leaders. Leaders who are highly agreeable have preferences for participative styles of leadership (Stevens & Ash, 2001) – trusting and straightforward characteristics are both facets of agreeableness – and are more likely to invoke strong emotional ties and build high-quality relationships with followers (Nahrgang et al., 2009). Among the Big Five traits Agreeableness emerged as the strongest and most consistent predictor of transformational leadership and charisma (Judge & Bono, 2000).

However, the link between Agreeableness and leadership is ambiguous with inconsistent findings. Agreeableness may also be a hindrance to leaders because highly agreeable individuals tend to be submissive and conforming, according to Graziano and Eisenberg (1997). Lim and Ployhart (2004), in line with this, found a negative relationship between agreeableness and charismatic leadership. Moreover, agreeable individuals are likely to be modest (Goldberg, 1990), and effective leaders tend not to be excessively modest according to Bass (1990). In contrast, Collins (2001) found that the most successful leaders were modest, unpretentious and humble, as opposed to self-promoting.

#### 6.2.2.2 SOC: *“How do people manage the lack of control of their lives”*

Sense of coherence, which is a strong predictor of psychological resilience, increased in the Shibboleth leaders, and decreased in the conventional leaders. These findings are in accordance with the co-workers’ rating of the leaders’ Capacity to cope with stress. The findings suggest that the Shibboleth leaders felt more stable and more rooted in reality, having a greater sense of being a coherent part of the world as well as a greater tolerance and more confidence to confronting and deal with negative life experiences and anxieties. Individuals with high SOC used more active and problem-focused coping strategies in contrast to individuals with lower SOC, who used more avoidant and emotion-focused coping (Amirkhan & Greaves, 2003; Pallant & Lae, 2002). Previous research shows several positive effects of high SOC.

Those with high SOC were found to have lower levels of psychological distress (Cohen & Kanter, 2004; Eriksson & Lindstrom, 2006) as they seem to be more resilient during stress than people with a low SOC (Feldt,



2000; Korotkov & Hannah, 1994). High SOC is strongly *negatively* associated with anxiety, anger, burnout, demoralization, hostility, hopelessness, depression, post-traumatic stress disorder, and *positively* associated with optimism and self-esteem (Eriksson & Lindstrom, 2006; Lindstrom & Eriksson, 2005). According to Antonovsky (1995), the father of SOC, what is morally good is good for health. Moreover, SOC has been found to be related to how people experience and understand their work environment (Antonovsky, 1987; Kalimo & Vuori, 1990; Vuori, 1994), and also found to be positively related to work engagement and professional efficiency (Basson & Rothmann, 2002; Fourie et al., 2008; Strumpfer, 2003). The individual measuring high on SOC shows more understanding of group dynamics than the individual measuring low (Kalimo, et al., 2002). High SOC predicts good organizational climate (Feldt et al., 2004) and contributes to the maintenance of well-being among co-workers (Kalimo et al., 2002).

### **6.3 CHANGES IN THE CO-WORKERS**

The change processes that have been induced in the Shibboleth leaders by virtue of Shibboleth intervention have been followed by mobilization of psychosocial and neurobiological resilience processes in their co-workers. The findings from study I showed a significantly better development of psychosocial and biological stress related health both in the Shibboleth leaders and in their co-workers, which stand in contrast to the conventional group. Publication of the results from study I received attention in the media and the study was reviewed, evaluated, and highlighted as new findings and earned a "Must read" by a F1000Prime<sup>2</sup>. Apparently, the leadership area tends to awake considerable interest and this research brings together several fields elucidating a chain of links: arts' impact on leaders and leaders' impact on psychosocial and neurobiological resilience in co-workers.

#### **6.3.1 Psychosocial resilience**

Resilience is primarily identified as a psychological phenomenon. Resilience implies the ability to face and cope with stress, adversity, uncertain-

---

<sup>2</sup> F1000 is a post-publication review group of thousands of experts worldwide who identify and evaluate the most important articles in biology and medical research publications.

ty, tragedy, and threats of harm. Luthar et al., (2000) define resilience as a dynamic process encompassing positive adaptation within the context of significant adversity. Our findings demonstrate that the most striking difference between the developments of the two groups of co-workers (improvement in Shibboleth co-workers, and deterioration in the conventional co-workers) regarded covert coping, which refers to avoidance behaviour when facing injustice and unfair treatment at work. This finding indicates changes in the co-workers behaviour. Covert coping is negatively correlated to psychological resilience. Earlier research suggests that covert coping is specifically strongly related to poor health (Theorell et al., 2000; Härenstam et al., 2000; Leineweber et al., 2011). Indeed, our findings confirm the correlation to poor mental health in both groups. Decreased poor mental health (emotional exhaustion, sleep disturbance and depressive symptoms) as well as decreased performance based self-esteem (improved self-esteem) were observed in the Shibboleth co-workers. The opposite trend occurred in the conventional group. Moreover, decreased covert coping behaviour suggests an increase in psychological acceptance (willingness to experience unwanted thoughts and feelings), which in turn is associated with improvement of mental health and depressive symptoms (Bond et al., 2000; Wells & Carter, 2002; Hayes et al., 1999; Salovey et al., 1999). Furthermore, studies of work environment have shown that sleep disorder is associated with emotional coping strategies and high arousal levels (Morin et al., 2003). Finally, emotional exhaustion is suggested to be strongly associated with laissez-faire behaviour (Hetland et al., 2007). Thereby, the overall picture with regard to psychological resilience seems to be coherent.

### 6.3.2 Neurobiological resilience

As was mentioned above, resilience is primarily identified as a psychological phenomenon. However, a growing body of the neurobiological research has directed the attention toward neurobiological resilience related to psychological resilience. DHEA for example, represents one of the biomarkers that constitute the biological base of psychological resilience (Charney, 2004). Our findings demonstrate that the Shibboleth intervention protected from winter deterioration of the DHEA-S excretion that could have been expected on the basis of the seasonal effect in the Shibboleth group, both in participating leaders and their subordinates, compared to the conventional group.

DHEA-S is considered to be a neurobiological stress-protective element

(e.g. Gallagher & Young, 2002). Several studies reported that DHEA-S promotes psychological resilience and has antidepressant effects (Charney, 2004). Empirical evidence provides that DHEA-S is associated with superior stress tolerance and fewer psychological symptoms of burnout (Mohammad, 2012). DHEA provides also beneficial mental, cognitive and behavioural effects (Rose et al., 1997; Southwick et al., 2005). Increased level of DHEA has been observed (McCraty et al., 1998) as an effect of an emotional self-management program that required participant to focus on feelings of care for others. Another study showed that a mental training program was successful in changing in DHEA-S (Johansson & Uneståhl, 2006). Recovery from severe stress appears to be facilitated by DHEA; an effective coping predicted higher plasma DHEA levels (Yehuda et al., 2006). Moreover, links between higher concentrations of DHEA-S and superior cognitive performance (Wolf et al., 1998), and problem-solving/decision-making abilities while experiencing acute stress have been found. DHEA-S was highest in soldiers who demonstrated the best performance during rigorous training (Morgan et al., 2004).

#### **6.4 NEUROBIOLOGICAL AND PSYCHOSOCIAL RESILIENCE, LEADERSHIP AND MORAL RESPONSIBILITY**

It has been shown that a higher level of DHEA-S was associated with healthier psychological and behavioural profiles among managers (Fava et al., 1992). The neural mechanisms of reward and motivation, courage, and adaptive social behaviour such as altruism and cooperation were found to be associated with resilience; individuals who demonstrate outstanding leadership ability and courage, are characterized by altruism (Charney, 2004). DHEA was also found (McCraty et al., 1998) to be significantly positively related to care, compassion, kindness, tolerance, acceptance etc. According to Zak (2005), hormones appear to support a moral sense. Altruism has frequently been shown related to empathy (Batson, 2014). The neural mechanisms underlying altruistic feelings appear to link to empathy, the ability to comprehend how other think and feel (Tankersley et al., 2007). Empathy (or perspective taking) also has neural correlates in the cerebral cortex (Lamm et al., 2007).

Altruism is a powerful contributor to resilience and has consistently been related to resilience in both children and adults. Individuals whose acts are based on a strong moral compass guided by altruism are more likely to be resilient when facing stress and adversity using active coping style, and are less likely to develop psychopathology (Southwick, et al., 2005). As

was mentioned before, what is morally good is good for health (Antonovsky, 1995). According to Rachman, (1979) facing fears is a key component of active coping. Resilient individuals have learned to face fears and have ability to select appropriate action. Research on altruistic behaviour during WWII showed that individuals who cared for others suffered less trauma and anxiety than would be expected (Rachman, 1979). Our findings in the Shibboleth leaders confirm the relationship between resilience (SOC) and increased moral responsibility, courage (decreased laissez-faire behaviour) and altruism and empathy (Agreeableness).

## **6.5 METHODOLOGICAL CONSIDERATIONS**

The research presented in the present thesis utilized a randomized controlled trial design (RCT). RCT is traditionally considered as the golden standard for measuring the effectiveness of interventions across many diverse fields. With RCT design all participants are given the same opportunity to be randomly assigned into an experimental intervention group or a control group. However, RCT is not free from methodological problems.

### **6.5.1 Design**

The recruitment of participants does not guarantee representativeness of the “whole” leader population. Volunteering leaders, who were willing to undergo a leadership education without specification and were willing to participate in the extensive follow-up for one year and a half, may have been more interested and more accepting than the average leader may be. However, it is a major strength that randomization to both groups occurred after participants had accepted the conditions of the study (randomization and repeated measurements). Thus, dropout during the study was as non-differential as possible.

The study was designed as far as possible in a symmetrical way. The crucial difference between these two programs was the content itself. For both intervention groups the same education purpose and pedagogical philosophy was applied, equal time for the sessions was allocated and the structure of each session was similar. Accordingly, the design of the evaluation was constructed in such a way that the programs would compete with one another in a symmetrical way. All participants received the same initial conventional leadership training before they were exposed to the two different intervention programs. By providing similar leadership pre-understanding to all participants the leaders in the two groups could start from approxi-

mately the same baseline and with the same motivation to improve their own leader competence. This means that the contrast between the groups were diminished with ensuing possible attenuation of differentiation in results compared to a design where the two groups would have had entirely different interventions from the beginning. Despite this equalization effect of the design, significant differences between the groups developed after the end of the interventions.

There was only one supervisor team for each intervention. This means that the intervention principles that were tested could not be generalized to teacher teams in general. I, the author of this thesis, have constructed the Shibboleth concept. This could create a bias in favour of the Shibboleth program. The two professional leadership teachers at The Swedish Armed Forces have constructed the conventional program in close cooperation with one of my supervisors. The two teachers themselves also led the whole program and were both anxious to show that their program was the best one representing the “conventional” program, which could create a bias in favour of the conventional program. Therefore, while the general principles have to be tested with a larger number of teacher teams, our conclusion is that none of the programs has been systematically favoured in the design of this study.

The fact that the leaders themselves selected their co-workers may be regarded as a weakness compared to a random allocation. On the other hand the same conditions applied to both intervention groups. The secondarily recruited co-workers’ (via leaders) evaluations of their leaders were anonymous. The anonymity of co-workers is methodologically necessary (Atwater et al., 2002). Anonymity made it impossible to identify individuals in pre/post-measurements, so a collective mean score was calculated from the sums of the subordinates for each leader. It should also be emphasized that the co-workers were not involved in the interventions themselves. Therefore, any observed effect on them is unlikely to be biased. Of all our measurements only two, SOC and Agreeableness, are not link to the co-workers. It is also a strength in the design that the findings on DHEA-s changes which are less likely to be biased than the questionnaire findings point in the same direction as the findings on self-reported health changes.

Attrition due to unwillingness and openly stated negative attitudes to the project were infrequent. On the other hand the total attrition was high. The study design was complex and multi-level. It was based on the assumption

that leaders and their corresponding co-workers kept the same work position for almost 2 years. However, in the Swedish longitudinal study of employees ([www.stressforskning.su.se/slosh](http://www.stressforskning.su.se/slosh)) 38.5% of the participants who described themselves as managers reported that they had changed jobs during the past 2 years. Some of the total attrition in this study was due to the fact that some of the co-workers also changed jobs or went on leave of absence. These should be added to the attrition rate that was due to manager turnover with resulting loss of corresponding co-workers. Accordingly, the total attrition was on a level that could have been expected in the Swedish working life.

It could be argued that the Shibboleth concept is probably not appropriate for everyone. The intervention was perceived as emotionally, intellectually and aesthetically challenging and – although it was not a therapeutic intervention – inducing self-protective, defensive mechanisms. The artistic form and the topics were likely to affect deeper layers of personality and bring in existential questions (as “How should I live?”), and lead to painful reassessment of standpoints or self-understanding. One leader participant decided to leave the program after a few times due to strong discomfort. Two other participants did not like the concept, but continued to participate. On two occasions one/two person(s) left the room during performances but were back to discussion. However, the Shibboleth program is a leadership intervention and addressed to leaders. Assuming a position of power is a voluntary choice with which follows the duty to confront and cope with demanding, turbulent and many times a painful reality with complex value conflicts. Thereby and contrarily, it could be claimed that the demanding Shibboleth concept is appropriate for leaders, and possibly particularly suitable for leaders in high power position because such positions may exert great allure to lose contact with the actual reality and the self. People possessing high power are less willing to take the perspective of the others, are less willing to abandon their own vantage point, and tend to rely more on stereotypes (e.g., Fiske, 1993; Galinsky et al., 2008, 2006; Hogeveen et al., 2014).

Moreover, the leaders were recruited from different organizations and Roskam (2009) has argued that it may be preferable if all managers in the organisation participate in the same program (Theorell, et al., 2001). It is possible that this could have been of greater importance to the conventional leaders, because they may be more dependent of the support of others than the Shibboleth leaders who developed an inner independence.

Finally, it should be pointed out that all participants attended the two-days introductory standardised leadership program. Although the introductory program was disconnected from both intervention programs and conducted with another group than the randomized one, it could have affected the results in the two groups. However, the same condition applied to both intervention groups. Nevertheless, the introductory program could have a greater importance for the art-based intervention than for the conventional intervention. Since Shibboleth had no explicit connection with leadership issues in contrast to the conventional program, the introductory program placed Shibboleth in a leadership context. However, how and to what extent this introductory program impacts the results in the two groups requires further research.

### 6.5.2 Methodology and analyses

It could be claimed that the size of the sample in this research was relatively small and thereby not very generalizable. However, in an evaluation project a small sample size means that it is more difficult to achieve a statistically significant result; only very large differences may be statistically significant. Therefore, it could be stated that our findings indicating statistically significant results despite a relatively small size, are powerful.

For psychological and biological stress related health variables (study **I**) the fact that the first follow-up took place after a whole year whereas the second took place after 1 year and a half could potentially be a problem since there are pronounced seasonal variations in several of the studied outcome variables (Theorell et. al., 2000a; Persson et al., 2008). Accordingly increased cortisol excretion, reduced DHEA-s excretion and worsening mental health could be predicted during the dark part of the late fall and early winter – when the 18-month follow-up was performed. In particular, the concentration of this DHEA-S shows strong seasonal variation. This was counter-balanced by the design (identical follow-up periods in the 2 groups) as well as in the statistical analysis (2 separate analyses for each period).

In study **II** it could be argued that some of the observed group differences in development could be due to regression towards mean. However, the initial values did not differ significantly between the groups and for all the study variables the Shibboleth group ended on a better level than the other group although most of these differences were non-significant.

For SOA – self-other rating agreement – data (study **III**) a simple statistical analytical strategy was chosen. There has been some disagreement in the field over different methods for operationalization of self-other agreement. Our choice of method was dictated by the small size of samples, which made our study unfit for complex statistical analysis. It should be pointed out that the aim was to capture changes in the SOA over time. The changes themselves should be relative and independent of comparative methods as long we use the same assessment method for all subjects in both pre and post measurements. However, we acknowledge that using difference scores instead of applying polynomial regression (Edwards, 1993) is a limitation.

It could be stated that the assessment instrument DLQ contains dimensions that we have not analysed. In fact, we additionally tested the transformational leadership dimension (sum of “exemplary model”, “individualised consideration” and “inspiration and motivation”). The two intervention programmes may theoretically have different effects on this dimension. Although the MANOVA tests regarding transformational leadership showed no significant interaction effects, the pattern was similar however, with advantage to Shibboleth intervention; the agreement between the leaders’ and the co-workers’ evaluations increased and self-overrating decreased in the Shibboleth group in contrast to the conventional group. A possible explanation of non-significant effects could be larger dropouts. Another explanation could be that it is easier for subordinates to perceive the appearance of a desirable behaviour (a change from laissez-faire to more engagement and responsibility) than to detect the more subtle and elusive changes in the degree of “positive behaviour” (more of the “good” transformational leadership). It can also be that the Shibboleth method is more devoted to fighting destructive leadership, than to strengthen a positive behaviour.

In study **IV**, which is a phenomenological study, the aim was to interpret the possible characteristics that distinguish the subjective experience of Shibboleth. This obviously means that no claim is made on the statistical generalizability. Our interests have thereby been vertical rather than horizontal; to deepen the understanding of the experience of Shibboleth, rather than to investigate how widespread and frequent a particular experience is. Nevertheless, it is striking how coherently the participating leaders have experienced Shibboleth.



## 6.6 GENERAL DISCUSSION

### 6.6.1 How could we understand the negative effects of the conventional program

According to Lévinas (1985), “the boldest knowledge does not put us in communication with the real other” knowledge gives no one the opportunity to come out of oneself.

The main concerns about conventional leadership development programs’ weaknesses – their instrumental, reductive and standardized approaches – seem to be justified since the leaders in the conventional program developed a false sense of self-image followed by deterioration in responsibility (increased *laissez-faire* and inability to cope with stress). These changes were, in turn, followed by negative development in their co-workers psychological and biological condition. The co-workers reported increase in sadness, powerlessness and sleep problems as well as increased tendency to sweep the problem under the carpet (covert coping). Decreased psychological resilience was reflected in neurobiological resilience. The tendency to negative development in stress related health was visible already in the first follow-up when worsening of health was not expected due to the seasonal variations. The findings are consistent and demonstrate a decreased psychosocial and biological resilience in both the co-workers and their leaders. These results indicate that the impacts of the conventional program on the leaders’ behaviours and attitudes caused deterioration in the psychosocial work environment. There are studies that illustrate that DHEA-S decrease during psychosocially stressful periods (Theorell, 2009; Westerlund et al., 2004).

This negative effect of conventional training is in some respects inconsistent with some meta-analytic reviews (Avolio, et al., 2009; Taylor et al., 2009) that show weak, but positive effects of leader training in general. However, the meta-analytic reviews bundled all kinds of training; both conventional and experimental leader training was included. It is unclear if the methods of evaluations were based on comparison between two equal conditions/interventions (as in this research) or based on leaders’ satisfaction estimates, or on co-workers ratings. It is also unclear if *laissez-faire* and stress coping, or health effects on co-workers were among outcome measurements. Nevertheless, divergence of our findings in the conventional group from previous research may have implications for the interpretation. However, the considerable self-overrating in the conventional leaders after

the intervention complies with the meta-analysis, which shows that leaders' self-ratings were more than two-times higher than estimates based on the subordinates' ratings. Also, in accordance with our findings, meta-analyses show stronger effects of non-training-oriented leadership interventions (such as the Shibboleth intervention) versus those of developmental/training-oriented type (such as the conventional program in the present research).<sup>3</sup> This fact could be one of conceivable reasons for the deterioration in leaders after the conventional program. The reinforcement of an instrumental approach during ten months in the conventional group (versus the aesthetic/emotive/ethical impact of an art-based intervention) might have counterproductive effects. As Grint (2010) states, while a huge effort has been made to reduce the ideal leader to the essence, ironically the reduction has simultaneously reduced its value. Exaggerated attempts to capture the quintessential of leadership in prescriptive models and confirmation through (self-)recognition may simultaneously encourage dangerous feelings of overconfidence and of being able to control a complex reality through routine behaviour. Indeed, the findings in the present study demonstrate that the leaders developed a false sense of self-importance (increased over-estimation). Succumbing to hubris and becoming distanced is for leaders "the kiss of death" (Haslam et al., (2012).

The negative effect of conventional training is also inconsistent with the participants own satisfaction estimates through the two evaluations performed after the intervention ended and nine months later. The participating leaders described that they were generally satisfied with the conventional program, perceiving it as fruitful, informative, strengthening, and rewarding. They experienced that they have become better leaders, felt much more confidence and safer and were much more aware of how to act to achieve the goals, and how to talk to their co-workers not to be misunderstood, "convincing instead of persuading". Models and metaphors evoked recognition feelings, and the participants stated that they "recognized my work-

---

<sup>3</sup> Non-developmental interventions involved studies where the experimenter was manipulating the leader's behaviour through role plays, scripts, assignment, scenarios and so forth (Avolio, et al., 2009). Developmental/training-oriented type refers to leadership training or development as an attempt by the investigators to enhance an individual's knowledge, skills, ability, motivation, and/or perceived self-concept to enable them to exercise positive influence in the domain of leadership. (Avolio, et al., 2009).

place right away”. The exchange of experiences confirmed that all leaders shared similar problems, which made that “many big problems will be smaller” inducing feelings of relief. They got confirmation of their values and their view of leadership and their leadership approach. Models, tools and metaphors were perceived as very important and gave them strength, a platform to stand firmly on. The leaders were making efforts to put concepts into practice and implement them. They dared to let go of control, not to do violence on themselves and rely more on intuition, “trust my gut feeling and have a theory to lean on”. The most important leadership values they carried with them were the importance of employee participation and to delegate more. Then “the employees are satisfied and deliver a better result”, or “you get the maximum out of people, without simultaneously impeding”. They also reported that they worked less than before the intervention.

However, the co-workers did not share the leaders’ positive image and did not perceive their leaders as improved, which is in accordance with previous research (Eden, 1985; Taylor, et al., 2009). On the contrary, the co-workers experienced deterioration in both leaders’ responsibility, as well as deterioration in their own psychological and biological resilience. A number of characteristics can be distinguished that could explain such effects of the conventional program.

First, highlighting and confirming personal experiences, values and the familiar provide, of course, feelings of strength and security. But, at the same time, it may create ground for passivity and excessive self-importance, especially in a position of power. Confirmation does not challenge values and self-image; however, critical examination is an important motivational force for self-improvement. Indeed, the leaders did not mention that they had undergone some self-examination or self-re-evaluation. Feelings of recognition do not stimulate to extend specific/everyday experiences and own sphere of interest. However, to understand and interpret the alien or to see the world through the eyes of the others is a source of gaining universal knowledge. Looking inwards before recognizing others, “to thine own self be true”, is indeed, the basic orientation of narcissism (Sparrowe, 2005).

Second, using the explanatory models of reality as a comprehensive platform to work from, and making efforts to realize these models could create a reversed order leading to reality alienation effects. Rather than to be a starting point for independent judgement, reality and human beings are subsumed according to reductive models, which is at odds with the actual de-

mands that the complexity of authentic experiences set. As Martha Nussbaum (1995) stresses, “we should be on our guard against this lightness with which simplified models tend to take over and begin to be like the whole of reality”. Indeed, the leaders did not mention the human complexity or ethical consideration or emotional aspects in their relations to the co-workers. One can clearly see in the leaders’ statements, an instrumental ethics towards their co-workers. Such an approach may also lead to an attitude of moral indifference, adiaphorization according to Bauman (1995), which means “making certain actions, or certain objects of action, morally neutral or irrelevant - exempt from the categories of phenomena suitable for moral evaluation.”

Third, affirmation of intuition and gut feeling combined with trust on the models do not stimulate ability for judgement, it rather stimulates an anti-intellectual approach. Relying on human intuition is often a mistake; intuition is usually based on feelings and stereotypes and may be a great source for failures (Kahneman, 2011). We tend to see our intuitions as the product of some natural force that understands more than we do, however, the intuition may provide great biases because it captures just a part of the whole and because it is often determined by immediate self-interest, people tend to believe what they want to believe (Baron, 1998).

Fourthly, over-emphasis on co-workers’ participation could create a counterproductive pseudo-democracy – a kind of moral indoctrination where in the name of high values, development of instrumental and institutionalised ethics and convenient escape from responsibility could take place. Over-promotion of employee participation can ironically also underline and consolidate the distinctions and distance, “us and them”, highlighting the employee’s inferior position, which instead of inclusion may create an exclusion effect reinforcing the leaders’ superiority attitude. It has been shown that employees’ health may be negatively correlated with a democratic leadership style and high participation (Tollgerdt-Andersson, 2005). However, a democratic leadership style and the promotion of employees’ participation are undoubtedly good and desirable values, but such values should come from the heart. Regenerating values “administratively” (Habermas, 1975) does not mean that they will become by themselves internalized and anchored in the leaders’ moral conscience. Participation entails that leaders build high-quality relations with followers and that they really share the same world, the same organizational value system, and the feelings of being part of a common “we”, and not just sharing “technical” information. Such value congruence, which requires laborious efforts, pro-

motes communication and the development of trust within relationships (Edwards et al., 2009).

#### 6.6.2 How could we understand the positive effects of the Shibboleth program

According to Hanna Arendt (1968), the function of education is to teach what the world is like and not to instruct in the art of living. The Shibboleth intervention and the effects it has had on the leaders were strikingly different from the conventional intervention. Based on the results from the four studies, the leaders' experiences of the Shibboleth program and development can be interpreted and discussed as follows:

No instrumental intentions, self-enhanced efforts, no specific messages, other than the artistic were conveyed. The leaders had not received ready-made answers or "the right" moral system or ideas; on the contrary, the world opened up as a question (in their notes the participants raised countless amounts of questions). They were not expected to learn from what they had heard or to associate to leadership practice or own experiences, and did not get any help to find meaning. On the contrary, they had to rely on their own sensations and judgment. They did not train any social skills such as how to act and to talk to their co-workers. Opposing, they cultivated their values and feelings, and loyalty to human beings, not to learned models and leadership ideas. They could not satisfy their needs of confirmation; rather, the "illusions have been crumbled" (as one leader expressed it). The participants were forced to abandon own self-absorption and extend their subjective and everyday circumstances and experiences. They were forced to shift the perspective from their own sphere of interest to the universal – from "I" to "we" and to pay attention to the outside world (which could appear strange or irrational) and put themselves in the place of people of different kinds and in different kinds of circumstances. They were forced to "read" the world through the eyes of others, different from themselves. They could participate in, and feel the suffering of others, assist in their struggle, ambivalence, wishes and desires, and in their impossible moral choices and helplessness when facing things beyond their control. They were confronted with the complexity of life, with destruction, unfairness, cowardice – insights that are disturbing and induce powerful emotions which cut through self-protective mechanism, which requires a response. Such impressions evoked deep feelings of compassion and reverence for life – feelings of being part of a common "we". Facing the painful complexity of being human in an aesthetically demanding way forced self-critical evaluation, which increased awareness of moral responsibility through "seeing oneself as an

other” (Ricoeur, 1992). Such insights could have given strong incentives for concern for others and for doing something about unfairness and disasters, and mobilize the leaders’ courage to take a stand and act when required – a moral courage to act (Monroe, 2011). These experiences could have increased humility in the leaders and connected them more closely with followers. Sharing a common humanity, a sense of “us”, is central to the social influence on followers and lies at the heart of effective leadership (Haslam et al., 2012).

#### 6.6.2.1 *Increased psychological complexity*

In order to be able to include the new challenging reality in the process of appropriation of Shibboleth, the participants seemed to expand their psychological “structures” or stretched their mental boundaries (“cognitive stretching”, Piaget, 1932), and developed more psychological complexity (cognitive/imagination, emotional and ethical).

The participants got hold of deeper levels of their subjectivity (higher level of self-awareness) that previously was hidden by self-importance or high level of prestige, or when one defines oneself as someone firmly determinate. Here, I would like to refer to Beauvoir and her concept of *Ethics of Ambiguity*. Beauvoir (1976) discusses two different, conflicting ways of being in the world. The first, “wanting to be”, refers to a striving for existence away from freedom and anxiety, a desire for childhood’s security and cheerfulness without bearing responsibility. Such strive to be what we are not, is doomed to fail. What is required is a change of attitude from “wanting to be” to “wanting to disclose being”, which is the condition of an authentic being and a source of ethical existence, “an original type of attachment to being... Now, here there is not failure, but rather success” (p. 12). Such attitude implies to confirm our ambiguous connection to the world, the vulnerability and the fact that we cannot help being affected by it. By “parenthesizing” our “wanting to be”, an abstention from common sense attitude, we discover and get in touch with our subjectivity, and can gain access to an emotional life and joy and vitality in addition to anxiety and disruption. However, “wanting to disclose being” is difficult and psychologically laborious. Beauvoir’s ethics of ambiguity raises the question of our humanity, to respect and bear responsibility for “we”.

One of the most apparent effects of Shibboleth is that the leaders seemed to expand their relational self; how they see themselves (self-image) in relation to others. Monroe (1996, 2011) means that such way of seeing oneself

in relation to others as *closely connected through bonds of common humanity* lies at the heart of altruism. This “altruistic perspective”, to experience oneself as linked to the others, in which moral imagination plays a critical role, is possible to activate, according to Monroe, through varied factors in the external environment. The increased “altruistic perspective” followed by increased awareness of moral responsibility can be an explanation to the Shibboleth leaders’ underrating of their laissez-faire behaviour that occurred after the intervention – the feeling that one can always do more. According to Lévinas (1982), a moral person does not believe that he or she has done enough: “Don’t ever console yourself that you have done everything you could, because it’s not true.” The feeling of ambivalence is inevitable for moral awareness (Bauman, 1995). Such increased moral responsibility, intervening when something is wrong or unfair or when somebody is humiliated (decreased laissez-faire behaviour), brought into the leaders a greater appreciation of own courage and greater self-esteem and self-respect, which is in accordance with Lévinas’s (e.g., 1985) conception of subjectivity implying that moral responsibility is the basis of our self-esteem/respect. According to Monroe, (2011), we can only find self-esteem and self-respect and the humanity in ourselves by honouring it in others.

An intriguing observation, which indicates a reverse order in development that was not expected, is that the development in the leaders was probably determined by a strong moral obligation, a moral imperative to assume responsibility and act. Increased ability for empathy (Agreeableness) was observed only in the second follow-up, but changes in behaviour (decreased laissez-faire – increase leadership responsibility) were already visible in the first follow-up. The hypothesis could be that increased efforts to assume responsibility brought with it changes in attitudes and not vice versa.

Decreasing laissez-faire behaviour is not a trivial psychological process; it means being able to abandon the position of indifference, cowardice, uniformity, and self-absorption / blindness. In addition, people often consider the harm caused by their evident negative actions to be more moral severe than harm caused by omissions of action (Baron, 1998). Thereby, to be aware of the harm we cause through failing to act requires a sharp ability to moral imagination and moral judgment or a strong moral imperative. An intriguing observation regarding laissez-faire behaviour is that the leaders also reported that they worked more than before the intervention, which again

is contrasting with the conventional leaders who reported that they worked less after the intervention.

Taken together, the participants dedicated themselves to the “alien” Shibboleth. They heard the call to take a stand to reflect in their lives. They were able to accommodate *complexity*, their own ambiguous and contrasting sides and hold more contradiction in their thinking, a *dialectical* “both-and” thinking, rather than an “either-or”. They allowed Shibboleth to matter in their lives, despite the fact that their life differed drastically from the experiences portrayed in Shibboleth. Shibboleth was not defined for a specific aim, and did not convey any specific messages but addressed the universal existential problems. This could have made it possible for each individual leader to receive Shibboleth in a unique personal way and to develop the psychological processes that she or he needed to develop, and to find their own responses meaningful in their own life. It made it possible to open up the buried experiences of the past, which could be interpreted in new ways revealing truths about one’s life and existence in general, and thereby offering new future possibilities. Thus, the leaders’ aesthetic experiences were transformed into a lived reality.

#### 6.6.2.2 *Psychological complexity and leadership effectiveness*

We interpret the findings in the Shibboleth leaders as an expression of a psychic growth towards a more complex and integrated ‘self’ in which the realisation of one’s own ability co-exists with awareness of one’s own limitations. I would like to refer to research regarding leadership effectiveness, which is in strong accordance to the results in the current thesis.

Kegan and Lahey (2001) in their research in adult development theory applied to leadership, claim that great mental complexity correlates with leadership effectiveness and an improved capacity to cope with uncertainty in genuinely creative ways. Leaders at higher levels of mental development operate more efficiently because they are able think in more complex ways.

A longitudinal study (Keith, 1998) that examined CEOs of major corporations (each with annual revenues of over \$5 billion) showed that there was a clear correlation between higher levels of mental complexity and higher levels of effectiveness. Keith and Kuhnert (2005) have identified, based on research with 21 top leaders, characteristics that highly effective leaders have in common, labelled “the theory of leadership development level” (LDL). LDL is defined as the capacity to understand others, our situations,



and ourselves. It focuses on advancing a theory of the whole person: the levels of maturity that shape the mental and moral capacities of leaders. They conclude:

“Leadership effectiveness is not gained simply by piling more skills onto the same level, or by increasing the capacity to recite company leadership competencies. It is gained by fundamentally changing the way we address leadership development – it is not just what you know, but where you know it from that matters. The future of our organizations depends on successfully identifying and developing all leaders to higher LDLs – to a place of greater authenticity – so that they can respond effectively to the increasingly complex demands of our times.”

## **7 THEORETICAL IMPLICATIONS OF THIS THESIS**

## 7.1 THE AESTHETIC, DIALECTICAL PROCESS

“I think we ought to read only the kind of books that wound and stab us. If the book we are reading doesn’t wake us up with a blow on the head, what are we reading it for? ...We need the books that affect us like a disaster, that grieve us deeply, like the death of someone we loved more than ourselves, like being banished into forests far from everyone, like a suicide. A book must be the axe for the frozen sea inside us.”

FRANZ KAFKA. Letter to Oskar Pollak, 1904.

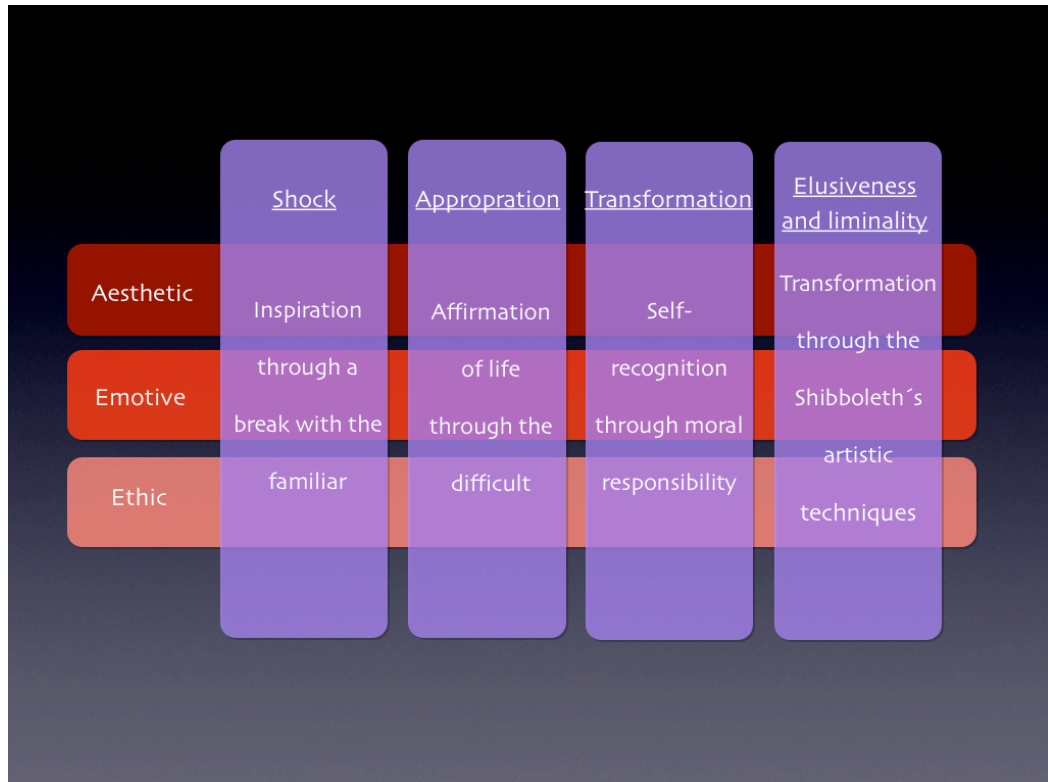
The scientific contribution of this thesis is, in addition to empirical findings, the theoretical concept of *aesthetics* (*aesthetic*, *emotional* and *ethic* dimensions). The notion of *aesthetics* conceptualises the core that constitute the transformative power of Shibboleth. The concept of *aesthetics* can help to clarify the underlying conditions for successful training programs in general.

Encountering Shibboleth entailed a drastic break with the familiar and was both a negative and a positive experience; making oneself susceptible to the alien, for others and one's own suffering was painful. Existence became more vulnerable, more solemn and more demanding. It could be claimed that the positive changes do not outweigh the negative aspects and that such a challenging psychological process could even increase vulnerability. Yet, in accordance with various authors, we argue that the negative experiences are just the underlying condition for the positive effects, and that the dialectical, aesthetic nature that constitute the core of Shibboleth's impact is offering the participants a world with the simultaneous validity of contrasting poles.

Below follows the description of the concept of the aesthetic, dialectical process. The *aesthetic approach* (presented in the result section) that the leaders adopted constitute the inner structure in each following characteristic:

1. Aesthetic shock: inspiration through a break with the familiar
2. Aesthetic appropriation: affirmation of life through the difficult
3. Aesthetic transformation: self-recognition through moral responsibility
4. Elusiveness and liminality through the Shibboleth's artistic techniques

The order in which the four characteristics are described does not imply a strict causal sequence; the different characteristics may coexist in varying combinations throughout the whole process and can be seen as a progress in a spiral motion.



**Figure 19 The aesthematic, dialectical process**

#### 7.1.1 Aesthematic shock: inspiration through a break with the familiar

Facing Shibboleth is like a shock that breaks the familiar, and is both a negative and a positive experience. *Emotionally*, Shibboleth was perceived to uncontrollably affect the self's deeper levels and to awaken unwelcome and fearful feelings. *Ethically*, working against the denial mechanisms, the participants experienced Shibboleth to force them to relate to the suffering of others. *Aesthetically*, the artistic form awakened a strong imaginative awe at something unique, beautiful and magical. In this dialectic, destabilising tension, in the oscillation at the threshold between alienation and coercion on the one hand, and the feeling of freedom and enchantment on the other, there occurs a drastic break with a habitual, self-absorbed attitude. This break may provide an incentive to go beyond the given. The shock / break is assigned great transformative importance by theorists. According to phenomenology and psychoanalysis, to mature mentally, a radical break with an ingrained, "natural attitude" (Husserl, 2012) is required: when we lose control of our intentions, strange, repressed, and twisted emotions within us

can be transformed and integrated into something meaningful. For Lévinas (1985), the break has a major ethical significance; in “the gravity” of breaks, we question our good conscience. Ricoeur (1991a) speaks of “the shock of the possible” through art experience that reorients our thinking providing new ways of being. Similarly, Adorno (1997) refers to “the shock” aroused by art that mediates strangeness beyond the immediacy; we feel “attacked”, “shaken” and “lose our footing” and “truth... becomes tangible” (244). These epiphanic moments “those lightning flashes seen by a closed eye that has received a blow” (Adorno, 2005: 236) gives the impulse to think differently and frees man from “his fetters” (Adorno, 1973a). Such moments can also, according to Fischer-Lichte’s (2008), strike us by a “stream of magic”, a sudden, intense experience of “radical” presence, “embodied mind”, which cannot be recreated in daily life and may be a source of power and happiness. The above closely captures the participants’ description of their experiences with Shibboleth: one sees with new eyes/new light, and new thoughts or feelings, never experience before, reveal themselves, as well as the intensive feelings of presence, freedom, happiness and gratitude for life.

#### 7.1.2 Aesthematic appropriation: affirmation of life through the difficult

The appropriation of Shibboleth was effectual, but at the same time challenging with experiences of e.g. guilt, fear, anxiety or evil. Simultaneously, there was a sense of security that “this cannot hurt me”. The participants discovered, with wonder, the courage to accommodate the difficult from the outside and the dark from the inside. They also found the liberation of fantasy, joy of life, and recreational power. Shibboleth provided a kind of dialectical *aesthematic distance* whereby self-defence could be transformed, according to participants’ reports, to a creative self-extension and a reorientation; this may have enabled them, with the power of imagination, to feel compassion with the suffering of others, without mirroring oneself in it. It may also have enabled confrontation with one’s own suffering, without losing oneself in pain. The importance of the dialectical combination of distance in relation to the self (the abandoning of the narcissistic self) and appropriation (making “the strange” one’s own), is discussed in more depth by Ricoeur (1991a).

One can argue that the harrowing appropriation process is not necessary or even may be counterproductive; yet, several theories claim that it is needed and can be transformative. Aristotle in the Poetics use the word “catharsis”, which could be interpreted as purification and purgation of emo-

tions through arts, the feeling of being washed or cleansed through “pity and fear”. According to Klein (2002), psychic growing requires a demanding process that enables a shift from a safety-focused splitting of the world into black and white, to a “depressive” position where we are able to accommodate both good and bad. In this process we learn to believe in our reparative power and stand loss, guilt and grief, without placing all evil on others. The feeling of anxiety and guilt is a prerequisite for moral maturity; we take responsibility for others and wish to atone and repair, which converts the destructiveness into creativity opening new possibilities. In Lévinas’s conception (2003a), similarly to Klein, shame should lead not to harm but to obligation for us to claim responsibility for ourselves, and motivation to compassion. For Ricoeur (1960), to confess guilt and anxiety means, at the same time, discovering freedom. Echoing Nabert, Ricoeur argue (Nabert, 1962) that attention to the dark experiences such as guilt, anxiety and erring, is absolutely fundamental to the understanding of existence; optimism can never make us directly aware of an original affirmation of life, liberty and opportunities. “The need to give voice to suffering is the condition of all truth”, according to Adorno (1973b: 17) and art, which is “the language of suffering” offers a unique opportunity for criticism. Ricoeur (1991b) likewise, means that through art/fiction we create “imaginative variation of the ego” allowing for criticism of our illusions that provides “redescription” of the world, especially the worlds of action and suffering. This work is transformative. Therein lies the subversive force of “poetics”. Drawing from Jasper (1947), Ricoeur (1992) believes that Greek tragedy gives us “the shock capable of awakening our mistrust with respect not only to the illusions of the heart but also to the illusions born of the hubris of practical reasoning itself “ (241). Such “tragic wisdom”, just because it does not produce a univocal ethic teaching, forms the “tragic source” of our practical wisdom, or *phronesis* (a sense of appropriate moral judgement that governs one’s conduct, from Aristotle, 1980). Nussbaum (1990) as well, argues that *phronesis* can be practised through arts becoming an entrenched virtue, and she emphasizes, echoing Aristotle, the fundamental role of feelings and fantasy in *phronesis*. *Phronesis* can be likened to a poetic ability, as it requires creativity (Miller, 1996). Bourdieu (1992) speaks of poetry’s “reality effect”; the magical efficacy to highlight what is “buried in the body’s folds”. The participants expressed something similar: “I do not need to reflect, it’s part of me”. The approach that the participants adopted in their encounter with others, to deal with particulars in a particular context and make the individual in a

specific situation one's starting point resembles phronesis.

### 7.1.3 Aesthethetic transformation: self-recognition through moral responsibility

The crucial turning points can be summarised as follows: (i) the recognition of *limitations of existence*, the tragic side of life; one's own and others vulnerability, complexity and inherent potential for destructiveness, as well as the uncontrollable and ambiguous nature of existence. (ii) At the same time the designation of the self as a *morally accountable* subject with power to act, take a stand and care for others, which (iii) entails an enhanced sense of a common humanity, humility and self-esteem, and also care for one's own wellbeing. The turn towards moral responsibility for others, which the participants had, according to their reports, never experienced before, and the link to self-recognition/self-esteem is in line both with Ricoeur's and Lévinas's ethics. For Ricoeur (2004), "the capable human" always detour through hard-earned lessons of outer experience to identify oneself as a moral responsible subject; only through recognition of the limitations of both human action and human suffering is our capacity to act genuine. According to Ricoeur, self-understanding/self-recognition, the true self, can never be grasped by introspection, but proceeds indirect, from the interpretation of signs given outside and in critical communication with others (Ihde, 1971). Lévinas in his ethics of Otherness (1969, 1987) claims that it is in the encounter with the other, different from oneself, one's subjectivity/identity is constituted, and not within itself. Hence, preserving the other's alterity is for Lévinas the core of ethics. A full self-recognition occurs when going beyond; a deliberate "deposition" of the self to take responsibility for the other. Then, and only then, can one fully appreciate oneself, which means a reversal of the famous "you have to love yourself to love another". When the others are revealed to me, in their vulnerability and suffering, which Lévinas (2003b) calls "the epiphany of the face", no one can take my place. For Lévinas (1985), man's humanity, the genuine significance of a human life, consists of taking responsibility. Mature humans' "difficult freedom" (Lévinas, 1991) is to expose themselves to the severity of existence, and humbly responding to the unique other. The above mirrors the participants' sense of a self-worth detour through efforts to taking responsibility for others.

The etched memory images work as aesthethetic traces, suddenly releasing themselves after a long time in different particular contexts emerging a new understanding capable of guidance in the world. According to Adorno's (1997) concept "art as memory" such "traces", like a flash, can be trans-

formative, generating new understandings. The ethical importance of “memory trace” for connecting us to the other or to the past, have also been discussed both by Lévinas (2003b) and Ricoeur (1991b).

#### 7.1.4 Elusiveness and liminality through the Shibboleth’s artistic techniques

The dialectical tension between contrasting modes that the participants had been found in, an indeterminate and destabilizing state where one crosses a boundary, allows, according to numerous scholars, for a transformation of the self. Such “liminal experience” (to pass a threshold), a state of “betwixt and between” (Turner, 1995) builds a creative sphere in which new ways of acting are tried. Turner refers to the pioneering works of anthropologist van Gennep (1909) who showed that cultural performances “rites de passage” are divided into three phases: (i) the phase of separation from everyday flow and contexts; (ii) the liminal or transformation phase – a labile “in-between” state, allowing for entirely new, partly disturbing experiences preparing to a new identity; (iii) re-entry into the everyday world.

The elusive transitional “in-between” state is a central idea in Iser’s perception theory (1974). According to Iser, one of the most important literary theoretician, art experience requires an “aesthetic response”, which means activating of creative imagination to produced meaning. A modern, fragmentary artistic technique forces our imagination to fill in “hiatuses” and to fit different segments together, and “uncover the unformulated part” (287). In this dialectic position between presences and absences we oscillate between anticipation, revision, frustration and surprise, “we look forward, we look back, we decide, we change our decisions, we form expectations, we are shocked by their non-fulfilment, we question, we muse, we accept, we reject; this is the dynamic process of recreation.” (288). The “interplay of illusion-forming and illusion-breaking”, movement between position and counter-position, results in a “strange situation” (289), we do not know what it actually entails, we “prepare us for a re-orientation” (290). We are forced to confront the alien and negate the familiar. We impart “lifelikeness” to such experience, which enables us to absorb the unfamiliar. We must suspend the attitudes that shape our personality. The shattering of expectations and undercutting of norms will “inevitably” bring us “above the threshold of consciousness” and we will be shifted into a new perspective that “brings to light that which remained hidden so long as their validity remained unquestioned” (Iser, 1993: 136); We are changed.



According to Fischer-Lichte (2008), a leading theatre researcher, the aesthetic experience of a theatre performance pervades of “the liminality, instability and elusiveness” (157). Such transformative experience is created from an autopoietic feedback loop (a self-referential process of an ever changing interaction between the representation/content, the act of performance itself, performers, their voices, the spatial design and the spectators), and perceptual multi-stability (the shift of perspectives between order of presence/corporeality and representation/content). Each shift produces discontinuity and is the condition for an associative generating of meaning, which “may lead to further autobiographical reflection” (157). The spectators’ perception swings continually, they cannot control this ambiguous process and are caught in a state of elusiveness and liminality that is likely to be experienced as crisis. Spectators might remain in a state of destabilisation long after the performance, and reorient themselves later upon reflection.

#### 7.1.4.1 *The crucial and dialectical role of the artistic form and music*

The Shibboleth experimental, artistic technique was perceived as especially challenging by the participants; full of blockage with unexpected contradictions that demands multiple attention and force imagination to fill in the unsaid and to link the fragments together. Yet, at the same time the performances were experienced as especially affecting in a way the participants have not experienced before. In its multimodal and polyphonic expression, Shibboleth may produce an autopoietic feedback loop and perceptual multi-stability triggering a strong liminal experience. The ongoing, unpredictable shift between art genres and of reading voices, as well as the affective contrasts between music and text, all reinforce destabilisation of perception and increase the tension between decoding the text and presence. Such a process triggers affective, physiological and volitional reactions.

The impact of Shibboleth’s technique was *aesthematical*, influencing aesthetics/creativity, emotions and ethics, and *dialectical*, reinforcing the liminal experience. The participants experienced a dialectical impact with two contrasting sides’ simultaneous validity, to name a few:

- a reflective distance, at the same time a strong affect
- the feelings of claustrophobia, at the same time the feelings of liberty
- an intensive concentration, at the same time a loss of control
- bodily reactions, at the same time transcendental moods
- the feelings of tiredness, at the same time the power of energy

- the feelings of incomprehensibility, at the same the power of fantasy
- to be shaken, at the same time to be carried
- a feeling of alienation, at the same time enjoying life, etc.

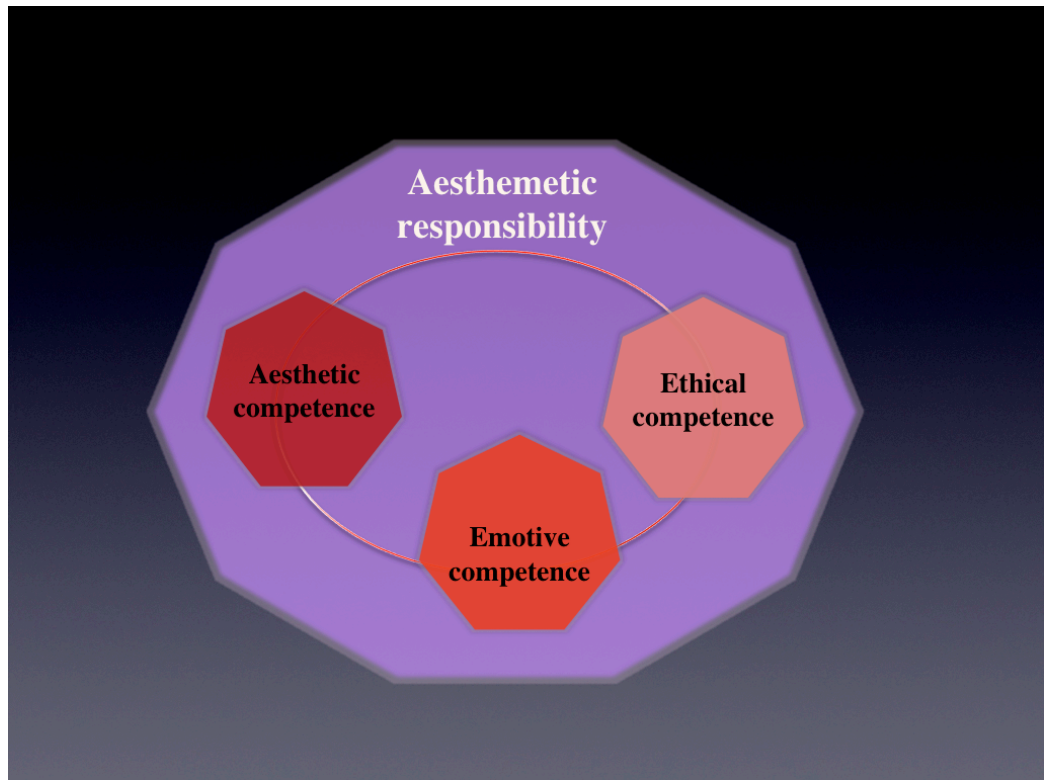
According to the participants, the music played a crucial role for the experience of Shibboleth as a transformative power; sometimes triggered shaking new thoughts whereas sometimes it was supportive having a sheltering power that made it possible to take in the difficult and “dreadful” from the Shibboleth performances. The music affects the body and activates self-referential processes (Fischer-Lichte, 2008). Music has the unique ability of stimulating visual imagery, it is like a “fantasy ground” and both portrays and arouses a wide range of complex emotive states and reactive emotional memories (Juslin and Västfjäll, 2008), and may become an antecedent of an empathic response (Hoeckner et al., 2011). Interaction between music and text could facilitate a context for understanding through broader associations. It has been suggested that music evokes emotion by creating dynamic patterns to which our socio-emotional brain is particularly sensitive (Coutinho and Cangelosi, 2011). Music might contribute knowledge facilitating empathic response and empathic concern (Hoeckner et al., 2011).

## 7.2 AESTHETIC RESPONSIBILITY IN LEADERSHIP

“Between two human beings the step is huger than between the worm and the highest vertebrate. In order to compare one face with another we need to change our point of view thoroughly, as well as all our measures and principles. Not one of those categories being fit for a certain human being would do when we stand in front of another.”

Bruno Schulz. Letter to Maria Kasprowicz 1934

The Shibboleth’s “laboratory room” allowed learning through experiences unavailable in the empirical world. Making such experiences as if they were for real, however without being directly affected by them in the lived life, may provide understanding of what it means to live in other ways than our own. In such imaginary, liminal and precarious room, aesthetical, emotional/bodily and ethical dimensions are inseparable. By adopting the aesthetic approach, the participants cultivated aesthetical, emotional and ethical responsibility. Based on these empirical findings the concept of *aesthetic responsibility in leadership* is presented below and thereby constitutes one more theoretical implication of this thesis. Aesthetics is a construct with no sharp boundaries between its three components, which are to some extent overlapping.



**Figure 20 The aesthematic responsibility**

#### 7.2.1 Aesthetical responsibility – thinking beyond the expected

Aesthetical responsibility involves openness to different kinds of new impressions and openness to different kinds of creative thinking. Divergent thinking, which refers to the way of thinking through associations in many different directions, is at the heart of the creative process (Guilford, 1950), and makes us to see differently than the regular. Several philosophers put the aesthetic ability of imagination in the centre of our knowledge and understanding of the world (e.g. Nussbaum, 1995, e.g., Ricoeur, 1991a). The aesthetic ability to creative/productive imagination helps us to interpret the multitude of impressions, to recognize patterns, and to create coherence and meaning (e.g., Kant, 2003). Through manifesting meaning, the imagination forms the basis for our actions. Thereby, taking responsibility requires creativity (Bauman, 1995; Johansson, 1998) to find new ways to act and to move from the known to the unknown, which imply being able to imagine what has been, what exists but is hidden, and what possibly could come. To be responsible requires ability to put ourselves in the position of someone different and to think from this standpoint (empathic imagination: the ability to be receptive to the other and it, Kerney, 2002). To be responsible requires also ability to imagine the moral consequences of the actions of oneself and others, even non-existing possibilities (ethical imagination: the

ability to response to the other, a response to suffering and exploitation, Kerney, 1991). Moral imagination plays a critical role as the link between empathy and affective and cognitive processes (Westen, 1995); our perception of both the self and the others govern our treatment of other people (Mikulincer & Horesh, 1999).

#### 7.2.2 Emotional responsibility – a “paradox of resilience”

Emotional responsibility involves openness to different kind of feelings, including emotional openness for the tragic sides of life that not only are linked to the self in response to own needs, but also a readiness to become emotionally involved with others who are different from oneself. Such readiness of accepting, enduring and coping with a spectrum of painful emotions of ones own and others may lead to better coping and increased resilience. Van der Hart et al. (2006) talks about “the act of triumph” and means that by abandoning an escape behaviour the trust in own ability to cope is restored. Walsh (2009) speaks about a “paradox of resilience”, that, “in the midst of suffering, as we search more deeply within ourselves and reach out to others, the hardship endured opens ways for the spirit to grow.”

#### 7.2.3 Ethical responsibility – a universalist way of thinking

Ethical responsibility involves openness to ethical self-criticism grounded in awareness of the limitations of human action and the potential destructiveness inherent in all exercise of power. Recognition of human otherness, vulnerability and suffering obligates to a responsibility resting on an ethical foundation of a common humanity that stands independent of a temporary order. According to Fairholm (2001) leaders cannot compartmentalize their lives into separate behaviour patterns so that what they accept in one situation, they ignore in another. Such an ethical position entails a universalist way of thinking as it relates to all people (Lévinas, 1985) and includes the courage to take a stand when no one else dares to.

## **8 CONCLUSION AND FUTURE DIRECTION**

The research in the current thesis explored complex interdisciplinary questions aiming to elucidate a chain of association to which various possible theories could be linked. The contribution of this thesis to different fields of research is the following:

*Conclusion I:* There is a widespread belief that leadership development is making a difference. The results of this research have confirmed this difference; leadership development can have a transformative effect on the participants' values and behaviours and the impact of this transformative influence can extend to the employees' attitudes, behaviours, and their psychosocial and biological resilience processes. Then, like ripples on water – when leadership changes, employees change.

*Future direction:* Given these empirical findings, it is of great importance to increase the scale of future research in the leadership field, and to take greater responsibility in the choice of evaluation methods.

*Conclusion II:* We used three evaluation concepts:

- 1) effects of the intervention on poor aspects of leadership,
- 2) effects on employees' psychosocial and biological stress
- 3) the inner perspective that reveals the Shibboleth's impact force

The three evaluation concepts seemed to fulfil their function and the selected evaluation aspects yielded results in both groups in two contrasting directions, thus confirming its strength. Hence, the choice of the concept and focus on the negative, destructive leadership styles and the negative impact it represents to employee development is justified.

*Future direction:* Given these empirical findings, we suggest that using our evaluation concept can be meaningful and may contribute to more efficient future scientific evaluations of leadership interventions.

*Conclusion III:* The quality of leadership development seems to be of utmost importance. The two intervention programs have affected the participants in strikingly different ways and consequently, their co-workers. The Shibboleth intervention seems to counteract poor leadership resulting in strengthening of psychosocial and neurobiological resilience processes in their co-workers. The contrary effect of the conventional program was observed.

*Future direction:* Given these empirical findings, it is essential that the fu-

ture evaluations of leadership interventions put more emphasis on capturing the potential adverse consequences of leadership intervention instead of focusing the positive effects. It is also essential to not solely rely on the participants' satisfaction assessments. Such assessments have been proved to be in strong discrepancy with the actual impact of the education on the leaders, as perceived by their employees.

*Conclusion IV:* The theoretical contribution of this research, based on empirical findings, is the introduction of two new concepts of *Aesthetics* (combination of aesthetical, emotional and ethical aspects):

- 1) The *Aesthetic, dialectical process*, which demonstrates leaders' efficient transformation, may contribute to gain an increased understanding of the conditions for successful education in general
- 2) The *Aesthetic responsibility*, which demonstrates leaders' adapted approach during the process of transformation, may contribute to more successful leadership

*Future direction:* This theoretical contribution can provide important ideas that I hope will motivate further research.

*Conclusion V:* There is strong evidence for the inverse correlation between power and the ability to be in touch with the actual reality and the self. As was mentioned earlier, possessing power may interfere with our ability to experience and comprehend the surrounding world. Especially holding high power may (i) limit our ability to see the world through the eyes of the others or to put one's self in the place of the other; (ii) reduce our ability to abandon own vantage point or stereotypes. The results in the present research suggest that Shibboleth counteracted such tendencies in contrary to the conventional training.

*Future direction:* Thereby, it could be claimed that the demanding Shibboleth concept may particularly be appropriate for leaders in high power positions.

Finally, this may be the first research to demonstrate that changes in behaviours in leaders through aesthetic experiences results in transferred effects on psychological and neurobiological resilience processes in followers, leading to health-promoting effects.

The striking differences in the effects of the two different types of interven-

tions raises some essential questions for future research in the field: What leaders do we want? What are the values that govern the design of the established leadership training? To what extent are we aware of what *kind* of influence training programs exerts on us, and the consequences of it? What is the level and the quality of the impact that our leaders exert on us? Do we value the power inherent in the arts and culture?

The current results indicate that the force of art may be great and lead to better human conditions. The Shibboleth participants placed responsibility, courage and human dignity at the heart of leadership and expressed feeling of being part of something bigger than the self – the common humanity. They testified that participation in Shibboleth was an exercise in integrity, working against the denial mechanisms: to not deny the unseemly and inconvenient and what falls outside of the rational order, to not deny conflicts and suffering that are hidden and that arise due to life's inevitable contradictions or indifference, conformity and self-absorption.

Facing Shibboleth was an encounter with alterity (otherness). The Shibboleth's pedagogical model, the content, the artistic techniques, the way of performance, the speech act eye to eye as well as the participants themselves created a wholeness – this is the essence of the Shibboleth's transformative power.



## **9 ACKNOWLEDGEMENTS**

This thesis would not have been possible and seen the light of day without Töres Theorell. You are a remarkable person and I have been incredibly fortunate to have you as my main supervisor. You gave me freedom, which forced me to explore on my own. At the same time you offered your wise judgment and guidance when my steps faltered or when things were not as expected, or obstacles seemed insurmountable. Your unflinching loyalty and belief in my work seemed infinite to me. Everything from your amazing patience to repeated examination of my texts and rapid answers is very much appreciated. Without your encouragement and dedication, your quick intellect and openness, your non-intrusive thoughtfulness and empathy, and your strong humanity, I would not have made it. You are in my heart.

I gratefully acknowledge my co-supervisor Gerry Larsson for allowing me to bring my ideas to you. You have an ability to highlight the positive sides and at the same time make challenging observations, which were thought-provoking and forced me to penetrate problems. Thanks for your sharp gaze, examining both the overarching structure and the smallest of details; I am also indebted to you for your help in ensuring the quality of the conventional training and providing necessary resources from the National Defence College in terms of assessment tools and also processing data consisting of hundreds of answers.

My co-supervisors Anna Nyberg and Walter Osika, my heartfelt thanks for your support; for your insightful advice, references to literature, and amazing review of the thesis that identified deficiencies, errors of reasoning and grammatical errors. I am also highly indebted to you for your encouraging voices that gave me the strength to complete the writing process.

Marianne Döös, my mentor, I am at a lack of words to express my deep sense of gratitude towards you and I am extremely indebted to you. You entered like an angel when things seemed impossible and dark. Your compassion, your sense of responsibility, your practical help and willingness to give your time so generously and your flair for language nuances have been invaluable. I am grateful to have met such an amazing person.

I would like to express my deep gratitude to Gunnar Karlsson. I had the incredible luck to have your academic and moral support along the road to complete this thesis. As my co-author in the last article, the invaluable expertise that you offered on the subject of qualitative analysis open up another world and shades, colours, diversity and the uniqueness came forward.

Britt-Maj Wikström, you were there in the beginning of this project and unreservedly trusted Shibboleth and me. When I struggled with my first application for research grants, staring at a blank sheet without finding a single word, you believed in me. It helped me greatly and I have been able to produce dozens of those applications later. I appreciate your kindness and friendship. You always had time to listen to me when things went wrong.

Halina Hylander, I am extremely indebted to you for your invaluable support along the way. You helped conduct and administer the project, and you helped digitalize all the results. Your tremendous loyalty, endless patience, genuine kindness, and willingness to sacrifice your time when you sat long into the nights to get everything working – all this incredibly and awesome help was sent to me from you. I doubt that I will ever be able to convey my appreciation fully. My friendship is eternal.

I am also indebted to Major Jan Berg for your invaluable support. First, you made it possible to implement a pilot training. You introduced me to a world that I never before had encountered. We sat there in a barrack in the midst of a huge military base with tanks and fighter planes and I interleaved our leadership training with Shibboleth performances. I thought it would be a total fiasco, but what an amazing response we got from the participants! It was magic. You helped also with recruitment of volunteers in the armed forces. You arranged for nurses to travel back and forth from Uppsala to Stockholm to take the morning blood sample. You helped organize the initial pre-intervention. You designed the conventional training and conducted it with help of your colleague Fredrik Nilsson.

Christer Sandahl deserves my sincere expression of thanks for generously providing me with his wise guidelines at the beginning of the project that were of crucial importance.

Hugo Westerlund, you revealed to me the secrets of statistics. You gave me priceless guidance that had a huge impact on my continuing independent work with statistical analysis. I am very grateful to you.

I am very much thankful to Fredrik Ullén for allowing me to be part of his team at the Department of Neuroscience at KI, and for your genuine interest in my research and your inspirational questions.

I would like to thank Maria Eriksson, for your help in preparing and transmitting data and executing the first statistical processing. You were like a

breath of fresh air and we could talk about serious matters and banalities.

My dear Mats Qviström, my constant companion in the Shibboleth world. You were the heart of the performances. A warm and huge heart. Your voice, your immense understanding of the text, your talent – you are irreplaceable. Thanks for your tremendous loyalty and your faith in the artistic quality of Shibboleth, for your patience with my constant last-minute changes of the script. Thanks for all jokes and laughter during rehearsals.

Anders Hallengren and Jan Henrik Swahn, how could I have managed without you? You led the group discussions cautiously, without domination, always responsive to participants' oscillations of the subject, but at the same time brave, and with integrity. Then you sat at home with me after every meeting and went through what happened with seriousness and jokes, with laughter and tears, with concern and hope. Thanks for this time of fellowship and support!

I want to express my heartfelt gratitude to Staffan Gullander, my dear friend, supporter and also my colleague. You and I have lead a number of leadership training programs together and you completely trusted my judgement. You gave me the courage to dare to contact Töres Theorell. You watched the start of this project with a thoughtful eye. Your friendship is of very great significance to me!

Cecilia Engellau, who is not among us anymore, but I carry her within me. Her glowing devotion and belief in me, and unshakable faith in the power of Shibboleth has been spark that ignited the whole project. She encouraged me to take the scientific step, which led me to believe in such possibility. I owe her my eternal gratitude. Thank you for your love!

My dear friends, Danuta Biterman, Elisabeth Sassower, and Regina Rodau, you have stood by me, believed in what I was doing and given unreserved moral support. I felt your loyalty from the depth of your hearts. Danuta, thanks for your insightful comments and our extensive discussions concerning my work. You read my mind and helped me focus my ideas.

Adina Feldman, thanks for your practical help, otherwise I would have lost myself in the administrative labyrinth of the final phase! You radiate a sense of security and kindness!

Grateful thanks to: Henry Bronett, you made me laugh despite the anxiety.

Heléne Lööw, your comforting words reduced tension in the final stages.

The Swedish Research Council, and a personal grant from the Swedbank Research Foundation supported this work. I am very grateful for your generosity and trust! I am also very grateful for the encouraging scholarship from Kristoffer Konarski Memorial Foundation.

My family, Ariella, Andreas, Esther-Lou, Josefin, Sasha, Rafael, and Ulrik. Words are insufficient to express what I feel. I tortured you with my writing, with proof-readings, with my stress, with my ups and downs, my lack of mental presence. And you were there, unflinching, and always reminding me of life's true priorities, and the existence of another world than just mine. You are the true life.

This list cannot be finished without acknowledging my parents who are the source of inspiration for this research; my mother for her faith in human beings, integrity and extraordinary courage; my father, for his love of literature, philosophy, theatre, and for the tears I could not hold back when listening to his poetry readings and rehearsal of performances with his students.

#### SPECIAL ACKNOWLEDGEMENTS

To the participating leaders; your great courage, patience, sincerity and responsibility has been at the heart of the study. I respect you highly. I would also like to thank your incredible employees who not only answered the various questionnaires on three separate occasions, but also were willing to take blood tests! My sincere gratitude to you!

## 10 REFERENCES

## A

- Aasland, M. S., Skogstad, A., Notelaers, G., Nielsen, B. M. & Einarsen, S. (2010). The prevalence of destructive leadership behaviour. *British Journal of Management*, 21, 438-452.
- Adorno, T.W. (1973a). *Philosophie der neuen Musik*. London: Burns & Oates.
- Adorno T.W. (1973b). *Negative dialectics*. New York: Continuum Press.
- Adorno T.W. (1997). *Aesthetic theory*. London and New York: Continuum Press.
- Adorno T.W. (2005). *Minima Moralia: Reflections from Damaged Life*. New York: Verso Press.
- Akrami, N. (2005). Prejudice: the interplay of personality, cognition, and social psychology. Vol. 5, Comprehensive summaries of Uppsala Dissertations from the Faculty of Social Sciences, Uppsala University, Uppsala.
- Albinsson, P. (1998). *The Learning Organization – From Vision to Reality*. Brain Books, AB, Jönköping.
- Altman R, Motton D.D., Kota, R.S., Rutledge, J.C. (2008). Inhibition of vascular inflammation by dehydroepiandrosterone sulfate in human aortic endothelial cells: roles of PPARalpha and NF-kappaB. *Vascul Pharmacol* 48: 76-84.
- Amirkhan, J. H., & Greaves, H. (2003). Sense of coherence and stress: The mechanics of a healthy disposition. *Psychology & Health*, 18(1), 31-62.
- Anderson, C., Keltner, D., & John, O. P. (2003). Emotional convergence between people over time. *Journal of Personality and Social Psychology*, 84, 1054–1068.
- Andersson, L. and Johansson, E. (1997). Developing Military Leadership by Making Problems Visible, LI. R series Department of Leadership, National Defence College, Karlstad.
- Antoni, M.H. (2003). Stress management effects on psychological, endocrinological, and immune functioning in men with HIV infection: empirical support for a psychoneuroimmunological model. *Stress* 6: 173-188.
- Antonovsky, A. (1987). *Unravelling the Mystery of Health: How People Manage Stress and Stay Well*. Jossey-Bass Publishers, San Fransisco, CA.
- Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social science & medicine*, 36(6), 725-733.
- Antonovsky, A. (1995). The Moral and the Healthy - Identical, Overlapping or Orthogonal. *Israel Journal of Psychiatry and Related Sciences*, 32(1), 5-13.
- Antonovsky, A. (1996). "The salutogenic model as a theory to guide health promotion". *Health Promotion International*, Vol. 11 No. 1, pp. 11-18.

- Arendt, H. (1968). *Between past and future: Eight exercises in political thought*. Penguin.
- Argyris, C. (1986). Skilled competence. *Harvard Business Review*, 65(4): 74–80.
- Argyris, C. (1999). *On Organizational Learning*. Blackwell, Oxford.
- Arnetz, B.B., Theorell, T., Levi, L., Kallner, A., Eneroth, P. (1983). An experimental study of social isolation of elderly people: psychoendocrine and metabolic effects. *Psychosom Med* 45: 395-406.
- Arvonen, J. (2006). The manager's self-image affects efficiency. *Psykologtidningen*, 8, 4–8.
- Ashford, S. (1989). Self-assessments in organizations: A literature review and integrative model. *Research in Organizational Behavior*, 11, 33–74.
- Ashforth, B. (1994). Petty tyranny in organizations. *Human Relations*, 47, 755–778.
- Ashkenas, R., Ulrich, D., Jick, T. and Kerr, S. (1998). *The Boundryless Organization: Breaking the Chains of Organizational Structure*. Jossey Bass, San Francisco, CA.
- Ashton, M. C., & Lee, K. (2001). A theoretical basis for the major dimensions of personality. *European Journal of Personality*, 15(5), 327-353.
- Atwater, L. E., Roush, P., & Fischthal, A. (1995). The influence of upward feedback on self- and follower ratings of leadership. *Personnel Psychology*, 48, 35-59.
- Atwater, L. E., & Yammarino, F. J. (1997). Self–other rating agreement: A review and model. In G. R. Ferris (Ed.), *Research in personnel and human resources management*, 15, 121-174.
- Atwater, L. E., Waldman, D. A., & Brett, J. F. (2002). Understanding and optimizing multisource feedback. *Human Resource Management*, 41, 193–208.
- Avolio, B.J., Walumbwa, F.O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology* 60: 421–449.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The leadership quarterly*, 16(3), 315-338.

## B

- Baron, J. (1998). Judgment misguided: Intuition and error in public decision making. Oxford University Press.
- Burgoyne J: How certain are we that management and leadership development is effective? In Management learning and leadership workshop. Lancaster University; 2004.



- Barrett-Connor, E., von Muhlen, D., Laughlin, G.A., Kripke, A. (1999). Endogenous levels of dehydroepiandrosterone sulfate, but not other sex hormones, are associated with depressed mood in older women: the Rancho Bernardo Study. *J Am Geriatr Soc* 47: 685-691.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership. Theory, Research and Managerial Applications*, Vol. 3. New York: The Free Press.
- Bass, B. M. & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The leadership quarterly*, 10, 181-217.
- Basson, M. J., & Rothmann, S. (2002). Sense of coherence, coping and burnout of pharmacists. *South African Journal of Economic and Management Sciences*, 5, 35-62.
- Batson, C. D. (2014). *The altruism question: Toward a social-psychological answer*. Psychology Press
- Bauman, Z. (1995). *Life in fragments. Essays in postmodern morality*. Cambridge, MA: Basil Blackwell
- Baumeister, R., Bratslavsky, E., Finkenauer, C., Vohs, K. (2001). Bad is stronger than good. *Review of general psychology*, 5(4):323-370.
- Bech, P. (2008). Use of rating scales in affective disorders. *Eur Psychiatr Rev*;1:14–18.
- Bergeman, C. S., Chipuer, H. M., Plomin, R., Pedersen, N. L., McClearn, G. E., Nesselroade, J. R., et al. (1993). Genetic and Environmental-Effects on Openness to Experience, Agreeableness, and Conscientiousness - an Adoption Twin Study. *Journal of Personality*, 61(2), 159-179.
- Bergeman, C.S., Chipuer, H.M., Plomin, R., Pedersen, N.L., McClearn, G.E., Nesselroade, J.R., Costa, P.T Jr and McCrae, R.R. (1993). "Genetic and environmental-effects on openness to experience, agreeableness, and conscientiousness: an adoption twin study". *Journal of Personality*, Vol. 61 No. 2, pp. 159-179.
- Berr, C., Lafont, S., Debuire, B., Dartigues, J.F., Baulieu, E.E. (1996). Relationships of dehydroepiandrosterone sulfate in the elderly with functional, psychological, and mental status, and short-term mortality: a French community-based study. *Proceedings of the National Academy of Sciences*, 93(23), 13410-13415.
- Berry, D. S., Willingham, J. K., & Thayer, C. A. (2000). Affect and personality as predictors of conflict and closeness in young adults' friendships. *Journal of Research in Personality*, 34(1), 84-107.

- Berson, Y. and Avolio, B.J. (2004). "Transformational leadership and the dissemination of organizational goals: a case study of a telecommunication firm". *Leadership Quarterly*, Vol. 15 No. 5, pp. 625-646.
- Beauvoir, S de. (1976). *The ethics of ambiguity*. New York: Citadel Press
- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. *Journal of Management*, 36(4), 1065-1105.
- Bolman, L. and Deal, T.E. (1997). *Reframing Organizations: Artistry, Choice and Leadership*. 2nd ed., Jossey-Bass, San Francisco, CA.
- Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of occupational health psychology*, 5(1), 156.
- Booth-Kewley, S., & Ross, R. V. J. (1994). Associations between Major Domains of Personality and Health Behavior. *Journal of Personality*, 62, 281-298.
- Bourdieu, P. (2000). *Pascalian meditations*. Stanford University Press.
- Brehmer, B. (2005). ROLF 2010, Swedish National Defence College, Stockholm.
- Brenninkmeijer, V., & VanYperen, N. (2003). How to conduct research on burnout: advantages and disadvantages of a unidimensional approach in burnout research. *Occupational and environmental medicine*, 60(suppl 1), i16-i20..
- Broch, H. (1982). *Sömngångare (Die Schlafwandler)*. Alba, Stockholm.
- Brooker, A. S., & Eakin, J. M. (2001). Gender, class, work-related stress and health: toward a power-centred approach. *Journal of Community & Applied Social Psychology*, 11(2), 97-109.
- Brown, M. E., & Trevino, L. K. (2009). Leader-Follower Values Congruence: Are Socialized Charismatic Leaders Better Able to Achieve It? *Journal of Applied Psychology*, Vol. 94 (2), pp. 478-490.
- Brutus, S., Fleenor, J. W., & McCauley, C. D. (1999). Demographic and personality predictors of congruence in multi-source ratings. *Journal of Management Development*, 18, 417-435.
- Burns, M.M. (1978). *Leadership*. Harper and Raw, New York, NY.
- Burgoyne, J. (2004, March). How certain are we that management and leadership development is effective. In *Presentation at the Centre for Excellence in Leadership First Annual Conference, the Belfry* (pp. 30-31).

## C

- Carlson, L. E., Speca, M., Patel, K. D., & Goodey, E. (2004). Mindfulness-based stress reduction in relation to quality of life, mood, symptoms of stress and levels of

- cortisol, dehydroepiandrosterone sulfate (DHEAS) and melatonin in breast and prostate cancer outpatients. *Psychoneuroendocrinology*, 29(4), 448-474.
- Carver, C., & Scheier, M. (1981). *Attention and self-regulation: A control theory approach to human behavior*. New York: Springer-Verlag.
- Chandola, T., Brunner, E., & Marmot, M. (2006). Chronic stress at work and the metabolic syndrome: prospective study. *Bmj*, 332(7540), 521-525.
- Charney, D. S. (2004). Psychobiological and vulnerability: Implications for successful adaptation to extreme stress. *American Journal of Psychiatry*, 161(2), 195-216.
- Chrousos, G. P., & Gold, P. W. (1992). The concepts of stress and stress system disorders: overview of physical and behavioral homeostasis. *Jama*, 267(9), 1244-1252.
- Church, A. H. (1997). Managerial self-awareness in high-performing individuals in organizations. *Journal of Applied Psychology*, 82, 281.
- Clausesewitz von C. (1999). *Om kriget (Vom Kriege)*. Stockholm: Bonnier Fakta Bokförlag.
- Clemedsson, L.J. (2003). *Psychodynamic Perspectives on Leadership*. Swedish National Defence College, Stockholm.
- Cohen, M., & Kanter, Y. (2004). Relation between sense of coherence and glycemic control in type 1 and type 2 diabetes. *Behavioral Medicine*, 29(4), 175-183.
- Cole, D. C., Ibrahim, S., Shannon, H. S., Scott, F. E., & Eyles, J. (2001). Work and life stressors and psychological distress in the Canadian working population: a structural equation modelling approach to analysis of the 1994 National Population Health Survey. *Chronic diseases in Canada*, 23(3), 91-99.
- Collins, J. (2001). *Good to Great*. New York: Harper, Collins.
- Costa, P. T., & McCrae, R. R. (1992a). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological assessment*, 4(1), 5..
- Costa, P.T. Jr & McCrae, R.R. (1992b), *NEO Personality Inventory Revised – (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI)*. Professional Manual (Vol. 1992:18), Psychological Assessment Resources, Odessa, FL.
- Coutinho, E. and Cangelosi, A. (2011), “Musical emotions: predicting second-by-second subjective feelings of emotion from low-level psychoacoustic features and physiological measurements”. *Emotion*, Vol. 11 No. 4, pp. 921-937.
- Côté, S., Kraus, M. W., Cheng, B. H., Oveis, C., van der Löwe, I., Lian, H., & Keltner, D. (2011). Social power facilitates the effect of prosocial orientation on empathic accuracy. *Journal of Personality and Social Psychology*, 101, 217–232.

Crocker, J., Karpinski, A., Quinn, D.M., & Chase, S.K. (2003). When grades determine self-worth: consequences of contingent self-worth for male and female engineering and psychology majors. *Journal of Personality and Social Psychology*, 85(3), 507-516.

## D

Day, D. V. (2001). Leadership development: A review in context. *The Leadership Quarterly*, 11(4), 581-613. De Vries, M. F. K. (1990). The organizational fool: Balancing a leader's hubris. *Human Relations*, 43, 751-770.

de Vries, M. F. K. (1990). The organizational fool: Balancing a leader's hubris. *Human Relations*, 43(8), 751-770.

de Vries, M. F. K. (2001). *The leadership mystique: an owner's manual*. Financial Times Prentice Hall.

Demerouti, E., Van Eeuwijk, E., Snelder, M., & Wild, U. (2011). Assessing the effects of a "personal effectiveness" intervention on psychological capital, assertiveness and self-awareness using self-other agreement. *Career Development International*, 16, 60-81.

DeRue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and Behavioural Theories of Leadership: An Integration and Meta-Analytic Test of Their Relative Validity. *Personnel Psychology*, 64(1), 7-52.

Dewey, J. *Art as Experience*. (1934). New York: Capricorn Books, 1958.

Diamond, M.A. and Allcorn, S. (1984), "Psychological barriers to personal responsibility", *Organizational Dynamics*, Vol. 12 No. 4, pp. 66-77.

Digman, J. M. (1990). Personality structure: emergence of the five-factor model. *Annual Review of Psychology*, 41, 417-440.

Digman, J. M. (1997). Higher-order factors of the big five. *Journal of Personality and Social Psychology*, 73(6), 1246-1256.

## E

Eden, D. (1985). Team development: A true field experiment at three levels of rigor. *Journal of Applied Psychology*, 70, 94.

Edwards, J. R. (1993). Problems with the use of profile similarity indices in the study of congruence in organizational research. *Personnel Psychology*, 46, 641-665.

Edwards, J. R., & Cable, D. M. (2009). The Value of Value Congruence. *Journal of Applied Psychology*, Vol. 94 (3), pp. 654-677.

- Eigel, K. M. (1998). Leadership effectiveness: A constructive developmental view and investigation. Unpublished doctoral dissertation, University of Georgia, Athens.
- Eigel, K. M., & Kuhnert, K. W. (2005). Authentic development: Leadership development level and executive effectiveness. *Authentic leadership theory and practice: Origins, effects and development*, 3, 357-385.
- Einarsen, S., Aasland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A definition and conceptual model. *The Leadership Quarterly*, 18(3), 207-216.
- Eisner, E. W. (2004). What can education learn from the arts about the practice of education. *International Journal of Education & the Arts*, 5(4), 1-12..
- Epel, E. S., Blackburn, E. H., Lin, J., Dhabhar, F. S., Adler, N. E., Morrow, J. D., & Cawthon, R. M. (2004). Accelerated telomere shortening in response to life stress. *Proceedings of the National Academy of Sciences of the United States of America*, 101(49), 17312-17315.
- Eriksson, M. and Lindstrom, B. (2005). Validity of Antonovsky's sense of coherence scale: a systematic review. *Journal of Epidemiology and Community Health*, Vol. 59 No. 6, pp. 460-466.
- Eriksson, M., & Lindström, B. (2006). Antonovsky's sense of coherence scale and the relation with health: a systematic review. *Journal of epidemiology and community health*, 60(5), 376-381.
- Everson, C. A., Laatsch, C. D., & Hogg, N. (2005). Antioxidant defense responses to sleep loss and sleep recovery. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 288(2), R374-R383.
- F**
- Fairholm, G. W. (2001). *Mastering inner leadership*. Greenwood Publishing Group.
- Fava, M., Littman, A., Lamon-Fava, S., Milani, R., Shera, D., MacLaughlin, R., & Guaraldi, G. P. (1992). Psychological, behavioral and biochemical risk factors for coronary artery disease among American and Italian male corporate managers. *The American journal of cardiology*, 70(18), 1412-1416.
- Feldt, T., Kinnunen, U., & Mauno, S. (2000). A mediational model of sense of coherence in the work context: a one-year follow-up study. *Journal of Organizational Behavior*, 21(4), 461-476.
- Feldt, T., Kivimäki, M., Rantala, A., & Tolvanen, A. (2004). Sense of coherence and work characteristics: A cross-lagged structural equation model among managers. *Journal of Occupational and Organizational Psychology*, 77, 323-342.
- Feldt, T., Lintula, H., Suominen, S., Koskenvuo, M., Vahtera, J., & Kivimäki, M. (2007). Structural validity and temporal stability of the 13-item sense of coherence scale:

prospective evidence from the population-based HeSSup study. *Quality of Life Research*, 16(3), 483-493.

Fenichel, O. (1945). *The Psychoanalytic Theory of Neurosis*. New York: Norton.

Ferrie, J. E., Shipley, M. J., Cappuccio, F. P., Brunner, E., Miller, M. A., Kumari, M., & Marmot, M. G. (2007). A prospective study of change in sleep duration: associations with mortality in the Whitehall II cohort. *Sleep*, 30(12), 1659.

Fischer-Lichte, E. (2008). *The transformative power of performance: a new aesthetics*. London and New York: Routledge.

Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, 48, 621– 628.

Fiske, S. T., & Dépret, E. (1996). Control, interdependence and power: Understanding social cognition in its social context. *European Review of Social Psychology*, 7, 31–61.

Fleenor, J. W., Smither, J. W., Atwater, L. E., Braddy, P. W., Sturm, R. E. (2010). Self-other rating agreement in leadership: A review. *Leadership Quarterly* 21, 1005-1034.

Ford, D. E., & Kamerow, D. B. (1989). Epidemiologic study of sleep disturbances and psychiatric disorders: an opportunity for prevention?. *Jama*, 262(11), 1479-1484..

Fourie, L., Rothmann, S., & de Vijver, F. J. R. V. (2008). A model of work wellness for non-professional counsellors in South Africa. *Stress and Health*, 24(1), 35-47.

Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of personality and social psychology*, 84(2), 365.

Füredi, F. (2009). *Wasted: why education isn't educating*. Bloomsbury Publishing.

## G

Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science*, 17, 1068– 1074.

Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95, 1450–1466.

Gallagher, P., & Young, A. (2002). Cortisol/DHEA ratios in depression. *Neuropsychopharmacology*, 26(3), 410.

- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. O. (2005). Can you see the real me? A self-based model of authentic leader and follower development. *The Leadership Quarterly* 16, 343-372.
- Gennep, A. van (1909). *The rites of passage* (M. B. Vizedom & G. L. Caffee, Trans.) London: Routledge and Keagan Paul.
- Gerstner, C.R. & Day, D.V. (1997). "Meta-analytic review of leader-member exchange theory: correlates and construct issues". *Journal of Applied Psychology*, Vol. 82 No. 6, pp. 827-844.
- Gilbreath, B. & Benson, P.G. (2004). The contribution of supervisor behaviour to employee psychological wellbeing. *Work & Stress*, vol. 18, no. 3, pp. 255-266.
- Glasø, L. & Einarsen, S. (2006). Experienced affects in leader-subordinate relationships. *Scandinavian Journal of Management*, 22, 49-73.
- Glise, K., Ahlborg, G., & Jonsdottir, I. H. (2012). Course of mental symptoms in patients with stress-related exhaustion: does sex or age make a difference?. *BMC psychiatry*, 12(1), 18.
- Gold, J., Thorpe, R., Mumford, A. (2010). *Gower handbook of leadership and management development*. Burlington: Gower Publishing Company.
- Goldberg, L. R. (1990). An alternative "description of personality" The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229.
- Goldshalk, V. M., & Sosik, J. J. (2000). Does mentor-protégé agreement on mentor leadership behavior influence the quality of a mentoring relationship? *Group Organization Management*, 25, 291.
- Goldsmith, M., & Reiter M. (2007). *What got you here won't get you there: How successful people become even more successful*. New York: Hyperion.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Goodnight, R. (2004). Laissez-faire leadership. *The Economic Journal*, pp. 820-823.
- Du Toit, F., Coetzee, S., & Visser, D. (2005). The relationship between personality type and sense of coherence among technical workers. *Southern African Business Review*, 9(1), 51-65.
- Goodyer, I. M., Herbert, J., Altham, P. M. E., Pearson, J., Secher, S. M., & Shiers, H. M. (1996). Adrenal secretion during major depression in 8-to 16-year-olds, I. Altered diurnal rhythms in salivary cortisol and dehydroepiandrosterone (DHEA) at presentation. *Psychological medicine*, 26(02), 245-256.
- Graziano, W. G., & Eisenberg, N. (1994). Agreeableness and altruism. In S. R. Briggs, R. Hogan & W. Jones (Eds.), *Handbook of Personality*. New York: Academic Press.

- Graziano, W. G., Jensen-Campbell, L. A., & Hair, E. C. (1996). Perceiving interpersonal conflict and reacting to it: The case for agreeableness. *Journal of Personality and Social Psychology*, 70(4), 820-835.
- Graziano, W.G. and Eisenberg, N.H. (1997). Agreeableness: a dimension of personality, in Hogan, R., Johnson, J. and Briggs, S. (Eds), *Handbook of Personality Psychology*, Academic Press, San Diego, CA, pp. 795-824
- Graziano, W.G., Bruce, J., Sheese, B.E. and Tobin, R.A. (2007a). Attraction, personality, and prejudice: liking none of the people most of the time". *Journal of Personality and Social Psychology*, Vol. 93 No. 4, pp. 565-582.
- Graziano, W.G., Habashi, M.M., Sheese, B.E. and Tobin, R.A. (2007b). Agreeableness, empathy, and helping: a person X situation perspective. *Journal of Personality and Social Psychology*, Vol. 93 No. 4, pp. 583-599.
- Grint, K. (2010). *Leadership. A very short introduction*. New York: Oxford University Press.
- Guilford, J. P. (1950). Creativity. *Am Psychol*, 5(9), 444-454.
- Guimond, S., Dambrun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of inter-group cognitions. *Journal of personality and social psychology*, 84(4), 697.
- H**
- Habermas, J. (1975). *Legitimation crisis* (Vol. 519). Beacon Press.
- Haddadi, P, & Besharat, M. A. (2010). Resilience, vulnerability and mental health. *Procedia-Social and Behavioral Sciences*, 5, 639-642.
- Hahn, R. Y., & Comrey, A. L. (1994). Factor-Analysis of the Neo-Pi and the Comrey Personality-Scales. *Psychological Reports*, 75(1), 355-365.
- Hallsten, L., Josephson, M., & Torgén, M. (2005). *Performance-based self-esteem: A driving force in burnout processes and its assessment*. *Arbete och Hälsa* 2005;4:1–40.
- Halverson, S. K., Tonidandel, S., Barlow, C. B., & Dipboye, R. L. (2005, April). Self-other agreement on a 360-degree leadership evaluation. Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Canada.
- Hane, M. & Wennberg, B.A . (2004). *Defense Efforts Organizing and Leading in a Pedagogical Perspective*, Swedish National Defence College, Stockholm.
- Hanson, L. L. M., Theorell, T., Oxenstierna, G., Hyde, M., & Westerlund, H. (2008). Demand, control and social climate as predictors of emotional exhaustion



- symptoms in working Swedish men and women. *Scandinavian journal of public health*, 36(7), 737-743..
- Harburg, E., Erfurt, J. C., Hauenstein, L. S., Chape, C., Schull, W. J., & Schork, M. A. (1973). Socio-ecological stress, suppressed hostility, skin color, and black-white male blood pressure: Detroit. *Psychosomatic medicine*, 35(4), 276-296..
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2012). *The new psychology of leadership: Identity, influence and power*. New York, NY: Psychology Press.
- Hasson, D., Anderberg, U. M., Theorell, T., & Arnetz, B. B. (2005). Psychophysiological effects of a web-based stress management system: a prospective, randomized controlled intervention study of IT and media workers. *BMC public health*, 5(1), 78.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. Guilford Press.
- Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin*, 110, 86-108.
- Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: Harvard University Press.
- Heifetz, R.A. and Linsky, M. (2002). *Leadership on the Line: Staying Alive through the Dangers of Leading*. Harvard Business School Press, Boston, MA.
- Hertting, A., Nilsson, K., Theorell, T., & Larsson, U. S. (2004). Downsizing and reorganization: demands, challenges and ambiguity for registered nurses. *Journal of Advanced Nursing*, 45(2), 145-154.
- Hetland, H., Sandal, G. M., & Johnsen, T. B. (2007). Burnout in the information technology sector: does leadership matter?. *European journal of work and organizational psychology*, 16(1), 58-75.
- Hoeckner, B., Wyatt, E. W., Decety, J., & Nusbaum, H. (2011). Film music influences how viewers relate to movie characters. *Psychology of Aesthetics, Creativity, and the Arts*, 5(2), 146.
- Hoel, H., & Salin, D. (2003). Organizational antecedents of workplace bullying. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.). *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 203–218). London, UK: Taylor & Francis.
- Hogeveen, J., Inzlicht, M., & Obhi, S. S. (2014). Power changes how the brain responds to others. *Journal of Experimental Psychology: General*, 143(2), 755
- Howell, J.M. and Avolio, B.J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation – key predictors of consolidation

ed-business-unit performance. *Journal of Applied Psychology*, Vol. 78 No. 6, pp. 891-902.

Hoyle, R. H., Kernis, M. H., Leary, M. R., & Baldwin, M. W. (1999). *Selfhood: Identity, esteem, regulation*. Boulder, CO: Westview.

Hunter, S. T., Bedell-Avers, K. E., & Mumford, M. D. (2007). The typical leadership study: Assumptions, implications, and potential remedies. *The Leadership Quarterly*, 18(5), 435-446.

Hurley, J.R. (1998). Agency and communion as related to 'big five' self-representations and subsequent behavior in small groups. *Journal of Psychology*, Vol. 132 No. 3, pp. 337-351.

Husserl, E. (1977). *Phenomenological psychology*. The Hague: Martinus Nijhoff.

Husserl, E. (2012). *Ideas: General introduction to pure phenomenology*. London: Routledge.

Hyde, M., Jappinen, P., Theorell, T., & Oxenstierna, G. (2006). Workplace conflict resolution and the health of employees in the Swedish and Finnish units of an industrial company. *Social Science & Medicine*, 63, 2218-2227.

Härenstam, A., Theorell, T., & Kaijser, L. (2000). Coping with anger-provoking situations, psychosocial working conditions, and ECG-detected signs of coronary heart disease. *Journal of Occupational Health Psychology*, 5(1), 191.

## I

Iacoboni, M. (2009). *Mirroring people: The new science of how we connect with others*. Macmillan.

Ihde, D. (1971). *Hermeneutic Phenomenology: The Philosophy of Paul Ricoeur*. Evanston: Northwestern University Press.

Iser, W. (1974). *The Reading Process: a Phenomenological Approach*. Baltimore: JHU Press.

Iser, W. (1993). *Prospecting: From reader response to literary anthropology*. Baltimore, JHU Press.

## J

Jackson, B., & Parry, K. (2011). *A very short fairly interesting and reasonably cheap book about studying leadership*. Sage.

Jakobowitz, S., & Egan, V. (2006). The dark triad and normal personality traits. *Personality and Individual Differences*, 40(2), 331-339.

Jaspers, K. (1947). *Von der Wahrheit*. München: Piper.

- Jensen-Campbell, L. A., Gleason, K. A., Adams, R., & Malcolm, K. T. (2003). Interpersonal conflict, agreeableness, and personality development. *Journal of Personality*, 71(6), 1059-1085.
- Jensen-Campbell, L. A., & Graziano, W. G. (2001). Agreeableness as a moderator of interpersonal conflict. *Journal of Personality*, 69(2), 323-362.
- Jex, S., G. A. Adams, D. G. Bachrach, & S. Sorenson. (2003). The Impact of Situational Constraints, Role Stressors, and Commitment on Employee Altruism. *Journal of Occupational Health Psychology* 8(3), 171–180.
- Johansson, B., & Uneståhl, L. E. (2006). Stress reducing regulative effects of integrated mental training with self-hypnosis on the secretion of dehydroepiandrosterone sulfate (DHEA-S) and cortisol in plasma: a pilot study. *Contemporary Hypnosis*, 23(3), 101-110.
- Johansson, P. (2006). Leadership Development with Artistic Element. Department of Behavioural, Social and Legal Sciences Psychology, Örebro University,
- Johansson, U. (1998). *Om ansvar: ansvarsföreställningar och deras betydelse för den organisatoriska verkligheten*. Lund University.
- John, O.P., & Srivastava, S. (1999). The big five taxonomy: history, measurement, and theoretical perspective, in Pervin, L.A. and John, O.P. (Eds), *Handbook of Personality: Theory and Research*, 2nd ed., Guilford, New York, NY, pp. 102-138.
- Jones, A.M. (2005). The anthropology of leadership: culture and corporate leadership in the American South. *Leadership*, Vol. 1 No. 3, pp. 259-278.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85(5), 751-765.
- Judge, T. A., LePine, J. A., & Rich, B. L. (2006). Loving yourself abundantly: Relationship of the narcissistic personality to self- and other perceptions of workplace deviance, leadership, and task and contextual performance. *Journal of Applied Psychology*, 91, 762–776.
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of applied psychology*, 89(1), 36.
- Juslin, P. N., & Västfjäll, D. (2008). Emotional responses to music: The need to consider underlying mechanisms. *Behavioral and brain sciences*, 31(05), 559-575.

## K

- Kahneman, D. (2011). Thinking, fast and slow. Macmillan. Day DV: Leadership development: a review in context. *Leadership Quarterly* 2001;11: 16 581–613.

- Kalimo, R., & Vuori, J. (1990). Work and sense of coherence – resources for competence and life satisfaction. *Behavioral Medicine*, Vol. 16 No. 2, pp. 76-89.
- Kalimo, R., Pahkin, K., & Mutanen, P. (2002). Work and personal resources as long-term predictors of well-being. *Stress and Health*, 18(5), 227-234.
- Kant I: *Kritik av omdömeskraften (Kritik der Urteilstkraft)*. Essen, Thales, 2003.
- Karlsson, G . (1993). *Psychological qualitative research from a phenomenological perspective*. Stockholm: Almqvist & Wiksell International.
- Karlsson, I., Berglin, E., & Larsson, P. A. (2000). Sense of coherence: quality of life before and after coronary artery bypass surgery - a longitudinal study. *Journal of Advanced Nursing*, 31(6), 1383-1392.
- Kearney, R. (1991). *Poetics of imagining: from Husserl to Lyotard*.
- Kearney, R. (2002). *The wake of imagination*. Routledge.
- Kecklund, G., & Åkerstedt, T. (2004). Apprehension of the subsequent working day is associated with a low amount of slow wave sleep. *Biological psychology*, 66(2), 169-176.
- Kegan, R., & Lahey, L. L. (2009). *Immunity to change: How to overcome it and unlock potential in yourself and your organization*. Harvard Business Press. Kellerman, B. (2004). *Bad leadership. What it is, how it happens, why it matters*. Boston: Harvard Business School Press.
- Kelloway, E. K., Sivanathan, N., Francis, L., & Barling, J. (2005). Poor leadership. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.). *Handbook of work stress*. Thousand Oaks: Sage Publications.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14, 1–26.
- Khorram, O., Vu, L., & Yen, S. S. (1997). Activation of immune function by dehydroepiandrosterone (DHEA) in age-advanced men. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 52(1), M1-M7.
- Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., & Glaser, R. (2002). Psychoneuroimmunology: psychological influences on immune function and health. *Journal of consulting and clinical psychology*, 70(3), 537.
- Kivimäki, M., Nyberg, S. T., Batty, G. D., Fransson, E. I., Heikkilä, K., Alfredsson, L., & Theorell, T. (2012). Job strain as a risk factor for coronary heart disease: a collaborative meta-analysis of individual participant data. *The Lancet*, 380(9852), 1491-1497.

- Kivimäki, M., Vahtera, J., Elovainio, M., Lillrank, B., & Kivimäki, M. V. (2002). Death or illness of a family member, violence, interpersonal conflict, and financial difficulties as predictors of sickness absence: Longitudinal cohort study on psychological and behavioral links. *Psychosomatic Medicine*, 64(5), 817-825.
- Klein, M. (2002). *Love, guilt and reparation: and other works 1921-1945*. NY: Simon and Schuster.
- Korotkov, D., & Hannah, T. E. (1994). Extraversion and Emotionality as Proposed Superordinate Stress Moderators - a Prospective Analysis. *Personality and Individual Differences*, 16(5), 787-792.
- Koestner, R., Franz, C., & Weinberger, J. (1990). The Family Origins of Empathic Concern - a 26-Year Longitudinal-Study. *Journal of Personality and Social Psychology*, 58(4), 709-717.
- Kovacs, M. (2011). Developing a psychophysiological profile based on personality dimensions in the corporate setting. *International Research of Management and Business Studies*, Vol. 1 No. 1, pp. 4-11.
- Krishnan, V. R. (2003). Power and moral leadership: Role of self-other agreement. *Leadership & Organization Development Journal*, 24, 345-351. doi: 10.1108/014377303104 94310.
- Kristof, A. L. (1996). Person- organization fit: An integrative review of its conceptualizations, measurements, and implications. *Personnel Psychology* (49), pp. 1-49.
- Kuoppala, J., Lamminpää, A. & Husman, P. (2008). Work health promotion, job well-being, and sickness absences - a systematic review and meta-analysis. *Journal of Occupational and Environmental Medicine*, vol. 50, no. 11, pp. 1216-1227.
- L**
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought*. Basic books.
- Lamm, C., Batson, C. D., & Decety, J. (2007). The neural substrate of human empathy: effects of perspective-taking and cognitive appraisal. *Cognitive Neuroscience, Journal of*, 19(1), 42-58.
- Larsson, G. (2006). The developmental leadership questionnaire (DLQ): some psychometric properties. *Scandinavian Journal of Psychology*, Vol. 47 No. 4, pp. 253-262.
- Larsson, G., Carlstedt, L., Andersson, J., Andersson, L., Danielsson, E., Johansson, A., Johansson, E., Michel, P.-O. and Robertson, I. (2003). A comprehensive system for leader evaluation and development. *The Leadership & Organization Development Journal*, Vol. 24 No. 1, pp. 16-25.
- Lazarus, R.S. (1991). *Emotion and Adaptation*. Oxford University Press, New York, NY.

- Lazarus, R.S. (1999). *Stress and Emotions*. A New Synthesis, Free Association Press, London.
- Lecrubier, Y. (2001). The burden of depression and anxiety in general medicine. *Journal of clinical psychiatry*.
- Leineweber, C., Westerlund, H., Theorell, T., Kivimäki, M., Westerholm, P., & Alfredsson, L. (2011). Covert coping with unfair treatment at work and risk of incident myocardial infarction and cardiac death among men: Prospective cohort study. *Journal of epidemiology and community health*, 65(5), 420-425..
- Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: a model of the organizational context of burnout. *Journal of health and Human Services administration*, 472-489.
- Lennartsson, A. K. (2013). Effects of Psychosocial stress on DHEA and DHEA-S levels- Acute and Long-term effects. Department of Physiology  
Institute of Neuroscience and Physiology Sahlgrenska Academy at University of Gothenburg
- Levi, L.(2005). Working life and mental health - A challenge to psychiatry? *World psychiatry*, 4(1):53-57.
- Levi, L., Bartley, M., Marmot, M., Karasek, R., Theorell, T., et al. (2000) Stressors at the workplace: theoretical models. *Occup Med* 15: 69-106.
- Lévinas, E. (1969) *Totality and infinity: An essay on exteriority*. Pittsburgh, PA: Duquesne University Press.
- Lévinas, E. (1982). *Ethics and infinity: Conversations with Philippe Nemo*. Pittsburgh, PA: Duquesne University Press.
- Lévinas, E. (1985) *Ethics and infinity: Conversations with Philippe Nemo*. Pittsburgh, PA: Duquesne University Press.
- Lévinas, E. (1987) *Time and The Other*. Pittsburgh, PA: Duquesne University Press.
- Lévinas, E. (1991) *Difficult Freedom: Essays on Judaism*. London: Athlone.
- Lévinas, E. (2003a) *On escape*. Stanford, CA: Stanford University Press.
- Lévinas, E. (2003b) *Humanism of the Other*. Urbana and Chicago: University of Illinois Press.
- Lillefjell, M., & Jakobsen, K. (2007). Sense of coherence as a predictor of work reentry following multidisciplinary rehabilitation for individuals with chronic musculoskeletal pain. *Journal of Occupational Health Psychology*, 12(3), 222-231.

- Lim, B. C., & Ployhart, R. E. (2004). Transformational leadership: Relations to the five-factor model and team performance in typical and maximum contexts. *Journal of Applied Psychology*, 89(4), 610-621.
- Lincoln, K. D. (2000). Social support, negative social interactions, and psychological well-being. *Social Service Review*, 74, 231-52.
- Lindholm, M. (2006). *Pedagogical foundations*. Stockholm, Sweden: Försvarsmakten.
- Lindstrom, B., & Eriksson, M. (2005). Salutogenesis. *Journal of Epidemiology and Community Health*, 59(6), 440-442.
- Lipman, R. S. (1986). Depression scales derived from the Hopkins Symptom Checklist. In *Assessment of depression* (pp. 232-248). Springer Berlin Heidelberg.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, 71(3), 543-562.

## M

- Mabey, C. & Ramirez, M. (2005). Does management development improve organizational productivity? A six-country analysis of European firms. *Human Resource Management*, 16, 1067-1082.
- Marmot, M., & Feeney, A. (1996). Work and health: implications for individuals and society. *Health and social organization*, 235-254. Maslach C, Jackson S: The measurement of experienced burnout. *Journal of occupational behaviour* 1981, 2:99-113.
- Maslow, A.H. (1964). *Toward a psychology of being*. New York. Van Nostrand Reinhold.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99-113.
- Maslow, A.H. (1970). *Religions, values and peak-experiences*. Columbus, Ohio State University Press.
- Mccain, A.K. (1995). The relationship between head nurse leadership behavior and staff nurse burnout. Dissertation Abstracts International: Section B. Nov;56(5-B). US: Univ Microfilms International.
- McCrae, R. R., & Costa, P. T., Jr. (1991). Adding liebe und arbeit: The full five-factor model and well-being. *Personality and Social Psychology Bulletin*, 17, 227-232.
- McCrae, R. R., & Costa, P. T., Jr. (1996). Toward a new generation of personality theories: *Theoretical contexts for the five-factor model*. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 51-87). New York: Guilford.

- McCrae, R.R., & Costa, P.T. Jr (1999). A five-factor theory of personality. In Pervin, L.A. and John, O.P. (Eds), *Handbook of Personality. Theory and Research*, 2nd ed., Guilford, New York, NY, pp. 139-153.
- McCrae, R. R., & John, O. P. (1992). An Introduction to the 5-Factor Model and Its Applications. *Journal of Personality*, 60(2), 175-215.
- McCraty, R., Barrios-Choplin, B., Rozman, D., Atkinson, M., & Watkins, A. D. (1998). The impact of a new emotional self-management program on stress, emotions, heart rate variability, DHEA and cortisol. *Integrative Physiological and Behavioral Science*, 33(2), 151-170.
- McEwen, B. S. (2008). Central effects of stress hormones in health and disease: Understanding the protective and damaging effects of stress and stress mediators. *European journal of pharmacology*, 583(2), 174-185.
- McGuire, C., & Rhodes, G. (2009). *Transforming your leadership culture*. San Francisco: Jossey-Bass.
- Melchior, M.E.W., van den Berg, A:A., Halfens, R. & Abu-Saad, H.H. (1997). Burnout and the work environment of nurses in psychiatric long-stay care settings. *Social Psychiatry & Psychiatric Epidemiology*. Vol 32(3) Apr: 158-164.
- Mikulincer, M., & Horesh, N. (1999). Adult attachment style and the perception of others: the role of projective mechanisms. *Journal of personality and social psychology*, 76(6), 1022.
- Miller, R.B. (1996). *Casuistry and modern ethics: A poetics of practical reasoning*. Chicago: University of Chicago Press.
- Min, J. A., Lee, N. B., Lee, C. U., Lee, C., & Chae, J. H. (2012). Low trait anxiety, high resilience, and their interaction as possible predictors for treatment response in patients with depression. *Journal of affective disorders*, 137(1), 61-69.
- Mintzberg, H. (2005). *A Hard Look at the Soft Practice of Managing and Management Development*. Berret-Koehler, San Fransisco, CA.
- Mohammad, A. A. A. (2012). Resilience, burnout, and role stress among military personnel. *Middle East Current Psychiatry*, 19(2), 123-129.
- Monroe, K. R. (1996). *The heart of altruism: Perceptions of a common humanity* (p. 220). Princeton, NJ: Princeton University Press.
- Monroe, K. R. (2011). Ethics in an age of terror and genocide: identity and moral choice. *PS: Political Science & Politics*, 44(03), 503-507.
- Morin, C. M., Rodrigue, S., & Ivers, H. (2003). Role of stress, arousal, and coping skills in primary insomnia. *Psychosomatic medicine*, 65(2), 259-267.



- Morgan, C. A., Southwick, S., Hazlett, G., Rasmusson, A., Hoyt, G., Zimolo, Z., et al. (2004). Relationships among plasma dehydroepiandrosterone sulfate and cortisol levels, symptoms of dissociation, and objective performance in humans exposed to acute stress. *Archives of General Psychiatry*, 61(8), 819-825.
- Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Five-Factor Model of personality and performance in jobs involving interpersonal interactions. *Human Performance*, 11(2-3), 145-165.
- Mukherjee, S. (1998). Managerial transformation for TQM: Indian insights. *Journal of Human Values*, 4(1), 77-93.
- Multon, K., Brown, S. & Lent, R. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counselling Psychology*, 38, 30-38.
- Nabert, J. (1962). *Éléments Pour Une Éthique*. Preface Ricoeur P. Paris: Aubier 5-16.
- Nahrgang, J. D., Morgeson, F. P., & Ilies, R. (2009). The development of leader-member exchanges: Exploring how personality and performance influence leader and member relationships over time. *Organizational Behavior and Human Decision Processes*, 108(2), 256-266.
- Nettle, D., & Liddle, B. (2008). Agreeableness is related to social-cognitive, but not social- perceptual, theory of mind. *European Journal of Personality*, Vol. 22 No. 4, pp. 323-335.
- Nilsson, P. M., Rööst, M., Engström, G., Hedblad, B., & Berglund, G. (2004). Incidence of diabetes in middle-aged men is related to sleep disturbances. *Diabetes Care*, 27(10), 2464-2469.
- Nussbaum, M. (1990). *Love's knowledge: Essays on philosophy and literature*. New York: OUP.
- Nussbaum, M. (1995). *Poetic Justice: Literary Imagination and Public Life*. Boston: Beacon Press.
- Nyberg, A. (2009). *The impact of managerial leadership on stress and health among employees*. Doctoral dissertation, Karolinska Institute, Department of public health sciences.
- Nyberg, A., Alfredsson, L., Theorell, T., Westerlund, H., Vahtera, J. & Kivimaki, M. (2009). Managerial leadership and ischaemic heart disease among employees: the Swedish WOLF study. *Occupational and Environmental Medicine*, vol. 66, no. 1, pp. 51-55
- Nyberg, A., Bernin, P., & Theorell, T. (2005). *The impact of leadership on the health of subordinates*. National Institute for Working Life [Arbetslivsinstitutet].

Nyberg, A., Westerlund, H., Magnusson Hanson, L.L. & Theorell, T. (2008). Managerial leadership is associated with self-reported sickness absence and sickness presenteeism among Swedish men and women. *Scandinavian journal of public health*, vol. 36, no. 8, pp. 803-811.

## O

Olivier, R. (2001). *Inspirational Leadership – Henry V and the Muse of Fire*. Spiro Press, London.

## P

Pallant, J. F., & Lae, L. (2002). Sense of coherence, well-being, coping and personality factors: further evaluation of the sense of coherence scale. *Personality and Individual Differences*, 33(1), 39-48.

Pearce, C. L. (2007). The future of leadership development: The importance of identity, multi-level approaches, self-leadership, physical fitness, shared leadership, networking, creativity, emotions, spirituality and on-boarding processes. *Human Resource Management Review*, 17(4), 355-359.

Piaget, J. (1932). The moral development of the child. *Kegan Paul, London*.

Persson, R., Garde, A. H., Hansen, Å. M., Österberg, K., Larsson, B., Ørbæk, P., & Karlsson, B. (2008). Seasonal variation in human salivary cortisol concentration. *Chronobiology international*, 25(6), 923-937.

Petrie, N. (2011). Future trends in leadership development. Center for Creative Leadership white paper.

Petros, N., Opacka-Juffry, J., & Huber, J. H. (2013). Psychometric and neurobiological assessment of resilience in a non-clinical sample of adults. *Psychoneuroendocrinology*, 38(10), 2099-2108.

## R

Rachman, S. (1979). Concept of required helpfulness. *Behaviour Research and Therapy*, 17, 1–6.

Ramírez, J. A., Bruttomesso, A. C., Michelini, F. M., Acebedo, S. L., Alché, L. E., & Galagovsky, L. R. (2007). Syntheses of immunomodulating androstanes and stigmastanes: Comparison of their TNF- $\alpha$  inhibitory activity. *Bioorganic & medicinal chemistry*, 15(24), 7538-7544.

Rayner, C., & Cooper, C. L. (2003). The black hole in “bullying at work” research. *International Journal of Management and Decision Making*, 4(1), 47–64.

Ricoeur, P. (1960). *Philosophie de la volonté: Finitude et Culpabilité. I. L'homme faillible*. Paris: Aubier.

- Ricoeur, P. (1991a). *A Ricoeur reader: Reflection and imagination*. London: Harvester Wheatsheaf.
- Ricoeur, P. (1991b). *From text to action*. Evanston: Northwestern University Press.
- Ricoeur, P. (1992). *Oneself as another*. Chicago: University of Chicago Press.
- Ricoeur, P. (2004). *Parcours de la reconnaissance. Trois études*, Paris: Stock.
- Robles, T. F., & Carroll, J. E. (2011). Restorative biological processes and health. *Social and personality psychology compass*, 5(8), 518-537.
- Rose, K. A., Stapleton, G., Dott, K., Kieny, M. P., Best, R., Schwarz, M., et al. (1997). Cyp7b, a novel brain cyto- chrome P450, catalyzes the synthesis of neurosteroids 7-alpha-hydroxy dehydroepiandrosterone and 7-alpha- hydroxy pregnenolone. *Proceedings of the National Academy of Sciences of the United States of America*, 94, 4925–4930.
- Rosengren, A., Tibblin, G., & Wilhelmsen, L. (1991). Self-perceived psychological stress and incidence of coronary artery disease in middle-aged men. *The American journal of cardiology*, 68(11), 1171-1175.
- Roskam, E. (2009). Using participatory action reseach methodology to improve worker in health. In P. Schnall, M. Dobson & E. Roskam (Eds.), *Unhealthy work - causes, consequences, cures*. Baywood, Amityvill, New York.
- Ruiselova, Z. (2000). Salutogenetic approach in the context of the Big Five Factors. *Studia Psychologica*, 42(3), 157-161.
- Russell, A. M., & Fiske, S. T. (2010). Power and social perception. In A. Guinote & T. K. Vescio (Eds.). *The social psychology of power* (231– 250). New York, NY: Guilford Press.
- S**
- Salovey, P., Bedell, B. T., Detweiler, J. B., & Mayer, J. D. (1999). Coping intelligently. *Coping*, 141-164.
- Sapolsky, R. M., Romero, L. M., & Munck, A. U. (2000). How do glucocorticoids influence stress responses? Integrating permissive, suppressive, stimulatory, and preparative actions 1. *Endocrine reviews*, 21(1), 55-89.
- Sartre, J-P. (1940). *L'imaginaire : psychologie phénoménologique de l'imagination*. Paris: Gallimard.
- SBU. *The importance of working environment for symptoms of depression and chronic fatigue syndrome*. (2014). Stockholm: Statens beredning för medicinsk utvärdering. SBU-rapport nr 223. ISBN 978-91-85413-64-5

- Schaufeli, W., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. CRC press.
- Schaufeli, W. B., Maslach, C. E., & Marek, T. E. (1993). *Professional Burnout: recent developments in theory and research*. Taylor & Francis.
- Schnyder, U., Buchi, S., Sensky, T., & Klaghofer, R. (2000). Antonovsky's sense of coherence: Trait or state? *Psychotherapy and Psychosomatics*, 69(6), 296-302.
- Schuetz, A. (1998). Coping with threats to self-esteem: The differing patterns of subjects with high versus low trait self-esteem in first-person accounts. *European Journal of Personality*, 12(3), 169-186.
- Selart, M., & Johansen, S. T. (2011). Ethical decision making in organizations: The role of leadership stress. *Journal of Business Ethics*, 99, 129–143.
- Sheridan, J.E. & Vredenburgh, D.J. (1979). Structural model of leadership influence in a hospital organization. *Acad Manage J. Mar*;22(1):6-21.
- Siegrist, J. (2008). Chronic psychosocial stress at work and risk of depression: evidence from prospective studies. *European archives of psychiatry and clinical neuroscience*, 258(5), 115-119.
- Sklovskij, V. (1971). *Konsten som grepp (Art as a technique)*. In Aspelin K, Lundberg BA (Eds), *Form och struktur. Litteraturvetenskapliga texter i urval*. Stockholm: PAN/Norstedts.
- Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. *Journal of occupational health psychology*, 12(1), 80.
- Southwick, S. M., Vythilingam, M., & Charney, D. S. (2005). The psychobiology of depression and resilience to stress: Implications for prevention and treatment. *Annual Review of Clinical Psychology*, 1, 255-291.
- Sparrowe, R. T. (2005). Authentic leadership and the narrative self. *The Leadership Quarterly*, 16, 419–439.
- Sripada RK, Marx CE, King AP, Rajaram N, Garfinkel SN, et al. (2013) DHEA Enhances Emotion Regulation Neurocircuits and Modulates Memory for Emotional Stimuli. *Neuropsychopharmacology*.
- Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health—a meta-analytic review. *Scandinavian journal of work, environment & health*, 443-462.
- Stevens, C. D., & Ash, R. A. (2001). Selecting employees for fit: personality and preferred managerial style. *Journal of Managerial Issues*, 4, 500-517.

- Strumpfer, D. J. W. (2003). Resilience and burnout: A stitch that could save nine. *South African Journal of Psychology*, 33(2), 69-79.
- Sturdy, A., Brocklehurst, M., Winstanley, D., & Littlejohns, M. (2006). Management as a (self ) confidence trick: management ideas, education and identity work. *Organization*, Vol. 13 No. 6, pp. 841-860.
- Suitters, A. J., Shaw, S., Wales, M. R., Porter, J. R., Leonard, J., Woodger, R., ... & Foulkes, R. (1997). Immune enhancing effects of dehydroepiandrosterone and dehydroepiandrosterone sulphate and the role of steroid sulphatase. *Immunology*, 91(2), 314-321.
- Suls, J., Martin, R., & David, J. P. (1998). Person-environment fit and its limits: Agreeableness, neuroticism, and emotional reactivity to interpersonal conflict. *Personality and Social Psychology Bulletin*, 24(1), 88-98.
- Svedberg, L. (2007). *Group Psychology*. Studentlitteratur, Lund.
- T**
- Tankersley, D., Stowe, C. J., & Huettel, S. A. (2007). Altruism is associated with an increased neural response to agency. *Nature neuroscience*, 10(2), 150-152.
- Taylor, P. J., Russ-Eft, D. F., & Taylor, H. (2009). Transfer of management training from alternative perspectives. *Journal of Applied Psychology*, 94, 104.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43(2), 178-190.
- Tepper, B. J. (2007a). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, 33(3), 261-289.
- Tepper, B. J. (2007b). Introduction to The Leadership Quarterly special issue: Destructive leadership. *The Leadership Quarterly*, 18(3), 171-173
- Tierney, P., Tepper, B. (2007). Introduction to the leadership quarterly special issue: destructive leadership. *Leadership Quarterly*, 18(3):171-173.
- Theorell, T. (2009). Anabolism and catabolism at work. *Research in occupational stress and well-being*, 7, 249-276.
- Theorell, T., De Faire, U., Johnson, J., Hall, E., Perski, A., & Stewart, W. (1991). Job strain and ambulatory blood pressure profiles. *Scandinavian journal of work, environment & health*, 380-385.
- Theorell, T., Emdad, R., Arnetz, B., & Weingarten, A. M. (2001). Employee effects of an educational program for managers at an insurance company. *Psychosomatic Medicine*, 63(5), 724-733.

- Theorell, T., Harms-Ringdahl, K., Ahlberg-Hulten, G., & Westin, B. (1990). Psychosocial job factors and symptoms from the locomotor system--a multicausal analysis. *Scandinavian journal of rehabilitation medicine*, 23(3), 165-173.
- Theorell, T. O. R., Alfredsson, L., Westerholm, P., & Falck, B. (2000). Coping with unfair treatment at work--What is the relationship between coping and hypertension in middle-aged men and women? *Psychotherapy and psychosomatics*, 69(2), 86-94.
- Theorell, T., Hasselhorn, H. M., Vingård, E., Andersson, B., & MUSIC-Norrtälje Study Group. (2000a). Interleukin 6 and cortisol in acute musculoskeletal disorders: results from a case-referent study in Sweden. *Stress and Health*, 16(1), 27-35.
- Theorell, T., Westerlund, H., Alfredsson, L., Oxenstierna, G. (2005). Coping with critical life events and lack of control – the exertion of control. *Psychoneuroendocrinology*, 30:1027–1032.
- Tobin, R.M., Graziano, W.G., Vanman, E.J. and Tassinary, L.G. (2000). Personality, emotional experience, and efforts to control emotions. *Journal of Personality and Social Psychology*, Vol. 79 No. 4, pp. 656-669.
- Tollgerdt-Andersson, I. (2005). *Ledarskap och sjukfrånvaro: en jämförande studie av arbetsplatser med hög respektive låg sjukfrånvaro*, FoU i Väst, Göteborg.
- Tollgerdt-Andersson, I. (1996). *Swedish Leadership in Europe*. Malmö, Liber-Hermods,
- Turner, V. (1995). *The ritual process: Structure and Anti-Structure*. New Jersey: Transaction Publishers.
- Wittgenstein, L. (1984). *Culture and value*. University of Chicago Press.

## U

- Ursin, H., & Eriksen, H. R. (2004). The cognitive activation theory of stress. *Psychoneuroendocrinology*, 29(5), 567-592.

## V

- Walsh, Froma. (2009). Integrating spirituality in family therapy: Wellsprings for health, healing and resilience. In *Spiritual resources in family therapy*, ed. Froma Walsh, 31-61. New York: The Guilford Press.
- Van der Hart, O., Nijenhuis, E. R., & Steele, K. (2006). *The haunted self: Structural dissociation and the treatment of chronic traumatization*. WW Norton & Company.
- Van de Vliert, E., & Euwema, M. C. (1994). Agreeableness and Activeness as Components of Conflict Behaviors. *Journal of Personality and Social Psychology*, 66(4), 674-687.

- Van Velsor, E., Taylor, S., & Leslie, J. B. (1993). An examination of the relationships among self-perception accuracy, self-awareness, gender, and leader effectiveness. *Human Resource Management*, 32, 249-263.
- Wang, J., & Patten, S. B. (2001). Perceived work stress and major depression in the Canadian employed population, 20–49 years old. *Journal of Occupational Health Psychology*, 6, 283–289.
- Weissbecker, I., Sephton, S. E., Salmon, P., Studts, J. L., Floyd, A. R., & Dedert, E. A. (2002). Mindfulness-based stress reduction and sense of coherence among women with fibromyalgia. *Journal of Clinical Psychology in Medical Settings*, 9(4), 297-307.
- Wells, A., & Carter, K. (2002). Further tests of a cognitive model of generalized anxiety disorder: Metacognitions and worry in GAD, panic disorder, social phobia, depression, and nonpatients. *Behavior therapy*, 32(1), 85-102.
- Wenglén, R. & Svensson, P. (2008). The skilled incompetent manager. *Sociologisk forskning*, Vol. 1, pp. 42-61.
- Westen, D. (1995). Revision of social cognition and object relation scale: Q-sort for projective stories. Unpublished manuscript, Department of Psychiatry, Cambridge Hospital and Harvard Medical School, Cambridge, MA.
- Westerholm, P. (2008). (Ed.): Psykisk arbetsskada. Volume;42: 1. Göteborg: Arbets- och Miljömedicin, Göteborgs universitet;.
- Westerlund, H., Bergström, A., & Theorell, T. (2004). Changes in anabolic and catabolic activity among women taking part in an alternative labour market programme. *Integrative Physiological & Behavioral Science*, 39(1), 3-15.
- WHO: The world health report:report of the Director-General. Mental Health: new understanding, new hope. Geneva: World Health Organization; 2001.
- Wikström, B-M., Theorell, T. & Sandström, S. (1993). Medical health and emotional effects of an art stimulation in old age. A controlled intervention study concerning the effects of visual stimulation provided in the form of pictures. *Psychotherapy and Psychosomatics*, 60, 195-206.
- Winter, D. G., & Barenbaum, N. B. (1985). Responsibility and the power motive in women and men. *Journal of Personality*, 53(2), 335-355.
- Wittgenstein, L. (1984). *Culture and value*. University of Chicago Press.
- Wolf, O. T., Kirschbaum, C., Kudielka, B. M., Hellhammer, D. H., & Hellhammer, J. (1998). Opposing effects of DHEA replacement in elderly subjects on declarative memory and attention after exposure to a laboratory stressor. *Psychoneuroendocrinology*, 23(6), 617-629.

Wolkowitz, O. M., Epel, E. S., Reus, V. I., & Mellon, S. H. (2010). Depression gets old fast: do stress and depression accelerate cell aging? *Depression and anxiety*, 27(4), 327-338.

Vuori, J. (1994). Preemployment antecedents of health resources, job factors and health risk behavior in men and women. *Work and Stress*, Vol. 8 No. 3, pp. 263-277.

## Y

Yammarino, F. J., & Atwater, L. E. (1993). Understanding self- perception accuracy: Implications for human resource management. *Human Resource Management*, 32, 231-247.

Yehuda, R., Brand, S. R., Golier, J. A., & Yang, R. K. (2006). Clinical correlates of DHEA associated with post-traumatic stress disorder. *Acta Psychiatrica Scandinavica*, 114, 187-193.

Yehuda, R., Resnick, H., Kahana, B., & Giller, E. L. (1993). Long-lasting hormonal alterations to extreme stress in humans: normative or maladaptive? *Psychosomatic Medicine*, 55(3), 287-297.

Yukl, G. A. (2006). *Leadership in organizations*. Upper Saddle River: Prentice Hall.

## Z

Zak, P. J., Kurzban, R., & Matzner, W. T. (2005). Oxytocin is associated with human trustworthiness. *Hormones and Behavior*, 48(5), 522-527.

Zapf, D., & Gross, C. (2001). Conflict escalation and coping with workplace bullying: A replication and extension. *European Journal of Work and Organizational Psychology*, 10, 497-522.

Zellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87(6), 1068-1076.

Zur, O.(1994). Rethinking – Don't Blame the Victim!: Psychology of Victimhood. *Journal of Couple Therapy*, 4 (3/4), 15-36.

## Å

Åkerstedt, T. (2006). Psychosocial stress and impaired sleep. *Scand J Work Environ Health* 32: 493-f501.

Åkerstedt, T., Kecklund, G., Axelsson, J. (2007). Impaired sleep after bedtime stress and worries. *Biol Psychol* 76: 170-173.

Åkerstedt, T., Knutsson, A., Westerholm, P., Theorell, T., Alfredsson, L., & Kecklund, G. (2002). Sleep disturbances, work stress and work hours: a cross-sectional study. *Journal of psychosomatic research*, 53(3), 741-748.