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MINDFULNESS-BASED PROGRAM AS A STRESS-MANAGEMENT INTERVENTION METHOD. A CASE STUDY AMONG MANAGERS IN STORA ENSO FINANCE DELIVERY TALLINN

Master´s Thesis

Programme Business Administration

Supervisor: Karin Reinhold, PhD

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I hereby declare that I have compiled the paper independently

and all works, important standpoints and data by other authors

has been properly referenced and the same paper

has not been previously presented for grading.

The document length is 13724 words from the introduction to the end of conclusion.

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ABSTRACT

Occupational stress has become an important topic of interest in recent decades due to increase in negative impact on employees´ physical and mental health, influencing thereby also organizations´ financial performance with costs from absenteeism and employee turnover. More organizations deal with the topic more openly by offering employees different types of supportive intervention methods.

The objective of the Master thesis is to find out how effectively can a mindfulness-based program be utilised as a stress-management intervention method as well as to find out the possible relationships between authentic leadership, leader efficacy, work engagement and the level of mindfulness. The research questions of this Master thesis are following: 1. How is a mindfulness-based program affecting the level of occupational stress? 2. Does a mindfulness-based program affect work engagement? 3. Is there a positive link between leadership authenticity and level of mindfulness? 4. Does higher leadership authenticity and/or level of mindfulness support higher leader efficacy?

This research is a longitudinal explanatory case study using a mixed method research approach. Nine managers from Stora Enso Finance Delivery Tallinn organization took part in a Mindfulness Training Series program, during which they also carried out individual practice. The program was held in five sessions, 90 minutes each, from September to October, 2019. Quantitative data was gathered through questionnaires pre- and post-program, as well as from short surveys from each program session. Qualitative data was gathered through semi-structured interviews held with the participants after the program had ended.

The results of the research show that a mindfulness-based program can be suggested as one possible stress-management intervention method in organizations as mindfulness can support increasing the coping skills for handling occupational stress. There were no clear indications that mindfulness has an affect to work engagement but it can be said that mindfulness supported the level of authenticity for most of research participants. Participants who attended most of the

sessions had the greatest increase in the level of mindfulness, authentic leadership and leader efficacy, suggesting that both mindfulness and authentic leadership style support leader efficacy.

INTRODUCTION

Constant new challenges, whether due to high pace development in technology, increased competition or changed motivational terms in workforce make leadership both challenging and especially important for organizations. As expectations for leaders are high then it might create additional occupational stress and also have an affect on work engagement. Both leaders themselves and organizations need to acknowledge what they can do to maintain a balance in the stress level, keep leaders engaged and develop them further.

This Master thesis will focus on the occupational stress level of managers in Stora Enso Finance Delivery (SE FD) Tallinn organization, which has undergone fundamental changes in the last years changing their business model and insourcing the financial processes; creating new and temporary extra tasks, additional workload, need to hire and train a considerable amount of new employees and tension to manage the changes in a given timeframe and budget. Based on that, the research problem for the Master thesis is that the employees at SE FD organization are not able to effectively cope with increasing negative stress at work. Increasing negative stress at work is also visible from the results of Stora Enso yearly employee satisfaction survey (Stora Enso 2018).

The objective of the Master thesis is to find out how effectively can a mindfulness-based program be utilised as a stress-management intervention method among SE FD Tallinn organization managers, as well as to find out the possible relationships between authentic leadership, leader efficacy, work engagement and the level of mindfulness.

The research questions of this Master thesis are following:
1. How is a mindfulness-based program affecting the level of occupational stress?
2. Does a mindfulness-based program affect work engagement?
3. Is there a positive link between leadership authenticity and level of mindfulness?
4. Does higher leadership authenticity and/or level of mindfulness support higher leader efficacy?

The thesis is mainly focused on managers. The research also includes results from volunteers who participated in the mindfulness-based program. Their input comes through anonymous surveys which were filled every session. The aim for the future is to enlarge the participants of the program to a bigger group of employees after a potentially successful pilot study and gradually integrate mindfulness practice to all levels in the organization.

This thesis is concentrating mainly on managers as they are more likely to have a high level of occupational stress due to the nature of their role, which might also impact the quality of leadership. Therefore leadership style is included to the research. When deciding upon which leadership style to study then "As one possibility to look at leadership and its development is to focus on the root construct – authentic leadership - which is the foundation of all positive forms of leadership and leadership development" (Avolio, Gardner 2005). This study is also focusing on the basis, authenticity of a leader.

The Master thesis is a longitudinal explanatory case study using a mixed method research approach. The participants took part in a Mindfulness Training Series program, during which they carried out individual practice. The program was held in five sessions, 90 minutes each, from September to October, 2019. Quantitative data was gathered through questionnaires pre- and post-program, as well as from short surveys from each program session. Qualitative data was gathered through semi-structured interviews held with the participants after the program had ended.

Based on the outcome of the research, the Master thesis will provide suggestions to organizations regarding possible implementation of mindfulness-based programs as a stress-management intervention method.

The structure of the Master thesis is following: theoretical background, where the research terms are explained, some findings from previous studies related to the topics and also possible links with the study items brought out. The research itself is described in the second part of the thesis, explaining more the background of why Stora Enso Finance Delivery Tallinn managers were selected as a sample, how the study was structured, data collected and analysed. Third part of the study will focus on the quantitative and qualitative results of the research, providing suggestions to organizations regarding possible implementation of mindfulness-based programs as a stress-management intervention method based on the outcome of the research. The objectives are analysed based on the research results and previous studies and discussion points brought out in

the fourth part of the thesis. The fourth part will contain study limitations and suggestions for the future studies. The Master Thesis will end with a conclusion, list of references and appendices. Thesis has been proofread by Dean Marcinyshyn.

1. THEORETICAL FRAMEWORK

This Master thesis is focusing on five main topics to study: Occupational stress, Work engagement, Mindfulness, Authentic leadership and Leader efficacy. As mindfulness was chosen to be the possible mediator regarding the topics, then Conservation of Resources (COR) theory was taken as a theoretical foundation. Firstly the background of COR theory and each of the research topics will be explained and main definitions brought out. Secondly, it will also be clarified how the research topics can be linked with each other, using findings from different studies, while taking mindfulness as a central focus. Understanding the link between to topics makes second part of the research paper, the study itself, more clear and easier to follow.

1.1. Conservation of Resources Theory

One base to research mindfulness and its effects has been COR theory, Conservation Of Resources, which proposes that: „employees actively seek to acquire, protect, and rebuild resources valued by the individual" (Hobfoll 2001). As the research for the Master thesis focuses on both mindfulness and stress, then this theory can be used efficiently as COR theory is also used in stress related studies as it states that: „resource loss is the principal ingredient in the stress process" (*Ibid.*).

The COR theory is seen as an alternative to appraisal-based stress theories and has been used successfully to predict the stress related outcomes in both organizational settings, individual health context and handling everyday stressors (*Ibid.*).

From occupational stress perspective the COR theory will be supported by the Occupational Stress Model by Cooper and Marshall which illustrates very clearly which factors according to their research create occupational stress to the individual. Occupational Stress Model will be clarified further in chapter 1.2.1.

1.2. Stress

The word "stress" comes from Latin *stringere,* meaning "to draw tight" and as "stress" has been so overused and elusive as a term, there have been suggestions to abandon it completely (Furnham 2005, 354). There has been several theories and models built upon stress. (*Ibid.*, 358-363) has named the following: Control theory by Spector, 1998; Cybernetic theories by Cummings, Cooper, 1998 and Edwards, 1998; Social-environment model (Michigan model) and Person-environment fit model, summarized by Caplan, 1983; Demand-control model based on the work of Karasek and colleagues, 1990 and Effort-reward imbalance theory by Siegrist, 1996.

This Master thesis is focusing on the interactive mechanism of stress process, combining both stimulus and response elements (*Ibid.*, 356). Therefore the work of Lazarus is chosen as a way to define the concept of stress.

"According to cognitive-motivational-relational theory, stress depends on the balance of power, as judged subjectively, between the environmental demands, constraints, and resources and the ability of the person to manage them" (Lazarus 1995).

Central to the stress process is coping, as it gives an immidiate effect on how a person reacts to stress emotionally and in long-term, where it influences subjective well-being, social functioning and somatic health. Coping is defined by Lazarus as: "cognitive and behavioral efforts a person makes to manage demands that tax or exceed his or her personal resources" and is a constant process. (*Ibid.*)

Coping is also brought out in the Occupational Stress Model, clarified in the next chapter. Occupational Stress Model is supporting this research as based on the general understanding of stress, occupational stress was chosen as a more narrow study area by the author.

1.2.1. Stress in the workplace, occupational stress

Due to transformational changes in the economy and political spheres, organizations need to be very adaptive to new strategies, adopt and implement various high-performance work systems such as outsourcing, privatization, mergers, acquisitions, decentralized control and more flexible and lean production technologies. Those work systems often involve layoffs of permanent employees and utilization of temporary or subcontracted staff, reduced job stability and increased

workload which are all potentially stressful circumstances and have led today´s industrial society to a situation where occupational stress is a major health risk. (Taris *et al.* 2010) So all the working people from the labor force are potentially affected by occupational stress at the workplace because of the general business environment in the society.

When looking at the early studies regarding the specific causes for occupational stress from the 1960s, the results show that role ambiguity, responsibility for managing people, shift work, little autonomy, rapid technological change and threats to self-esteem through evaluation methods were identified as causes for occupational stress (Zander, Quinn 1962 cited by di Salvo *et al.* 1995, 40), according to (Kahn *et al.* 1964 cited by di Salvo *et al.* 1995, 40) the stressors were: role conflict, role ambiguity, unmet expectations, work overload and interpersonal conflicts among members. Heavy workload and little or no control over the work pace are also found as sources for occupational stress in more recent studies (DeLamater *et al.* 2018, 523)

Figure 1 shows the Occupational Stress Model by Cooper and Marshall from 1976, illustrating which factors according to their research create occupational stress to the individual. Depending on how well the individual is able to cope with the pressure, the possible negative outcomes of stress can be prevented. (Clarke, Cooper 2004, 6)

Sources of pressure

Intrinsic to the job
Role in the organization
Relationships at work
Career development
Organisational   structure
and climate
Home-work interface

Individual
e.g. coping strategies
personality

Stress outcomes
e.g. mental ill-health
physical ill health
sickness absence
work accidents

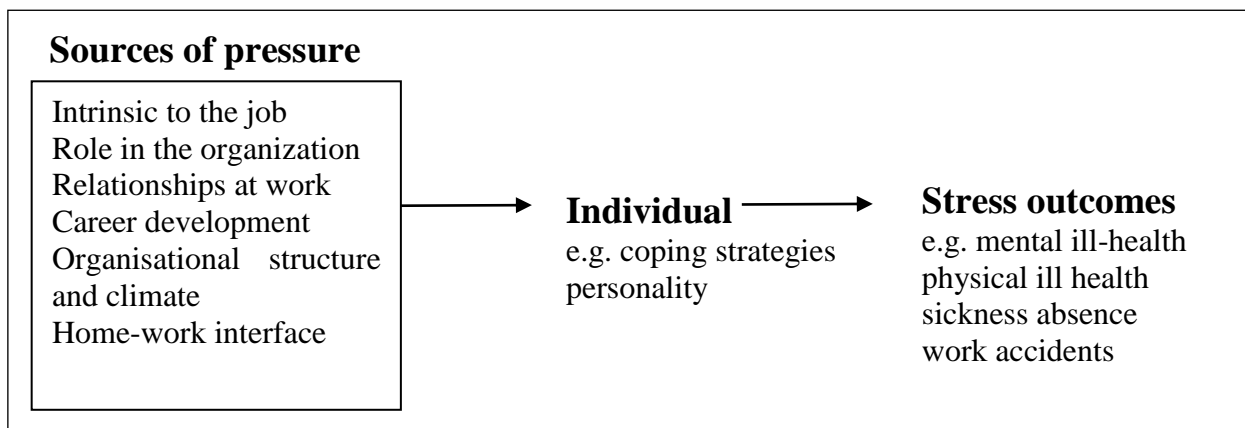Figure 1: The Occupational Stress Model by Cooper and Marchall 1976
Source: (Clarke, Cooper 2004, 6)

This model is combining factors from the job itself and organizational context, such as structure, climate, management style and communication. It is appropriate to be used in this Master thesis as it is focusing on the individuals´ occupational stress level due to the stressors, individuals´ possible

coping skills to the situation and also as one possible tool to show which are the negative outcomes of stress.

Occupational stress is nowadays analysed and tackled in organizations as one of the psychosocial risks. Besides occupational stress also burnout, psychological and sexual harrassment, as well as, third-party violence are some examples categorized as psychosocial risks. In addition to above mentioned sources of stress, it is also brought out that lack of involvement in decision making, poor communication about changes at the workplace and lack of support from the management were identified as stressors. (Nielsen *et al.* 2018)

Stress is part of our everyday life and we are constantly exposed to potentially stressful events or circumstances. Even though the topic has been actual for some time and there seem to be also less organizations where it is tabooed, it seems that the amount of people struggling with stress is still growing rapidly. It is up to organizations and individuals to try and adapt new tools and methods to tackle this issue.

1.2.2. Workplace stress management interventions

As stress has become an inevitable part of our lives then it is also quite clearly an inevitable part of our working life. As time spent at work is substantial then organizations need to mitigate the potential effects of stress and support their employees in handling the stressors efficiently. Many organizations have therefore integrated a set of stress management intervention programs to strategically handle the topic.

"Stress Management Intervention (SMI) is any activity or program initiated by an organization that focuses on reducing the presence of work-related stressors or on assisting individuals to minimize the negative outcomes of exposure to these stressors" (Ivancevich *et al.* 1990 cited by Richardson, Rothstein 2008).

Framework for SMIs was developed by Ivancevich *et al.* and targeted the following areas in the stress cycle (Richardson, Rothstein 2008):
   a) the intensity of stressors in the workplace,
   b) the employee´s appraisal of stressful situations,
   c) the employee´s ability to cope with the outcomes.

In practice, structure, focus and implementation of such programs are based on organization´s needs and can therefore target either each or a combination of all the above mentioned areas.

Based on the meta-analysis done by Richardson and Rothstein, the SMIs can be classified as based on a focus of the intervention as (Sidle 2008):

a) primary interventions, which try to change the workplace stress sources by, for example, redesigning the jobs, increasing the decision making authority and flexibility.

b) secondary interventions, which aim to improve employees´s awareness and ability to cope with stress by, for example, exercise, meditation, cognitive-behavioural skills training, relaxation.

c) tertiary interventions, which support employees to recover from stressful events with the support of, for example, mental health professionals through Employee Assistance Programs.

Most commonly used SMIs in organizations are secondary interventions (Giga *et al.* 2003 cited by Richardson, Rothstein 2008). They can intend to alter the employees´ appraisal and response to stressful events with the help of cognitive-behavioural intervention, decrease the adverse reactions to stress with the support of meditation, relaxation and deep-breathing interventions, focus on physical release to stress tension using exercise programs, monitoring and managing stress by journaling interventions (Richardson, Rothstein 2008).

Table 1 gives a better perspective of the different types of interventions based on the focus as well as possible outcomes to the individual and/or organization.

Table 1. Levels of Stress Management Interventions and Outcomes

Interventions	Outcomes
Focus on individual:	Focus on individual:
Relaxation techniques	Mood states (depression, anxiety)
Cognitive coping strategies	Psychosomatic complaints
Biofeedback	Subjectively - experienced stress
Meditation	Physiological parameters (blood pressure,
Exercise	catecholamines, muscle tension)
Employee Assistance Programmes	Sleep disturbances
	Life satisfaction
Focus on individual/organizational interface:	Focus on individual/organizational interface:
Relationships at work	Job stress
Person-environment fit	Job satisfaction
Role issues	Burnout
Participation and autonomy	Productivity and performance
	Absenteeism
	Turnover
	Health care utilization and claims
Focus on organization:	Focus on organization:
Organizational structure	Productivity
Selection and placement	Turnover
Training	Absenteeism
Physical and environmental	Health care claims
characteristics of job	Recruitment/retention success
Health concerns and resources	
Job rotation	

Source: (DeFrank, Cooper 1987)

Even though there is an unavoidable overlap of some items as none of the categories is entirely independent of others (DeFrank, Cooper 1987), it can still be used successfully by the management in order to evaluate the stress levels in the organization, offer the sufficient programs and assess the effectiveness through possible outcomes mentioned in the table.

1.2.3. Stress management intervention effectiveness

There is a wide range of intervention program types used by organizations, based on their needs, financial condition, the level and source of stress and range of employees involved. It can also be assumed that many of the intervention programs are not implemented and assessed in a strategical way, using a comprehensive framework which makes the evaluations of their effectiveness a challenge. Organizational SMIs are different in design and may be tailored according to a specific

organization so that the likelihood of outcomes being impacted by process and circumstances increases (Holman, Johnson 2018).

Based on the meta-analysis by Richardson and Rothstein in 2008, where they analysed the outcome of 36 studies and 55 interventions, the most popular treatments were relaxation and meditation techniques, however larger effects were consistently produced by cognitive-behavioural programs. The biggest difference in the mentioned intervention types is relaxation and meditation being a passive technique where the individual learns how to let go of the tension but does not confront the dysfunctional ideas, behaviours and emotions. Cognitive-behavioural interventions however are seen as an active approach for taking charge in the negative thinking and emotions and changing the cognitions and emotions to more be more proactive. (Richardson, Rothstein 2008)

It needs to be mentioned that the existing meta-analysis on secondary level SMIs have not mentioned mindfulness training as a separate category, therefore statistical summary and comparison with other methods is lacking. (Holman, Johnson 2018)

A more holistic and comprehensive approach to stress management (Table 2) has been proposed by (Grawitch et al. 2015) where they analyse the different perspectives and viewpoints for designing and assessing SMIs and propose a structured framework to organizations.

Table 2. Comprehensive approach to stress management

Aspect	Purpose
Needs assessment	To determine needs in the areas of employee personal resource deficiencies, an excessive number of demands or demands that are excessively resource depleting, lack of fit between employees and their job demands, resources being allocated ineffectively or a deficit of skills related to resource allocation and negative outcomes that are occurring as a result of exposure to chronic stress.
Top management support	To ensure that senior leadership will provide the resources necessary to ensure effective intervention design, implementation and evaluation. Sometimes, this can be acquired prior to actual needs assessment, but often data are needed to garner the necessary support. In addition, senior leadership must communicate support for the practices and model desired behaviours.
Employee involvement	This is necessary to ensure that employee ownership is cultivated for the comprehensive approach to stress management within the organization. Employees can and should be involved in a variety of phases, including needs assessment, program development, communication, implementation and evaluation.
Comprehensive strategy	A comprehensive strategy is important for specifying the area(s) of focus for the comprehensive approach. The strategy should be driven largely by the results of the needs assessment, although buy-in by senior leadership and employees will be important. The strategy should also detail the overall goals of the program, which will assist in identifying important intervention components (from the five psychologically healthy workplace areas) and relevant outcomes for evaluation.
Implementation plan	Once a strategy is identified, the execution of that strategy becomes important. Although the strategy may involve a long-term plan with many types of interventions, those interventions cannot typically be implemented all at the same time. An effective implementation plan can be utilized to help create a timeline for the development and implementation of various stress management components.
Evaluation plan	This should be designed hand in hand with the implementation plan. It should detail how the key outcomes will be assessed and how often assessment will occur. In addition, it should include the collection of data (often qualitative) that can be used to guide ongoing improvement and refinement of the overall strategy and its implementation.

Source: (Grawitch et al. 2015)

This approach could be tailored and integrated to the specific needs of the organizations but at the same time a broad perspective on the organization as a whole is needed in order to strategically handle the stress in different organizational layers efficiently (Grawitch *et al*. 2015).

Even though there currently is still no universal way of assessing the effectiveness of different SMIs in use and regardless of the specific assessment approach the organization is using for a particular SMI, it should be planned and carried out in a documented and structured way, having

a sustainable framework so that SMIs wouldn´t be abandoned due to poor management and causing negative outcomes of occupational stress (re)appear. It is also vital to do a long-term follow-up with the interventions in order to re-assess the effectivess of the interventions with handling the possible new stressors (DeFrank, Cooper 1987).

1.3. Work engagement

Work engagement is receiving an increased amount of attention in the organization and management literature (Gunasekara, Shao-mei Zheng 2018) and has been defined as a: „positive, fulfilling, affective-motivational state of work-related well-being that is characterized by vigour, dedication, and absorption (Bakker *et al*. 2008).

Even though organizations are interested in having engaged employees, especially in today´s situation in an economy with high competition among companies and deficiency in talented workforce in some occupational sectors, they don´t always necessarily know how to maintain or increase the level of engagement. According to a Gallup 2016 report, employee engagement can significally improve the organizational performance outcomes such as: customer loyalty, profitability, productivity, turnover, safety incidents, shrinkage, absenteeism, patient safety and quality (defects) (Harter *et al*. 2016).

1.4. Mindfulness

Consciousness is believed to play an important role in well-being by several spiritual, philosophical and psychological traditions. Its primary capacities, attention and awareness, can be trained and improved by being more mindful. (Brown, Ryan 2003)

Mindfulness originates from Buddhist practice as being a form of meditation to cultivate full and active awareness to present experience, maintaining it from one moment to the next (van Gordon *et al*. 2014) but is known more in a modern society and also in organizations by Kabat-Zinn who defines mindfulness as: „the awareness that emerges through paying attention, on purpose, in the present moment, and non-judgementally to the unfolding of experience moment by moment" (Kabat-Zinn 2003 cited by Janssen *et al*. 2018). Kabat-Zinn has developed a mindfulness-based training called Mindfulness Based Stress Reduction (MBSR) which is the most common form of

mindfulness based training. Even though originally developed for patients with chronic pain (Janssen *et al.* 2018) is MBSR now used also by healthy people in different occupational sectors.

The interest in the topic of mindfulness, its potential effects and ways of usage has grown rapidly in the recent years which is visible also from the heavily increased amout of research done in the field. In 2018 only there were 842 articles published among academic journals regarding mindfulness (American Mindfulness Association 2019).
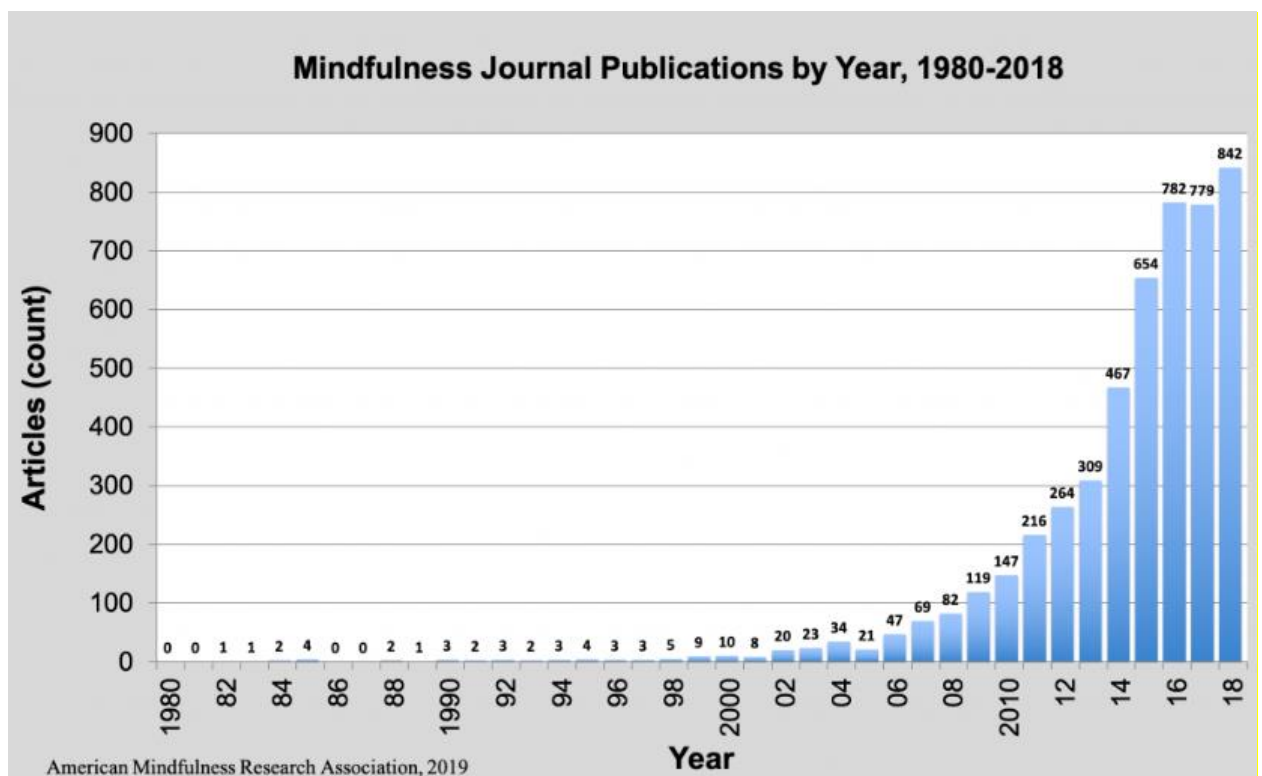
Figure 2: Mindfulness journal publications by year, 1980-2018
Source: (American Mindfulness Association 2019)

However, as mindfulness has become increasingly popular, there has been a certain scepticism growing in academic sphere regarding the possible misusage of the original concept of mindfulness, changing the originally Buddhist contemplative tradition into commodified consumerist product (Hyland 2017). This might also result in increased amount of research done and publications published as there were not too many studies in the field done until recent decade.

1.4.1. Mindfulness in business environment

As more research is done regarding the mindfulness and its physical and psychological benefits proven (Hyland *et al.* 2015), more organizations are interested in incorporating mindfulness programs to their organization culture. Hyland *et al.* (2015) mentions the following organizations who have started to offer mindfulness to their employees: Aetna, General Mills, Google, U.S. Army, Harvard Business School and some other universities in the US.

Besides occupational stress, which is one of the main focus areas in this research, mental health issues are also affecting organizations. The consequence of either symptomology or disability from mental health problems are resulting in lost work days, labour turnover and absenteeism. Bringing mindfulness to organizations is increasing awareness of these issues in the organization in general, and from a leadership perspective, enhancing the leadership support. Through increased awareness and leadership support the amount of employees who seek help and support regarding their mental health issues may increase. (Auten, Fritz 2018)

Mindfulness based programs in the workplace were initially mainly slightly customized versions of MBSR. Today there are several companies who are specialized in offering workplace mindfulness trainings. The format and content of the MBSR has been adapted to the organizational needs, for example by minimizing the time spent away from work tasks, shortening the daily individual mindfulness practice from original 45 minutes to 10-15 minutes, making courses available to attend online and conducting the program over a time period most suitable for the organization. (Hyland *et al.* 2015)

In Estonia, mindfulness is taught in a 8-week program, developed by psychologist Helena Väljaste, of MTÜ Vaikuseminutid. Other formats of mindfulness programs are offered to different focus groups. Also, psychologists Kärt Lust-Paal and Anni Kuusik are teaching mindfulness, as well as Elina Ojastu. The qualified trainer for Search Inside Yourself program by Google is Marko Leppik. MTÜ Teadveoleku labor is also offering mindfulness programs. This might not be a complete list of mindfulness trainers, but it is clear that mindfulness has not reached its full capacity in organizational context. A few examples of organizations in Estonia where mindfulness training has been held in some format are: Swedbank, University of Tartu, Pärnu Hospital, Playtech, Testlio and Ministry of Justice.

Therefore, mindfulness is more increasingly seen as one possible way to deal with challenges that might appear in either personal or professional context but which will definitely affect also the business environment. Increased attention and awareness to one´s present through increased mindfulness helps to improve well-being, performance and relationships (Auten, Fritz 2018). All of which are important both from business perspective as well as individual.

1.4.2. Mindfulness Training Series Program

The format of introducing mindfulness and assessing the possible benefits to Stora Enso was a program developed by psychologist Helena Väljaste called Mindfulness Training Series (MTS). Instead of an 8 – session program, MTS is held in 5 sessions, each lasting 90 minutes. The program is based on five themes for each program session: Presence, Thoughts, Emotions, Relationships and Balance. The overview of each session with the topics and exercises can be seen from Appendix 10.

The practical purpose was to develop a program to a bigger audience (30-40 participants) as opposed to an 8-week program which is usually for up to 16 participants, having not so in-depth appoarch to the topics, and with an aim to give an introduction and overview of mindfulness plus practical exercises that could be easily integrated to the work environment. The program needed to be fit to participants without any prior experience with mindfulness or meditation and participants who were able to attend only some sessions of the whole program. When developing the program, it was also important to take into account the potential preventive effect of mindfulness. So, the participants of the program were not assumed to be under heavy pressure or stress. At the same time the content needed to be helpful also for participants who were already struggling and needed some very precise supportive measures to improve their well-being.

Currently, MTS has been successfully held in Playtech Tallinn and Tartu offices and Testlio. It is also visible that organizations are becoming more interested and open to the topic as more organizations are reaching out to the trainers with their willingness to introduce mindfulness to their employees. However, from Stora Enso FD operating business model point of view, to the author´s knowledge none of the Financial Shared Service Centers in Estonia have undergone a mindfulness training in such context and length.

1.5. Authentic Leadership

Greek philosophers have defined authenticity as "Know thyself" and "To thine own self be true" (Harter 2002 cited by Avolio *et al*. 2004). An authentic person acknowledges, accepts and remains loyal to one´s self. Authentic leaders are therefore people with high authenticity level, who behave in accordance to their values and beliefs and who are very transparent in their interaction with others. (Avolio *et al*. 2004)

Through transparency and openness authentic persons are able to gain trust, have high moral standards, are more positive and have a healthy climate around themselves (Gardner *et al*. 2005). Authentic leaders have an effect on their colleagues, subordinates, clients and other stakeholders and workplace in general by behaving according to their true selves. Organizations should not fear high authenticity in a leadership as a threat, but use it rather as a tool to engage employees through their leaders and possibly also gain economically from that.

But as authenticity is not something you either have or don´t, it´s not a permanent condition as authentic or inauthentic (Erickson 1995 cited by Gardner *et al*. 2005), it is something that can be developed. For example, action learning can be used to become a more authentic leader (Baron, 2016). As leaders become more authentic in their leadership, due to increased self-awareness, self-regulation and positive modeling, they also increase their followers´ authenticity development (Avolio, Gardner 2005). Authentic relations can be described as open, trustworthy, transparent, guiding to (follower) devolpment and toward worthy objectives (Gardner *et al*. 2005). Such relations are also increasing the positive and healthy athmosphere at the workplace, so it is undestandable why the topic is becoming increasingly important for organizations.

1.6. Leader Efficacy

"Leadership efficacy is a specific form of efficacy associated with the level of confidence in the knowledge, skills, and abilities associated with leading others" (Hannah *et al*. 2008). It is definitely something that both organizations and employees want to see - their leaders being confident in their decisions and actions.

Leader efficacy can also be linked to openness to devolopment so organizations might find it useful to rate the leader efficacy level in order to define the developmental readiness, which in turn help

them maximize employees´ "return on development". Also here it is important to note, that efficacy is something that can be developed, not a static state. (Hannah, Avolio 2013)

Leader efficacy was defined as a construct in the Leader Self and Means Efficacy Theory (LSME) which states that „leaders´ level of perceived capability to self-regulate their thoughts and motivation, draw from means in their environment, and act successfully across the span of leader challenges and tasks in their current context" (Hannah *et al.* 2012). Leader Efficacy Questionnaire which is used in the current research has been developed based on the LSME and has proven its validity.

As there are often both „leader" and „leadership" used when talking about efficacy, it should be clarified that a narrower approach is a „leader efficacy" on an individual level and „leadership efficacy" as collective concept (Hannah *et al.* 2008). In the current research paper the focus is on an individual level or leader efficacy.

1.7. Connections between study topics

As there are quite many topics this Master thesis is focusing on, besides mindfulness and occupational stress, mindfulness was selected as the mediator between them. Firstly, most of the studies found in the literature regarding the topics had mindfulness as a common indicator. Secondly, as the main focus area for the Master thesis is mindfulness based stress-management intervention in the organization then it was reasonable to take mindfulness as a basis when searching for connections between all the study topics.

Even though this thesis is focusing on managers, understanding the possible benefits to employees in general from integrating mindfulness to a leadership development is needed. One potential benefit might be that by improving managers´ well-being, the well-being and performance of those who work for them is improved (Donaldson-Feilder *et al.* 2019). At the same time, as the systematic review of 19 studies on mindfulness or meditation interventions for managers and leader concludes – all of the studies found some positive change in leadership, even if no in all sub-categories and sometimes only through self-assessment measures (*Ibid.*). The full potential of mindfulness in leadership development is definitely worth studying further.

1.7.1. Workplace mindfulness and stress

As coping skills seem to be essential to stress process, then mindfulness might support the increase in coping skills through increased self-awareness, self-acceptance and self-compassion.

Allen *et al*. (2015) made a thorough review on studies which had mindfulness based training done to workers/workplaces. Most of the 27 studies found had stress and strain as a variable (24 out of 27) and the majority of these studies show us that mindfulness was beneficial in reducing stress and/or enhancing well-being.

When we use the Occupational Stress Model from chapter 1.2.1. as an example, then we see that mindfulness can also reduce or prevent stress by improving the concentration at work and interpersonal relationships. However the same study also showed that the benefits of mindfulness are linked with the amount of practice, as the participants who practiced longer at homehad better results. (Mellor *et al.* 2016)

In Estonia, to the author´s knowledge, there has not been any research done regarding the possible effect of mindfulness practice to occupational stress among managers. However, Helena Hanso has studied the possible impact of mindfulness in coping with occupational stress and preventing burnout among mental health workers. In her thesis, mindfulness was integrated with dance movement therapy and used as an intervention method. Her research showed an immidiate short-term effect in decreasing subjective stress levels. However, there were no significant changes in general stress level. (Hanso 2018)

1.7.2. Mindfulness and work engagement

The review done by Allen *et al*. (2015) shows that work engagement had either increased by practicing mindfulness or for two studies there were no significant changes found.

However a study done in the U.S. in two companies, an insurance company and pharmacy company, which have incorporated mindfulness to their workplace as a training for all volunteers, showed that mindfulness increased the level of concentration, morale, productivity and stronger teamwork. Also, participants have noted that their stress level has decreased and both their professional and personal lives have improved. (Karlin 2018) This might indicate that through

improved relations and productivity at work, the work engagement itself might still be positively affected when practicing mindfulness.

As individual employees are the ones who affect work engagement through their awareness, attention to tasks, focus on their tasks at hand and non-judgemental attitude regarding challenging work, thanks to effective emotion strategy (Gunasekara, Shao-mei Zheng 2018) it is reasonable to expect that with increased attention and awareness by mindfulness practice work engagement might increase.

1.7.3. Mindfulness and authentic leadership

As more mindful people become more self-aware and are able to act more according to their true self (Leroy *et al.* 2013), then it can be assumed that this study might show positive correlation between higher mindfulness and authenticity in leadership. Even though the authentic leadership is more likely to be measured as a rating from followers (Walumbwa *et al.* 2008) then the possible correlation will possibly come out also in this study where the authentic leadership is assessed through self assessment.

Mindfulness has a positive impact on critical leadership qualities according to the research that influence leadership performance. The study shows evidence that mindfulness practice reduces stress, anxiety, cultivates creativity and adds greater meaning to the work. (Brendel *et al.* 2016) Based on this example there could be seen correlations in the present research paper that mindfulness have with other study topics.

Mindfulness was examined in relation with leadership flexibility which is also one part of authentic leadership. As the hectic, complex, turbulent and dynamic situation for organizations in the current economical context are very challenging for the leaders, it is suggested that leaders must adapt their leadership style according to the demand of a particular situation or individual. One term to describe that type of leadership is flexible. (Baron *et al.* 2018)

As authentic leaders are described to be able to adapt their behavior according to the situation, it can suggest that authentic leaders are also flexible leaders. The results of Baron *et al.* study showed that mindfulness is positively correlated with the flexibility score, suggesting that interventions based on mindfulness are wortwhile options for use within organizations, in the leadership

development, as managers might adapt their leadership style according to the situation more successfully (Baron *et al.* 2018)

It has also been suggested that higher level of mindfulness will improve managers´ leadership "through the interpersonal effects of mindfulness, such as present-moment attention, intentionality, self-compassion, witnessing awareness and clarity" (Reb *et al.* 2015).

1.7.4. Mindfulness and leader efficacy

One possible framework how mindfulness is changing the behaviors and increasing the leadership effectiveness was proposed by (Lippincott 2018):
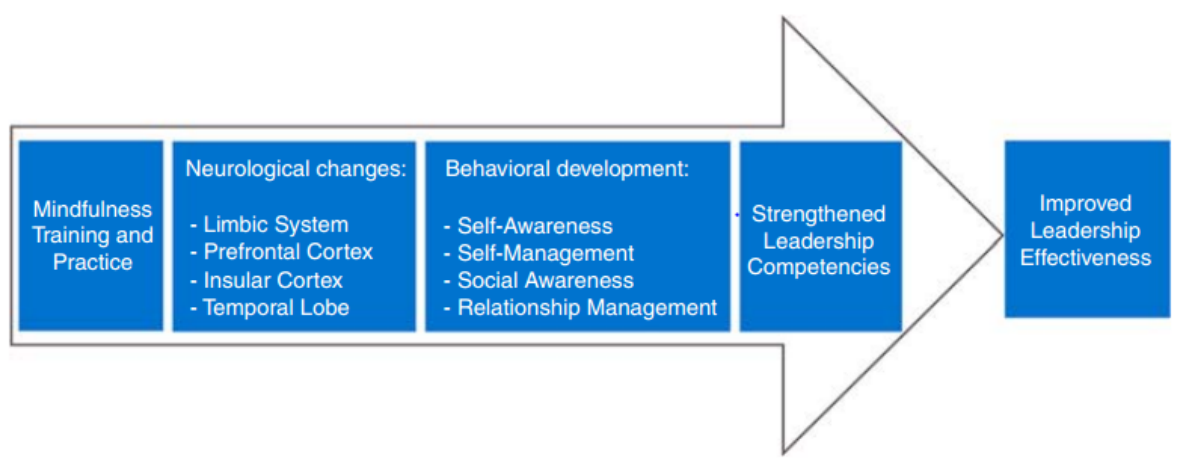
Figure 3: Possible relationships between mindfulness practice, neurological changes, Emotional Intelligence Competencies development, and positive changes to leadership effectiveness
Source: (Lippincott 2018)

The study was conducted with senior organizational leaders from ten countries and results showed that incorporating mindfulness to leadership development programs improved their efficacy. Mindfulness was shown to influence the behavioral development and changed their awareness which was linked to improved leadership effectiveness. (Lippincott 2018)

As improved leadership competencies are probably also improving the leader confidence, leaders belief in themselves, their followers´ and the organization in general, then mindfulness might have the same positive effect on leader efficacy as it did to leadership effectiveness in the above mentioned study.

2. RESEARCH

2.1. Background of the research in Stora Enso Finance Delivery Tallinn

Stora Enso Oyi is a leading provider of renewable solutions in packaging, biomaterials, wooden constructions and paper on global markets. Stora Enso group has about 26 000 employees in more than 30 countries, and is publicly listed on the Helsinki and Stockholm stock exchanges. Sales in 2017 were EUR 10.0 billion, with an operational EBIT of EUR 1004 million. (About Stora Enso, 2019)

Stora Enso Finance Delivery is one part of a support function, Group Controlling, and provides financial services internally to Stora Enso Divisions and externally to its suppliers, customers and other stakeholders. Its main part of a Shared Service Center is situated in Tallinn. The whole business model of shared services was reorganized and restructured during 2017-2019. This means that all of the financial processes, along with transactional tasks, controls, team structure, job positions, tasks and descriptions were revised, updated and modified from outsource scope to an insourced business model. As a result, the organization grew from ca 60 FTEs in 2017 to 160 by the end of Q3 2019.

Managing all of the changes, updating, adapting and implementing new working methods to the teams, along with constantly recruiting and training new team members have created extra tension, tasks and workload to the managers which might have an affect on their occupational stress.

Overall tendency of stress which negatively effects the employees in the Finance Delivery function is growing. This can also be seen from the Stora Enso yearly employee satisfaction survey, Your Voice, where employees indicate, whether they are free from negative stress that affects work. (Stora Enso 2018)

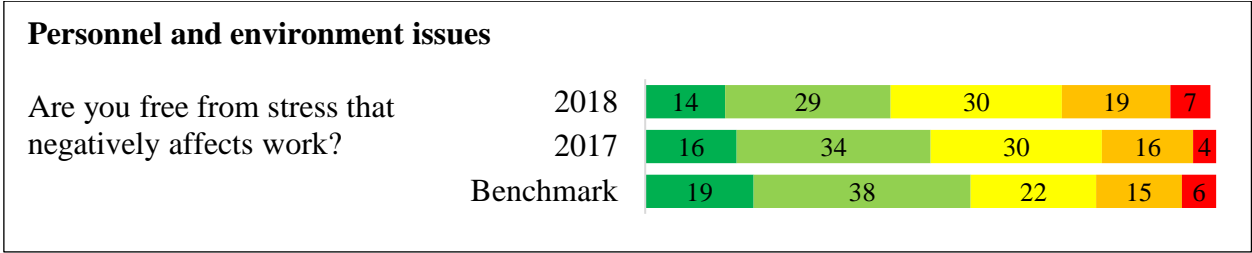| Personnel and environment issues						
Are you free from stress that negatively affects work?	2018	14	29	30	19	7
	2017	16	34	30	16	4
	Benchmark	19	38	22	15	6

Figure 4. Extract from Stora Enso yearly employee satisfaction survey Your Voice for Group Controlling

Source: (Stora Enso 2018)

Respondents chose their answer from a 5-point scale, where 5 meant "Completely agree" and 1 "Completely disagree". The question was "Are you free from stress that negatively affects you?" Figure 4 shows how many percentage of respondents are free from negative stress in dark green and respectively in red are the responses which indicate how many people feel that they are strongly affected by negative stress. There is a comparison with 2017 result and a general result of the whole Stora Enso as a benchmark.

However it needs to be mentioned that the above results indicate the opinion of Stora Enso Group Controlling function generally, it is not showing whether and how high is the stress level specifically for Stora Enso Finance Delivery Tallinn organization managers.

2.2. Objective of the research

The objective of the Master thesis research is to find out how effectively can a mindfulness-based program be utilised as a stress-management intervention method among SE FD Tallinn organization managers, as well as to find out the possible relationships between authentic leadership, leader efficacy, work engagement and the level of mindfulness.

2.3. Structure, method and procedure of the research

This research is a longitudinal explanatory case study using a mixed method research approach. Case study was used as it allows to research a phenomena in a real life context, taking into account multiple sources of proof (Saunders *et al.* 2009, 145-146). Case studies are also often used for organizations where the researcher works, which is also the case for this research. Using a

longitudinal approach allows the research to study changes and development in results for the study group. (*Ibid*., 155). Having an explanatory research allows to study a situation and find connections between variables (*Ibid.*, 140). Mixed method approach was used as it supports the data collection both quantitavely and qualitatively and as the sample size of the research was known to be rather small then using both data collection techniques seemed relevant in order to obtain results for the research objective and research questions.

Quantitative data was collected from the participants through online questionnaires on Google Docs and written surveys with two questions regarding stress and general satisfaction from each MTS program session. A questionnaire was used as a data collection tehnique as it seemed the most constructive way to evaluate the research objective using the existing questionnaires developed specially for the specific subtopic of the study and tested for validity. Also, questionnaires are often used in explanatory studies as they support the exploration of relationships between variables (*Ibid.*, 393) which was relevant for this particular research between different study topics. The questionnaire consisted of seven parts: a cover letter, five sections for the research topic and a section for personal information. The target group received an e-mail invitation along with a cover letter about the topic and objective of the survey. Qualitative data was collected from semi-structured interviews held with the participants after the MTS program had finished. Usage of semi-structured interviews in this longitudinal explanatory case study were used to gain more understanding on how the participants of the research saw the possible links between mindfulness and other study topics. As well, to get more detailed information on the perception of mindfulness in organizational context, which wasn´t studied through questionnaires.

As the research topic in general was quite sensitive and it was not sure how the managers would react to it, the author of this thesis held a short introduction meeting before sending out the participation invitation for the pre-program survey by e-mail. Also, even though the questionnaire is the most used research technique, it will provide low response rate, unless the person who is doing the research makes personal contact beforehand (Pickard 2007). Personal contact was seen essential also for increasing the participant numbers in regards to taking part in the mindfulness program and semi-structured interviews. The aim of the introduction meeting was to introduce the objective and structure of the research and the input that was asked from them. It was emphasized that participation is voluntary and that all the data will be kept confidential. The potential participants were encouraged to be honest in their answers in both the quantitative and qualitative

part of the research and answer according to reality not what they think the correct or desired answer would be.

The overview of the research structure and timelines can be seen from the research summary table, Table 3.

Table 3. Structure and timeline of the research

Timeline	Pre-Program activities	MTS Program activities	Post-program activities
27.08.2019	Introduction meeting with the managers		
03.09-13.09.2019	Submittance of pre-program survey results		
13.09.2019		Session 1. Presence Anonymous survey regarding stress and satisfaction	
27.09.2019		Session 2. Thoughts Anonymous survey regarding stress and satisfaction	
11.10.2019		Session 3. Emotions Anonymous survey regarding stress and satisfaction	
18.10.2019		Session 4. Relationships Anonymous survey regarding stress and satisfaction	
25.10.2019		Session 5. Balance Anonymous survey regarding stress and satisfaction	
26.10-15.11.2019			Submittance of post-program survey results Semi-structured interviews

Source: Author´s compilation

Potential participants were all given ca two weeks time period to take part in the pre-program survey after the written invitation was sent out. The mindfulness program MTS five sessions took place during September – October, 2019. The sessions were held on Fridays, from 15.30-17.00 as part of the working day. After the end of MTS program post-program surveys were filled in and semi-structured interviews held.

2.3.1. Measurement instruments

Even though the main objective for the reseach was to find out how effectively can mindfulness-based program be utilised as a stress-management intervention method, the research focused also on other topics besides mindfulness and occupational stress: work engagement, leadeship style and leader efficacy. All topics needed a separate measurement for data gathering.

An online survey for the quantitative data gathering included, besides the introductory part in the cover letter and questions regarding the personal information of the respondents, a separate measurement tool for each topic: work engagement, occupational stress, mindfulness, leader efficacy and authentic leadership.

Work Engagement was measured using Work and Family Engagement Survey Items (Rothbard 2001). This survey consists of two parts: Work Engagement and Family Engagement. Only the Work Engagement part was used in the research as it was seen more relevant for the objective of the study. The respondents answered nine statements regarding attention and absorption and rated them on a 7-point Likert scale from 1 being "Strongly disagree" and 7 being "Strongly agree".

Occupational Stress was measured with Work Tension Scale (Heinrand 2009). Work Tension Scale (House, Rizzo 1972 cited by Heinrand 2009) consists of 7 statements which respondents rated on a 5-point Likert scale from 1 being "Strongly disagree" and 5 being "Strongly agree". The English version of Work Tension Scale items (Fields 2002) used a rating system of "false" or "true" but for this study it seemed more sufficient to use the 5-point Likert scale rating as also used by Helen Hindrichson in her Master thesis (Heinrand 2009) and adapted by Monika Heinrand in her Master thesis. In the present study the objective is not to define whether participants are feeling stressed but rate the possible occupational stress level and compare it with other research topics before and after the MTS program.

Mindfulness was measured through Mindfulness Attention and Awareness Scale (MAAS) (Brown, Ryan 2003). As the possible meditation or mindfulness background of the sample group was not known, then MAAS was chosen as it is suitable also for respondents who don´t have previous experience with mindfulness (Seema 2014). The respondents had 15 statements to rate on a 6-point Likert scale based on frequency of experience where 1 indicated "almost always" and 6

"almost never". In the Estonian version of MAAS (*Ibid.*) were the definitions of each scale point turned over, meaning 1 meant "almost never" and 6 "almost always". The same principle was used in the current study. Before calculating the total score, the answers needed to be turned over so that the higher result would mean higher mindfulness.

In order to evaluate leader efficacy, Leader Efficacy Questionnaire (LEQ) (Hannah, Avolio 2018) was used. LEQ has been formed based on Leader Self and Means Theory (Hannah *et al.* 2012). There is both self assessment and external rating available for LEQ, however only self assessment was used in this study. Respondents had 22 statements to rate based on their level of confidence. Scoring was between 0-100, where 0 represented 0% of confidence and 100 represented 100% confidence. The LEQ also contained a part regarding demografic questions which was not used as it partially overlapped with the personal information part of the survey.

Leadership style, Authentic Leadership (Luthans, Avolio 2003) in this study, was measured with Authentic Leadership Questionnaire (ALQ) (Avolio *et al.* 2018). ALQ has both self assessment and external rater version, in this study only the self assessment was used. Respondents had 16 statements rate based on how frequently the statements reflected their leadership style. Scoring was based on 0-4 scale, where 0 referred to "not at all" and 4 to "Frequently, if not always". ALQ statements were divided to four subcategories when calculating the results: Transparency, Moral/Ethical, Balanced Processing, Self Awareness.

Last part of the questionnaire consisted of questions regarding personal information: gender, age, total length of experience as a manager, number of subordinates currently and questions regarding previous trainings that might affect the result of any topics in the study.

Besides an online survey, also short anonymous surveys were used each session for all participants of the sessions, meaning both research participants as well as volunteers from the teams who attended in sessions. The data was gathered with the aim to see whether there is an overall trend in the results for the attendants. The survey contained two parts. Before the sessions started, the participants were asked to rate the level of their current work related stress on a scale of 1-5, where 1 referred to "no negative stress" and 5 to "I have constant negative stress". The second question was regarding the general satisfaction in life. For the question "How satisfied are you with your life in current moment?" the respondents could choose between a scale of 1-10, where 1 referred to "very dissatisfied" and 10 to "very satisfied". The same question regarding general satisfaction

in life was asked to be assessed again after the session had finished. There was no solid reason to think that during the 1,5 hour session the level of occupational stress would change, however, the level of general satisfaction might have. Therefore satisfaction was asked to be rated twice during one session.

After the final, fifth session, also some additional questions were asked from the attendants. These questions included the opinion of the mindfulness program, the possible impact of the program to the level of occupational stress, also whether the participants had integrated any of the mindfulness practices to their everyday life and whether they planned to continue with mindfulness topic after the end of the program. The surveys for session 1-4 and longer version for session 5 can be viewed from the list of Appendices, Appendix no 3 and 4.

2.3.2. The sample

The target group of the study were Stora Enso Finance Delivery Tallinn managers – 16 in total. In practice the job titles used are both "manager" and "team lead", meaning an employee who has at least one subordinate. Both teamleads and managers are combined under one term "manager" in this study to simplify the description of the research. The pre-program questionnaire was filled by total of 10 respondents, making the participation rate 63%. The post-program questionnaire was filled in by 9 participants, the same 9 participants were also taking part in the interviews, making the drop out rate of the research 10%. One of the participants left the company before the MTS program and research had ended. The attendance from sessions can be seen from table 4. Participant 10 who left the company, is still included in this section for describing the sample, but removed from analysis of pre- and post-program results, as well as from qualitative data analysis.

Table 4. Attendance from sessions

Participant	Presence	Thoughts	Emotions	Relations	Balance
1	x	x	x	x	-
2	x	-	x	-	-
3	x	-	x	-	-
4	x	-	x	-	x
5	-	x	x	-	-
6	x	x	-	x	x
7	-	x	-	x	-
8	x	-	-	x	x
9	x	-	-	-	-
10	x	-	-	-	-

Source: Author´s compilation

Out of ten respondents seven were female and three male. Five of them were aged between 25-37 (Generation Y) and five between 38-55 (Generation X). Age option in the questionnaire was grouped according to generations (X, Y, Z) and the age range within the generation to see whether any specific results come up in a certain age group.

Two of the respondents had had less than 1 year experience at a managerial position at the time of filling in the questionnaire. Four people had managerial experience between 2-5 years and four participants had the experience between 6-10 years. Total length of experience as a manager was asked to see, whether the results differ depending on experience.

Also the current amount of subordinates was asked from the participants to see potential differences in research outcome due to that. At the time of responding the current amount was for four respondents between 1-5 subordinates, for two between 6-10 and for four between 11-15.

When asked about previous trainings, workshops or programs on stress, work engagement, mindfulness or leadership development then three people answered "No", two persons answered "Yes", three mentioned leadership development and two persons brought out previous experience with mindfulness.

2.4. Data analysis

Quantitatively, all of the questionnaire answers were downloaded from Google Docs to Microsoft Excel and analysed there. Also the data from written surveys from each session was inserted to Excel and analysed there. As the sample size was so small then using any quantitative analyse methods would not have given us results that could be extended to other Stora Enso employees. Therefore the analysis is only done in Excel, calculation is done regarding the total possible result of each questionnaire part and the average of the respondents found. The results are brought out in a summarized manner that will not jeopardize any respondents´ identify to be revealed.

Qualitatively the semi-structured interviews were recorded with two devices, transcribed by the author in Excel, using the data sampling approach. Data sampling can be used in transcribing audio-material when only content that is relevant to the study is transcribed (Saunders *et al.* 2009,

517). As the interview questions were grouped according to the research topics, then also the data sampling and analysis of the transcription was brought out based on the topics.

3. RESULTS

The original sample group was 10 people, making it a 63% participation rate out of total of 16 managers. However, the results are analysed based on 9 respondents. One participant left the company before the research was finished, so the drop out rate is 10%. Therefore there is no post-program quantitative data nor qualitative data from the interview, as it was not held with the participant and the participant is not covered in the results.

Quantitative results are presented according to the research topics and compare the written survey results from before the MTS program and after the program. Separately also the results of the written survey from MTS sessions from all the attendants will be brought out. Quantitative results are complemented with the outcome of qualitative part of the research - semi-structured interviews.

3.1. Mindfulness

MAAS results showed that the respondents had in average 66% mindful awareness before the MTS program and 69% after. Lowest result was 39% before and 41% after MTS. Highest result was 88% and 91%. Results from the interviews show that most of the participants were either aware of the topic before the MTS (4 out of 9) or had previous experience in practice (2 out of 9).Three participants had not heard about mindfulness before MTS. Interestingly, the two people with previous experience did not score highest in MAAS. The highest scores came from one person with general knowledge in theory and one person without any previous knowledge. Based on that result, it can be said that the impact of MTS was not dependant on pre-program experience.

The respondents were most mindful when evaluating the following statement both pre- and post-program: "*I do jobs or tasks automatically, without being aware of what I´m doing*" and least mindful result came from: "*I forget a person´s name almost as soon as I´ve been told it for the first time*". This might also come from the fact that the organization is growing so rapidly and there are constantly new colleagues, visiting stakeholders and customers being introduced to the sample

group, that it has been difficult for them to grasp the information at first place. Overview of the results can be seen in Figure 5.
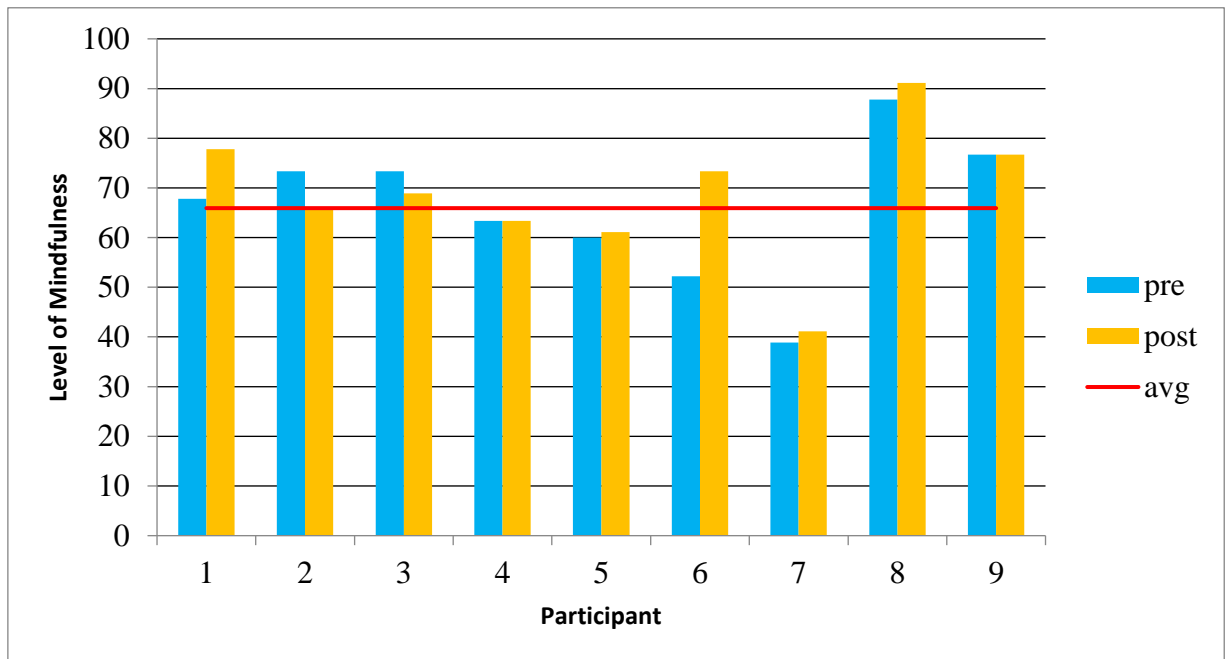

Figure 5. Comparison of MAAS results before and after the MTS program for each participant

Source: Author´s compilation

When comparing the pre- and post-program results based on age groups, then even though generation Y had higher average scores (76% to 78%) then the results of generation X made a bigger increase in average (58% to 62%).

When taking into account the attendance of sessions then most visible change in the MAAS result is seen from two attendants who participated the most in MTS, 1 and 6. The change in average result for participant 1 10%, from 68% to 78%. And for participant 6 the increase was even bigger – 21%, from 52% to 73%. It can be concluded that mindful awareness increased more for the participants who attended more sessions. Comparison between pre- and post-program MAAS results and the age groups can be seen from Appendix 6.

Key takeaways from mindfulness according to the interviews was that mindfulness is more practical than imagined, that it is a good tool but not a quick fix solution and not for everybody. One participant even pointed out being sceptical before the program, thinking it would be more of a spiritual practice. The practical value of it was discovered along the way. Another participant

said:*" I think it is needed, good tool, universal for everyone, not only managers. The usage of the tool depends a lot on the mental level of a person and readiness for it. Doesn´t definitely suit everybody".* (P7) It was also said to be easily practiced with simple and short exercises and the it gives simple tips and tricks, like conscious breathing. One participant also brought out that the topic didn´t suit the personality and wasn´t interesting. However, even though the same participant attended only the first session in MTS, the MAAS score was one of the highest, staying the same pre-and post-program.

3.2. Occupational Stress

Work Tension Scale which was used to find the level of occupational stress showed the average stress level of the respondents being 69% both before and after MTS. However the results here were ranging quite widely from 49% to 83% before and 29% to 91% after MTS. Also, the lowest score came from the following statement both before and after MTS: "*If I had a different job, my health would probably improve*" which is a positive sign from organizational point of view that respondents are not evaluating their job being the source of possible health hazard. The overview of the results can be seen from Figure 6.
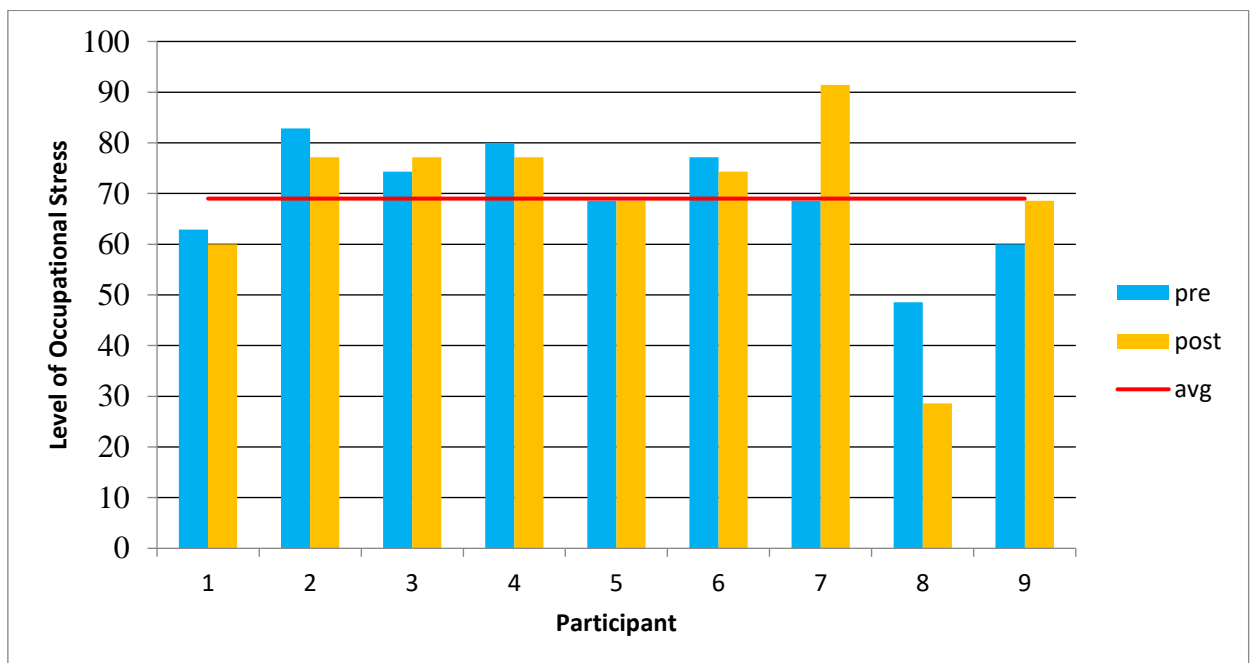

Figure 6. Comparison of Work Tension Scale results before and after the MTS program for each participant

Source: Author´s compilation

There is no clear indication that more subordinates create higher stress, also no clear difference come from male and female respondent point of view. When looking at age groups, then interestingly generation Y had an decrease in the average stress level from 64% to 59% but generation X average stress level increased from 74% to 78%. Comparison between age groups can be seen from Appendix 6.

Biggest factors that create occupational stress based on the interviews were conflicts; either between people, tasks or values (6 of 9 participants brought it up), stressed subordinates (brought out by 5 of 9 participants), workload; too many things to be done simultaneously, not enough control to influence the workload and being dependant on others, not enough resources; either time, knowledge, people and when the expectations to them are too high or unrealistic. The results from Work Tension Scale show that all of the five participants who brought out that they are affected by their team´s stress, scored higher in the WTS.

When asked how mindfulness can support with coping with stress, the answers in interviews were that mindfulness helps to handle stressful emotions better, calming the body and thoughts, practice acceptance and better response to stressful situations. Not reacting but responding was brought out, as well as finding balance with work life. One participant said that mindfulness supports by: *"helping me to look at all of this in a pragmatic way and not create stress through feeling emotions"*. (Participant 1) Another participant pointed out: *"When you force yourself to calm down, breath, focus your thoughts, then your breathing slows down, speech slows down. The thoughts will follow"*. (P2) It was also brought out by one participant that:*"for me on first place I´m taking it like being able to control yourself and your actions through being aware of why I feel like this"*. (P8)

From attendance point of view we can see that all three participants who had an increase in their stress level (3, 7, 9) were able to attend MTS either 1 or 2 sessions out of 5, which might be an indication that mindfulness practice requires attending the sessions in order to support with stress reduction. Both participant 1 and 6 who attended 4 out of 5 sessions, had a decrease in the stress level which could show that mindfulness is supporting with lowering the stress level. It was mentioned by one of the participant that:*"It can´t be necessarily said that the stress level has changed rather than the coping skills with the existing stress have improved"*. (P1) The biggest drop in the stress level was for participant 8, who attended 3 sessions and shows that even with

relatively low stress level compared to the average, the level can decrease even more. So with this example it could be said that mindfulness could support also as a preventive method for high occupational stress but due to the small sample size it can´t be stated as a firm conclusion. Participants themselves were relatively accurate when rating their stress level change during the interviews. The results from quantitative data support their subjective assessment. One participant mentioned that:"*even when I went to the sessions feeling very tired and couldn´t focus in the beginning then after after the session I was definitely feeling more calm. That´s a fact*". (P6)

3.3. Work Engagement

Work and Family Engagement Survey showed the respondents´ average being 73% before MTS and 71% after. Highest score came from statements: "*I concentrate a lot on my work*" and "*I pay a lot of attention to my work*", lowest score from: "*Nothing can distract me when I am working*". The lowest score from distraction statement could be linked to increase in the team sizes, as well as moving from old office to a new, open office surrounding. The overview of the results of the current research can be seen from Figure 7.
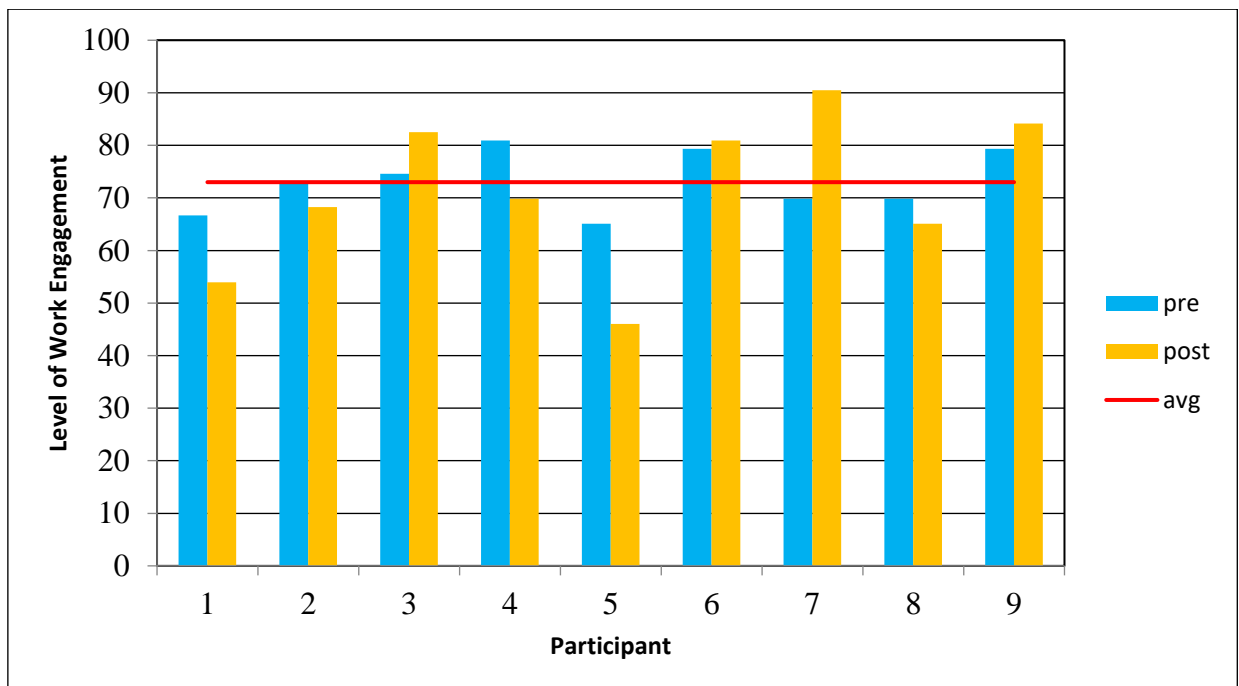

Figure 7. Comparison of Work and Family Engagement Survey results before and after the MTS program for each participant

Source: Author´s compilation

When looking at the overview of the results it is clear that no general conclusions can be made, the results vary heavily based on participants. Even though there is a clear increase in engagement level for participant 7 (from average 70% to 90%), there is also a heavy decrease for participant 5 (from 65% to 46%) and participant 1 (from 67% to 54%). The interviews showed that few participants rated their engagement level to be higher than the results from WTS suggest and the clear link between mindfulness and work engagement was not seen or felt. From age group view point the results vary, both X and Y generations have increasing and decreasing results, without any significant change in average. Comparison between pre- and post-program results for age groups can be seen from Appendix 6.

3.4. Leadership Style

Results from Authentic Leadership Questionnaire show that SE FD Tallinn managers were relatively authentic in their leadership style already before the MTS program. The average came to 72% of 100%, where 100% meant highest authenticity and 0% lowest. The range of results were between 55% and 84%. Post-program results show an increase in the average, from 72% to 78% with a range of 66% to 89%. When comparing the pre- and post-program results based on age groups, then similarly to mindful awareness even though generation Y had higher average scores (78,5% to 81,25%) then the results of generation X made a bigger increase in average (66% to 75%). Based on that it can be said that generation X participants were more open to the possible effect of leadership style with the support of TMS program. Comparison between pre- and post-program results for age groups can be seen from Appendix 6.

Overview of the results according to participants can be seen from Figure 8.
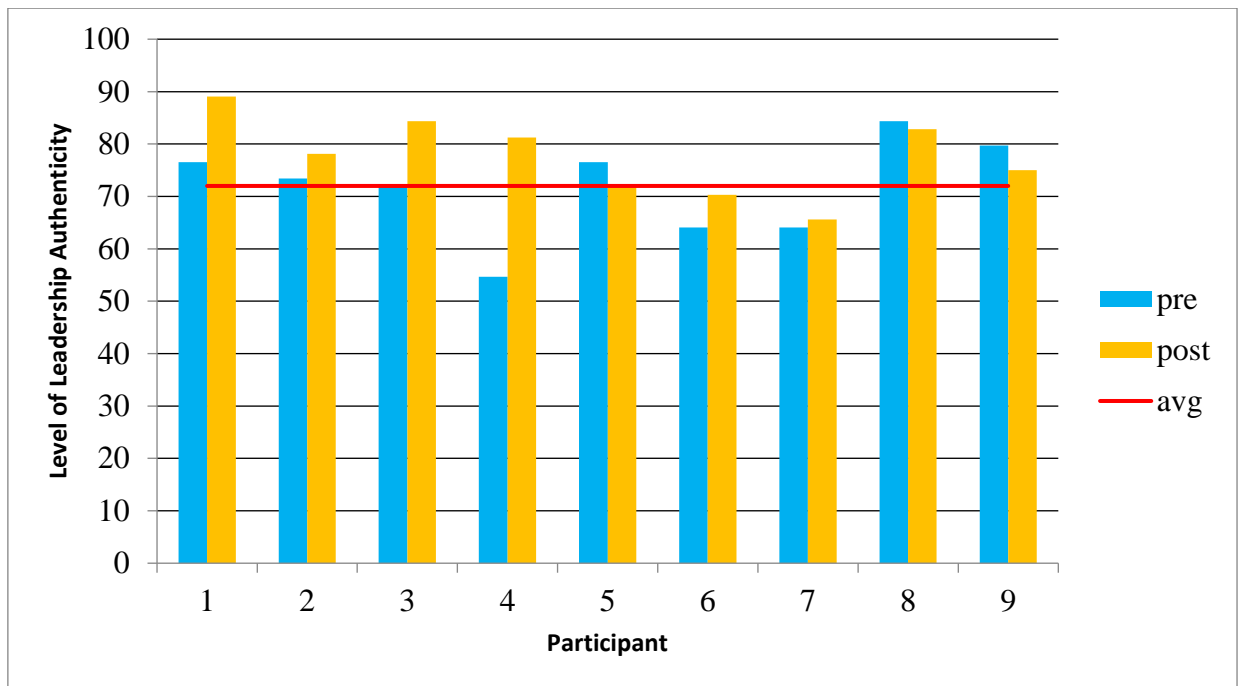
Figure 8. Comparison of ALQ results before and after the MTS program for each participant

Source: Author´s compilation

The results show that for couple of participants the result decreases in post-program survey. But for six participants the result increases, as much as 26% for participant number 4 (from 55% to 81%). Also for participants 1 and 6 who attended 4 out of 5 sessions was the trend in leadership style increasing. Based on this summary it can be said that MTS was supporting the level of authenticity for most of research participants. The support was visible also for the participants in the interviews. It was seen that mindfulness gives the capabilities to understand the complexity of human nature better and by having a good mental health, the managers are more stabile, make better decisions, communicate better and by controlling the emotions they are able to take time outs when needed. Conscious breathing, active listening, increased awareness and trying to understand the counterpart better before making decisions were brought out as practical examples of changes in leadership style impacted by MTS.

All of the participants agreed in the interviews that for the most part in their work, they can be authentic in their role. Some challenges were seen in the conflict that the job position creates – being in between the team and top management, or the conflict between values. The importance of relations, communication, support, caring for people, coaching and engaging people was brought out by participants when they described themselves as leaders. There was no clear

distinction in leadership style coming out from the interviews which could be linked with the ALQ results.

The average of the subcategories for authentic leadership pre-program were following: Transparency 78%, Moral/Ethical 72%, Balanced processing 69% and Self Awareness 66%. Biggest change in the subcategories was for Moral/Ethical, which had a change from 72% to 84%. Also change in Self Awareness was visible, from 66% to 74%. From mindfulness perspective this was certainly an expected change. The post-program score for Transparency was 77% and Balanced processing 74%. Comparison between pre- and post-program ALQ results based on subcategories can be seen from Appendix 7.

The highest scored statements about how frequently the statements appear in respondents´ leadership were "*Admit mistakes when they are made*" from pre-program survey and "*Encourage everyone to speak their mind*" from post-program survey. A positive increase was visible from the lowest scoring statements from pre-program study "*Solicit views that challenge my deeply held positions*" and "*Accurately describe how others view my capabilities*" which both increased from an average score of 18 to 23.

3.5. Leader Efficacy

When evaluating their leader efficacy with Leader Efficacy Questionnaire, the sample group rated themselves in average 65% confident before MTS and 71% after. Lowest rating got the following statement of the respondents that as a leader they: "*Count on others to give me the guidance I need to complete work assignments.*" and they were most confident in the post-program that they as leaders: "*Remain steadfast to my core beliefs when I'm challenged*". The increase in the result of the previously mentioned statement could be seen as a positive effect from increased mindfulness or authenticity level. The overview of the results can be seen in Figure 9.
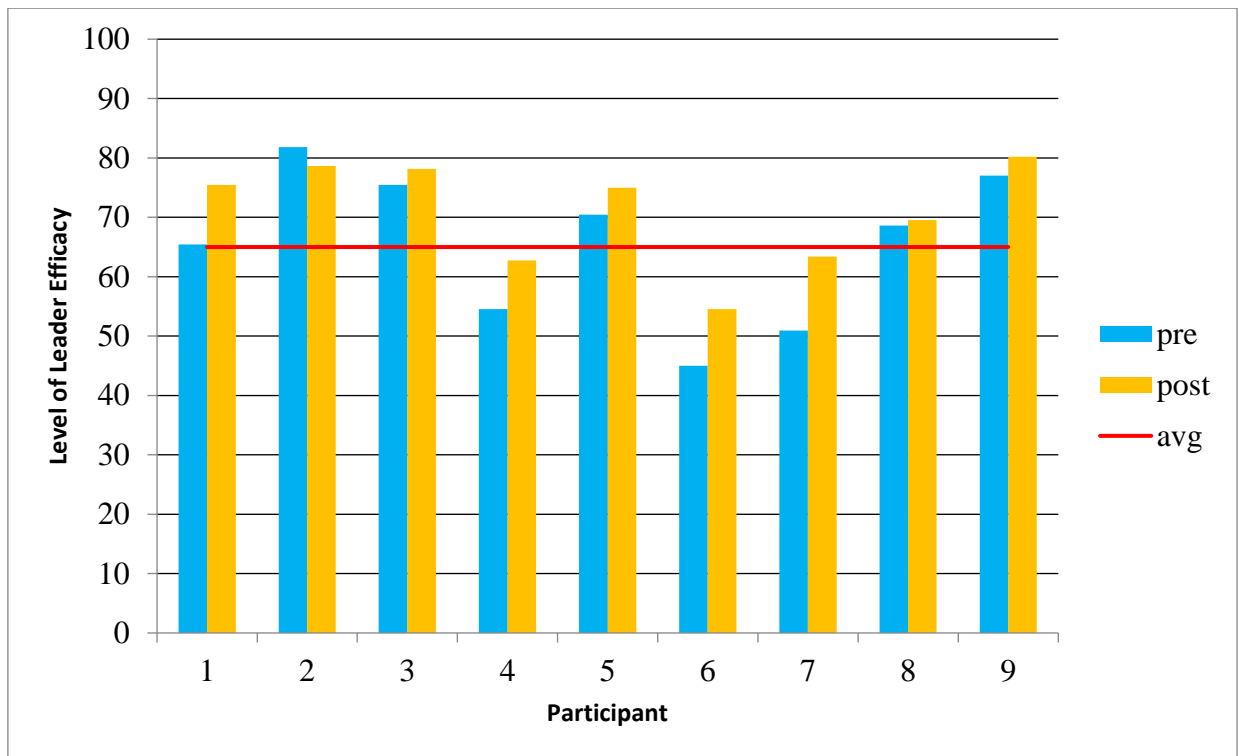
Figure 9. Comparison of LEQ results before and after the MTS program for each participant

Source: Author´s compilation

The biggest increase in results were for participant 1, 6 and 7. However, the number of subordinates, age group or whether the participant was male or female did not show any clear link with the results.

Answers from the interviews show that by understanding yourself and your boundaries better, the efficacy will boost as things can be dealt in a structured way. Results were also seen as an impact to leader efficacy. Authenticity and being in balance with the personal characteristics and using mindfulness was seen as a support in building that foundation for efficacy. Three participants mentioned that by not reacting to triggers increase efficacy, as well as controlling your emotions. As a practical example on how mindfulness has supported leader efficacy for one participant is the ability to let go of obsessive thoughts and being able to see the dynamic on different angles in the team better. Another participant highlighted:"*When you understand which things affect you and your confidence, then already this, that there is a framework, how to deal with these things, impacts efficacy. By continuous practicing the efficacy will increase*". (P1) Potentially negative effect of using mindfulness practices in work environment was not seen by most of the participants, four participants answered however, that they don´t see a potential negative effect if mindfulness is used at work with common sense.

3.6. Results from session based survey

All of the attendants of MTS sessions were asked to fill in a short survey, rate their level of stress and satisfaction before the session and satisfaction level again after the session. Figure 10 shows the change in results for each sessions, as well it shows the number of participants attending the current session.
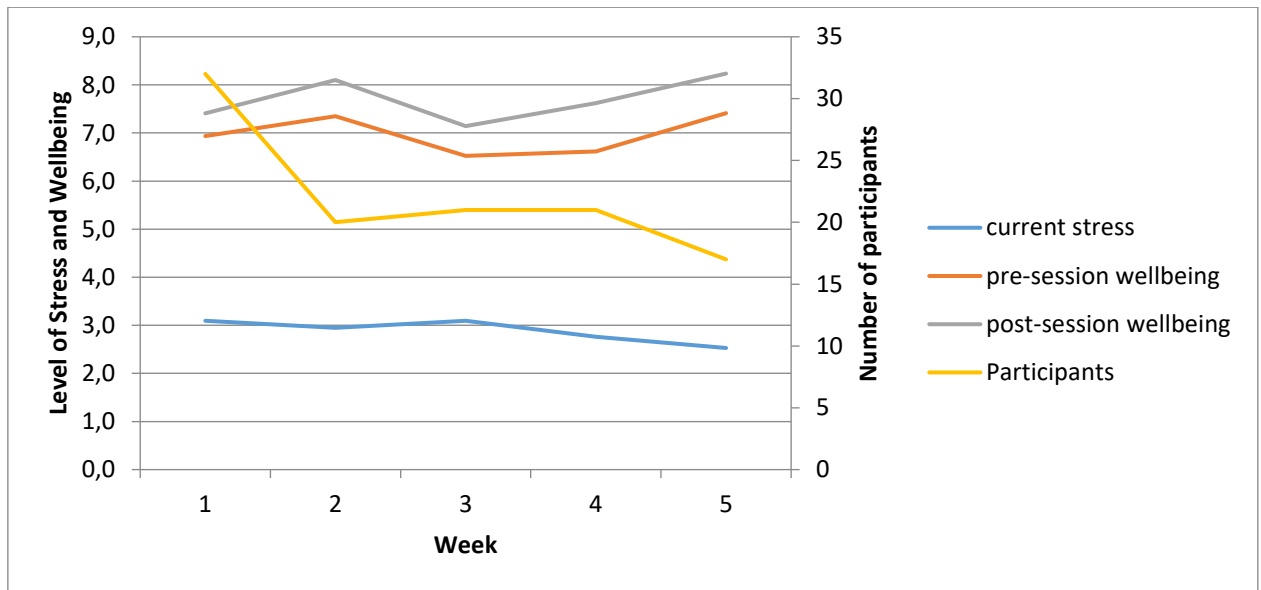
Figure 10. Summary of the results from session based surveys

Source: Author´s compilation

The overview shows that the attendance rate decreased, in average the sessions had 22 participants. But it is also understandable that this type of intervention method is not a quick fix solution nor a suitable practice for all, so a decrease in participation rate is logical.

The wellbeing rate varied throughout the sessions but there was a clear increase in the rating after the sessions. So the immidiate positive effect of mindfulness session is clearly visible from the summary. Also there is a increase when comparing the average result from 1st session to 5th session, from 6,9 to 7,4 pre-session and 7,4 to 8,2 post-session satisfaction.

The summary shows that the overall stress level decreased with every session. But it needs to be also mentioned that the stress level for the managers in the sample group is not showing the same positive trend. Figure 11 shows the difference of stress levels for study group and other participants of the MTS program.
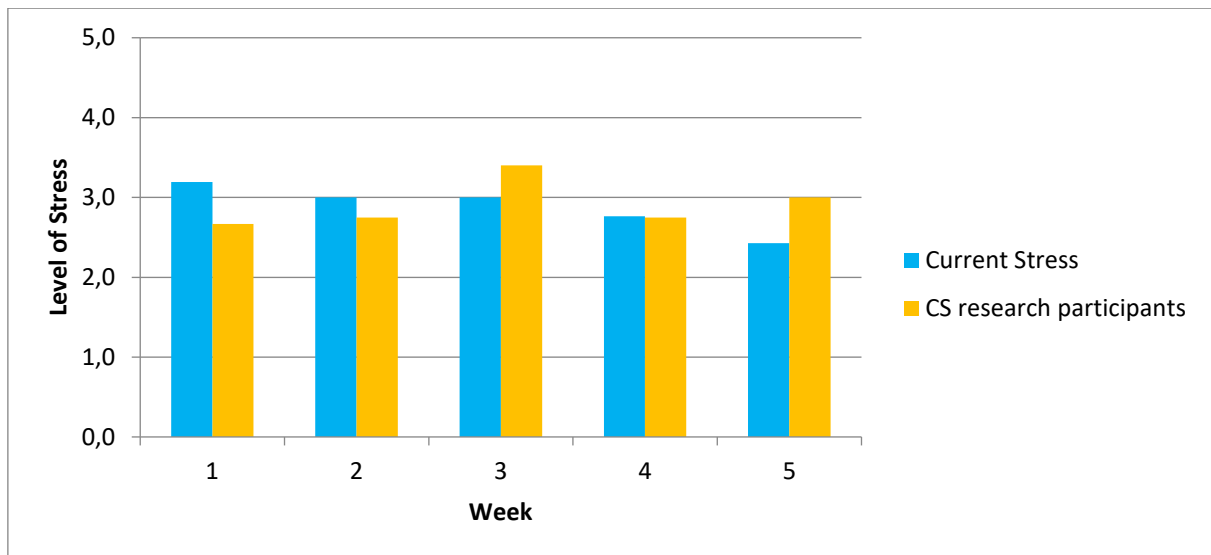
Figure 11. Summary of the results from session based surveys

Source: Author´s compilation

Even though it is not registered, it was visible from the sessions that most of the volunteering participants of each session were the same. But the sample group, however, were not able to attend the sessions as frequently as the volunteers. This might also be the reason for the results showing a negative trend for sample group and a positive trend for the others.

The additional questions from 5th session showed that most of the participants saw this MTS program useful (15 out of 17), 9 of the 17 attendants felt that their stress level has decreased due to the MTS impact, 13 answered that they have already integrated mindfulness practices to their everyday life and 15 out of 17 plan to continue with mindfulness after the program has ended.

The interviews with the sample group also showed that MTS was seen beneficial, by supporting with handling emotions and thoughts and by listening more own body and mind. Improved sleep quality was also mentioned, as well as better worklife balance. Regarding if the participant will continue with mindfulness topics, then there were four answers regarding the continous usage of Vaikuseminutid application and its exercises. It was also mentioned that there are some favourite exercises from the MTS which are integrated to everyday life. The need to keep practicing and consciously taking care of stress level with keeping worklife balance was seen essential. However, one participant pointed out that the topic, as such, is somewhere existing. So that in case of emergency, it is known where to get support. But there is no need for it daily.

When asked about the format that could be used in Stora Enso going forward regarding mindfulness, it was mentioned that people already with some experience could start rehearsing together. Also, short and appropriate exercises could be chosen to start or finish meetings with, to spread the information and increasing awareness. In general it was seen that there is a need to increase the awareness of stress, depression, and occupational stress, and mindfulness could be offered as a supportive measure. One participant pointed out that when people would start to prioritize mindfulness then Stora Enso would be a nicer place to work. One way to continue with mindfulness was also to offer similar type of program like TMS to the beginners.

DISCUSSION AND CONCLUSION

The objective of the Master thesis was to find out how effectively can a mindfulness-based program be utilised as a stress-management intervention method among SE FD Tallinn organization managers and one aim was to find out how is a mindfulness-based program affecting the level of occupational stress. Quantitative results show that on average the occupational stress level did not change when compared pre- and post-program. Based on age groups, there was a decrease in the average stress level for generation Y and increase for generation X.

Participation in the MTS sessions and individual practices seem to be quite crucial for attaining better coping skills and reducing stress level. This is also seen from quantitative research results, where the biggest decrease in stress level has been for participants who participated in most of the MTS sessions and were also practicing individually. A positive result was from a participant who had relatively low stress level before MTS and who had still a decrease in the results post-program, showing that potentially mindfulness could be used also for a preventive tool to manage stress more efficiently. The immidiate positive effect of mindfulness session was seen by participants through feeling relaxed, less tired, more aware and more capable of letting go of fixated thoughts and work matters.

This research does not give any clear indication that MTS had an impact on work engagement. The results are quite varied based on individual level and no general conclusions can be made based on this research. Qualitatively, some participants claimed to already have a high engagement and for some, it was said to be changing from time to time, based on the current pace and situation at work.

This research aimed to find out whether there is a positive link between leadership authenticity and level of mindfulness. Comparison of quantitative analysis of MAAS results and ALQ shows that the two participants who participated in four MTS sessions out of five, had a positive link between the authenticity and level of mindfulness. No clear connection came out from the results of other participants. Qualitatively, the participants brought out that by being more mindful and

aware of yourself, you are also more authentic in your leadership style, which supports the possibility of having a positive link between leadership authenticity and level of mindfulness

When studying whether higher leadership authenticity and/or level of mindfulness support higher leader efficacy the results from quantitative analysis show that for the two participants who had the highest participation rate of MTS, scored also highly for increase in MAAS, leader efficacy and authentic leadership. For rest of the participants there was no clear link between higher authenticity and/or level of mindfulness and leader efficacy. Qualitatively, the interviews indicate that authenticity and mindfulness were seen to positively impact the level of leader efficacy.

The results of the research indicate that mindfulness and authentic leadership support both the level of leader efficacy, as well have a positive link to each other. It can also be said that mindfulness can support with decreasing the level of occupational stress. The potential positive effect of mindfulness to work engagement however did not come forward from the results to the extent that any conclusions could be done. The effect of mindfulness to other research topics are concluded in Figure 12.
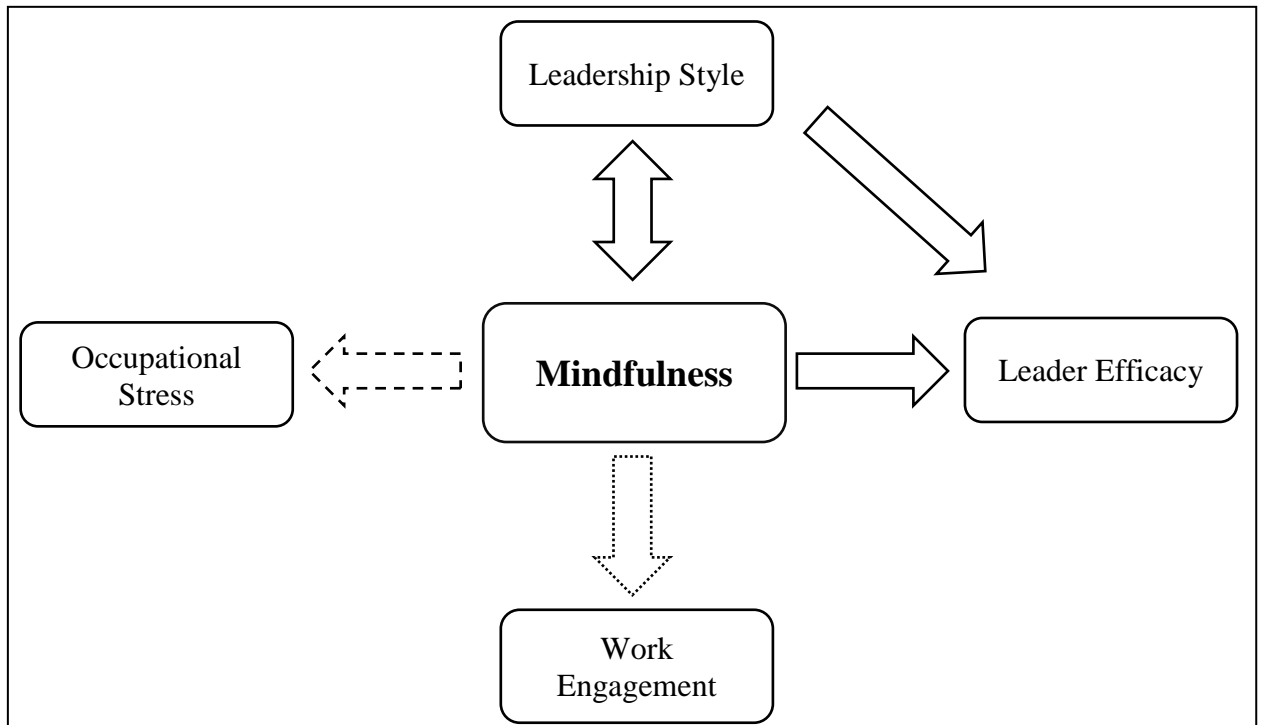

Figure 12. Overview of the effect of mindfulness to Leadership Style, Leader Efficacy, Work Engagement and Occupational Stress

Source: Author´s compilation

Based on the results of the quantitative results, key takeaways from the semi-structured interviews and author´s observations, a mindfulness-based program is suggested be used as one method for stress-management. When considering implementing a mindfulness-based program, the organizations could take into account the following suggestions:

- Before starting to assemble the participants, info sessions or info e-mails should be provided to employees, to clarify the nature of the mindfulness program, introduce the practical set up and expectations to the participants. That way more adequate feedback can be gathered about the amount of interested employees and reduce the risk of having participants who don´t find mindfulness useful for them and leave the program half way, causing still the cost for the company and hindering another employee from participating in the program due to limitation of the number of participants.

- The participation should be voluntary. There was no indication that having both managers and their subordinates together in sessions had any effect on the extent of how open and honest the participants were able to be in the sessions. However, the participants should all be ready to try new things, to work with themselves and for possibly seeing also inconvenient or negative patterns in their way of behaviour or thinking. So the participants should all be ready to change and consistent in their daily practice and exercises.

- The length of the program and timing of the sessions should be considered carefully. Currently, although the five sessions were not seen as too much, there was definitely a strong suggestion to have similar sessions in the future at another day or time. Friday late afternoon was seen a good timing in the sense of letting go the work related items and start the weekend being more relaxed, but still it was said to have prevented from participating in the session due to overlapping tasks or personal reasons.

- The facility and trainer should be chosen carefully. Currently the session in Stora Enso´s own room was seen more efficient in setting a cosy and warm ambience than the meeting rooms in a hotel that were used for the other four sessions. Also meeting the possible trainer beforehand seems to be highly relevant. Most of the participant saw the MTS trainer to be a perfect fit for teaching mindfulness and engaging people to the topic. However, there

were also some who thought the expressions and behaviour to be too positive, even to the extent of seeming fake.

- When choosing the themes for the program, then definitely the current MTS topics were all relevant. Even though not directly always linked with occupational setting, the topic of presence, emotions, thoughts, relationships and balance can all be used for personal use and improving the work environment. Especially presence was seen as an important topic to focus more on, so this is definitely something that any possible future program should contain as well. A narrower approach to the topic and a shorter version of the program can be used as an alternative for participants without any previous knowledge or experience with mind practices.

- The employer should provide small premises for individual or group practice after the mindfulness program has finished, supporting the sustainability of the practise. More open communication regarding the support by the company for having small mindful breaks during the day is also seen as a benefit. Generally, more practical support in having breaks and taking notice to possible overwork is essential in order to make the employees feel valued.

- One possibility to sustain the practice is integrating mindfulness to company wellbeing programs or employee development programs. This will however need prior mindfulness programs to be held to enlarge the group of practitioners in the company and also it needs to be taken into account that the practice as such will not be seen useful by all.

Even though the objective of the thesis was met to some extent, there were definitely limitations that hinder making general conclusions regarding the study topics. The sample size of 9 respondents does not give us the general overview for the whole Stora Enso in Estonia, nor the overview for all the managers in Finance Delivery Tallinn as 6 of 16 managers did not take part in the survey and one participant left the company before the research was completed. Also, all the data is very subjective, even though the validity of the used questionnaires has been proven.

Even though some of the research results show positive effect of mindfulness to occupational stress, work engagement, leader efficacy and leaderships style, it can´t be stated as a general conclusion whether mindfulness was a potential mediator or mechanism of change.

Lastly, the research results give an indication of the status at the time of filling in the questionnaires and taking part in the interview. Also, the immediate positive effect of the sessions to satisfaction level was visible from the results. But long term estimations whether the impact of MTS will increase, stay stable or decrease can´t be done.

This research gave a foundation for better understanding how mindfulness could support in an organizational context. Future research could include larger number of participants, as well as add the subordinates´ assessment for managers´ authenticity and leader efficacy. Also, include the followers´ engagement and occupational stress to the research topic, in order to find a possible link between higher leader mindfulness and follower engagement and occupational stress. Future research could also include the long-term evaluation, to assess the sustainability of the results of the mindfulness-based program.

SUMMARY

This Master thesis shows that Stora Enso Finance Delivery Tallinn managers are relatively authentic in their leadership style, have a mindfulness level and leader efficacy above average, are engaged in their work and also have an occupational stress level above average. As the long-term consequence for higher stress level is reportedly stress-related medical problems, increased absenteeism and employee turnover as a direct cost to the employer and decreased productivity and dimished customer service as hidden costs (Spielberger, Reheiser 1995, 52), it definitely is something that both Stora Enso as an organization and the managers themselves as individuals should keep on decreasing. Mindfulness-based program can be used as one of the supporting tools for decreasing occupational stress, while supporting the authenticity and leader efficacy to increase, but it needs to be taken into account that mindfulness exercices need constant practicing and that the tool is definitely not suitable for everyone.

According to (Lazarus 1995, 10-11) there are three main strategies to manage stress based on the knowledge of traditional research methods:

1. Conditions of work should be altered to be less stressful or less counterproductive to effective coping,
2. Improve the coping skills regarding conditions that are impossible or difficult to change,
3. Individual or group relationships that are stressful are identified and managed. So the focus is on better working relationships.

As the results of the research show that mindfulness can support increasing the coping skills for handling occupational stress then a mindfulness-based program can be suggested as one possible stress-management intervention method in organizations. Increasing the coping skills is suggested also due to difficulties of removing or changing the factors that often create negative stress to employees. It is also seen as a positive signal from the employer to openly handle the topic of occupational stress, increase awareness regarding the possible impact that high stress levels can have and provide tools to improve coping skills.

KOKKUVÕTE

Viimastel aastakümnetel on tööstress muutunud üha aktuaalsemaks teemaks, kuna see mõjutab töötajate füüsilist ja vaimset tervist ning toob endaga kaasa töötajate puudumise ja tööjõu voolavuse. See omakorda mõjutab negatiivselt ettevõtete kasumlikkust. Üha enam ettevõtteid tegelevad selle probleemiga ning pakuvad oma töötajatele tööstressi leevendamiseks erinevaid programme.

Magistritöö eesmärk on uurida, kui efektiivselt saab *mindfulnessil* põhinevat programmi kasutada stressijuhtimise sekkumismeetodina Stora Enso Finance Delivery Tallinn juhtide seas. Samuti tuvastada võimalikud seosed autentse juhtimise, juhtimise mõjususe, tööga seotuse ja *mindfulnessi* taseme vahel. Töö uurimusküsimused on: 1. Kuidas mõjutab *mindfulnessil* põhinev programm tööstressi taset? 2. Kas *mindfulnessil* põhinev programm mõjutab tööga kaasatust? 3. Kas autentse juhtimise ja *mindfulnessi* taseme vahel on positiivne seos? 4. Kas kõrgem autentsus juhtimises ja/või *mindfulnessi* tase toetab suuremat juhtimismõjusust?

Käesolev magistritöö on selgitav juhtumiuurimus, kus kvalitatiivne metodoloogia toetab kvantitatiivset. Üheksa juhti Stora Enso Finance Delivery Tallinna organisatsioonist võtsid osa *Mindfulness Training Series* programmist, mille vältel tegid ka individuaalselt harjutusi. Programm koosnes viiest, 90 minutit kestvast, sessioonist, mida viidi läbi vahemikus september-oktoober 2019. Kvantitatiivsed andmed koguti küsitlustest, mida täideti enne programmi algust ja peale programmi lõppemist. Samuti tuleb osa kvantitatiivsest infost lühikestest kirjalikest küsitlustest, mida täideti osavõtjate poolt iga sessiooni alguses ja lõpus. Kvalitatiivsed andmed koguti poolstruktureeritud intervjuudest, mida viidi läbi uurimuses osalejatega peale programmi lõppu.

Magistritöö uurimuse tulemuste põhjal võib *mindfulnessil* põhinevat programmi ettevõtetele soovitada kui üht võimalikku stressijuhtimise sekkumismeetodit, kuna *mindfulness* suurendas programmis osalejate võimekust tööstressiga toime tulla. Tulemustest ei ilmne, et *mindfulness* mõjutaks tööga kaasatust, küll aga oli näha *mindfulnessi* positiivne mõju autentsele juhtimisele

enamiku osalejate puhul. Need, kes võtsid osa enamikust sessioonidest, suurenes kõige enam *mindfulnessi* tase, autentne juhtimine ja juhtimismõjusus – viidates nii *mindfulnessi* kui autentse juhtimise positiivsele mõjule juhtimismõjususele.

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APPENDICES

Appendix 1. Letter of introduction for the potential research participants

Hello!

My name is Kati Kilk and besides being an employee in Stora Enso I am also a MBA student at TalTech University. As part of my Master Thesis study I would kindly ask your input to this survey to learn more about Work Engagement, Occupational Stress, Mindfulness Skills, Leader Efficacy and Leadership Style among managers at Stora Enso Finance Delivery Tallinn Organization.

My objective is to learn how effectively can mindfulness-based program be utilised as a stress-management intervention method, as well as to find out the possible relationships between authentic leadership, leader efficacy, work engagement and the level of mindfulness.

The same survey should be filled and sent twice - firstly before the mindfulness-based program starts in September and secondly after the 5 session program ends in October. After the post-program survey is filled, I will also organize an one-on-one interview with the participants to get a reflection on the program and its effects. I would be very grateful if you could support me with both pre- and post-program survey as well as participating in the interview. But please know that participation in the study is voluntary and you can withdraw at any time.

Please note that this is a confidential study, intended for educational purpose only. The results of the study will be shared in a summarized manner to the Finance Delivery Management Team only for reference regarding the topic for planning future training programs. None of the answers can be linked back directly to the respondent.

Your honest answers are highly appreciated as not only will it give real data for my Master Thesis but also an indication to you whether mindfulness is something you could benefit from. Also, whether mindfulness is something that could be integrated to Stora Enso. Please note that this is not an assessment of you as a leader, nor will there be any negative concequences for your answers.

This survey consists of six parts and takes you around 30 minutes to complete. Please don´t think too long when answering each question as there are no right or wrong answers.

I would request your answers for the pre-program survey to be submitted by 12.09.2019. By participating in the survey you will also give permission for the results to be used in the Master Thesis analysis.

Please contact me with any questions or concerns: kati.kilk@gmail.com / +372 52 29 172

Thank you for your time, effort and honest answers!

Kind regards,

Kati

Appendix 2. Invitation to the research participants to take part in the post-program survey

Dear participant of the mindfulness program study!

Thank you for taking part in the Stora Enso Mindfulness Training series. As now the program has finished, it would be good time to assess the outcomes by filling in the survey items again.

The topics remain the same: Work Engagement, Occupational Stress, Mindfulness Skills, Leader Efficacy and Leadership Style.

The objective is to learn how effectively can mindfulness-based program be utilised as a stress-management intervention method, as well as to find out the possible relationships between authentic leadership, leader efficacy, work engagement and the level of mindfulness. By comparing the pre-program results with the post-program we will see whether the mindfulness program has made any impact.

Your honest answers are highly appreciated as not only will it give real data for my Master Thesis but also an indication to you whether mindfulness is something you could benefit from. Additionally, whether mindfulness is something that could be integrated to Stora Enso. Please also note that this is not an assessment of you as a leader, nor will there be any negative concequences for your answers.

This survey consists of six parts and takes you around 30 minutes to complete. Please don´t think too long when answering each question as there are no right or wrong answers.

I would request your answers for the post-program survey to be submitted before our scheduled interview. By participating in the survey you will also give permission for the results to be used in the Master Thesis analysis.

Please contact me with any questions or concerns: kati.kilk@gmail.com / +372 52 29 172

Thank you for your time, effort and honest answers!

Kind regards,

Kati

Appendix 3. Stress and Satisfaction rating template for program sessions 1-4

Front page:

SESSION X – DATE

Participant No (to be filled in by participants in the mindfulness study):

How much are you impacted by work related negative stress in current period?

1 – No negative stress

2 – There is some but no actual impact

3 – I can feel it in some days

4 – I can feel it in most days

5 – I have constant negative stress

How satisfied are you with your life in current moment?

Very dissatisfied   Very satisfied

    1   2   3   4   5   6   7   8   9   10

Flip side of the page:

POST-SESSION RATING

How satisfied are you with your life in current moment?

Very dissatisfied   Very satisfied

    1   2   3   4   5   6   7   8   9   10

Appendix 4. Stress and Satisfaction rating template for program session 5

Front page:

SESSION X – DATE

Participant No (to be filled in by participants in the mindfulness study):

How much are you impacted by work related negative stress in current period?

1 – No negative stress

2 – There is some but no actual impact

3 – I can feel it in some days

4 – I can feel it in most days

5 – I have constant negative stress

How satisfied are you with your life in current moment?

Very dissatisfied   Very satisfied

    1   2   3   4   5   6   7   8   9   10

Flip side of the page:

POST-SESSION RATING

How satisfied are you with your life in current moment?

Very dissatisfied   Very satisfied

     1   2   3   4   5   6   7   8   9   10

Please **underline** the answer that suits the best:

- Was this Mindfulness Training Series program useful to you? (YES ; NO)

  Comment if necessary:

- Do you feel that mindfulness has had any impact on your stress level during the 5 session program?

  YES – my stress level has decreased

  YES – my stress level has increased

  NO

  Comment if necessary:

- Have you integrated any of the mindfulness practices to your everyday life? (YES ; NO ; NO but I plan to)

  Comment if necessary:

  - Do you plan to continue with mindfulness practice after the program has finished? (YES; NO; NOT sure)

    Comment if necessary:

Additional comments:

Appendix 5. Interview questions for the semi-structured interview

English version of the interview questions:

Interview questions

Title of the Master thesis: "Mindfulness-based program as stress-management intervention method. A case study among Stora Enso Finance Delivery Tallinn managers"

Research problem: Research problem for the Master thesis is that the employees at SE FD organization are not able to effectively cope with increasing negative stress at work.

Objective: The objective of this Master thesis is to find out how effectively can mindfulness-based program be utilised as a stress-management intervention method among SE FD Tallinn organization managers, as well as to find out the possible relationships between authentic leadership, leader efficacy, work engagement and the level of mindfulness.

Interview structure:

Opening questions:

- Were you familiar with mindfulness topic before the Mindfulness Training Series (MTS) program in Stora Enso?

- What impression do you have from this 5 session program that you attented? (topic as such, subtopics for every session, trainer, set up and execution of the program?
- What worked/ didn´t work for you?

- In how many sessions were you able to attend to? What subtopics were handled at these sessions?

- What subtopic (Presence, Thoughts, Emotions, Relations, Balance) seems most relevant for you? Why?

- How often were you able to do the individual excercises provided by the trainer in Vaikuseminutid application?

Questions according to the study topics:

1. Mindfulness and occupational stress
   - One of the purpose of this thesis is to understand to which extent is mindfulness supporting the coping with occupational stress. What are the factors at work that create stress for you? *(the definition of the word „occupational stress" was clarified to the participant)*

   - How can mindfulness support you to cope with these stress factors?

   - What is your estimation whether MTS program has impacted your level of occupational stress?
   - If yes, then to decrease the stress level or to cope with the existing stress better?
   - If yes, then in which way?

2. Mindfulness and work engagement
   - One of the purpose of this thesis is also to understand the potential impact of mindfulness to work engagement. If and how do you sense the impact of mindfulness to your work engagement? *(the definition of the word „work engagement" was clarified to the participant)*

   - What have you taken and used from the MTS program in your working life?

   - In which ways is or isn´t Stora Enso as an organization supportive place where mindfulness principles and practices could be integrated?

3. Mindfulness and authentic leadership
   - One of the purpose of this thesis is also understand how is mindfulness impacting leadership style, authentic leadership in particular. If and how do you sense the impact mindfulness has made to your style of leadership? *(the definition of the word „authentic leadership" was clarified to the participant)*

   - Please describe yourself as a leader?

   - Can you be yourself at work, behave according to your thoughts, emotions and ethical beliefs in accordance to your values and principles?

   - How has MTS impacted your work as a leader? Please provide an example.

4. Mindfulness and leader efficacy

- One of the purpose of this thesis is also understand how is mindfulness impacting leader efficacy. If and how do you sense the impact mindfulness has made to your leader efficacy? *(the definition of the word „leader efficacy" was clarified to the participant)*

- How has MTS impacted your behaviour as a leader?
- Please provide an example of a situation which you have handled differently now after being more aware of the mindfulness topic.

- In your opinion, can the usage of mindfulness practices in work environment have also a negative effect in some situations?

<u>Final questions:</u>

- What has been the biggest benefit from attending the MTS program and doing the individual exercises?

- What has been the biggest challenge in attending the MTS program and doing the individual exercises?

- In which format could mindfulness be utilised in Stora Enso in the future?

- How do you plan to continue with the topic of mindfulness after the end of the program?

Thank you!

Kati Kilk

Estonian version of the interview questions:

Intervjuu küsimused

<u>Magistritöö teema:</u> „Mindfulnessil põhinev programm kui stressijuhtimise sekkumismeetod. Juhtumiuurimus Stora Enso Finance Delivery Tallinn juhtide näitel".

<u>Magistritöö probleemipüstitus:</u> Stora Enso Finance Delivery organisatsiooni töötajatel on keeruline efektiivselt käsitleda üha suurenevat negatiivset stressi tööl.

<u>Uurimuse eesmärk:</u> Lõputöö eesmärk on välja uurida, kui efektiivselt saab mindfulnessil põhinevat programmi kasutada stressijuhtimise sekkumismeetodina Stora Enso Finance Delivery Tallinn juhtide seas. Samuti tuvastada võimalikud seosed autentse juhtimise, juhtimise mõjususe, tööga seotuse ja mindfulnessi taseme vahel.

Intervjuu ülesehitus:

Esmased küsimused:

- Kas olid enne Mindfulness Training Series (edaspidi MTS) programmi Stora Ensos mindfulnessi temaatikaga tuttav?

- Mis muljed on sul sellest 5 x programmist, milles osalesid? (temaatika, moodulite alateemad, koolitaja, programmi ülesehitus ja läbiviimine)
- Mis töötas/toimis ja mis mitte?

- Kui mitmel sessioonil said osaleda? Mis alateemad nendel kordadel käsitlemisel olid?

- Mis teemamoodul (kohalolu, mõtted, tunded, suhted, tasakaal) kõige enam kõnetas ja vajalik tundub? Miks?

- Kui tihti tegid jooksvalt lisaks ka koolitaja poolt antud harjutusi Vaikuseminutite äpis?

Järgnevad küsimused uurimisteemade järgi:

1. Mindfulness ja tööstress (*occupational stress*)
   - Üks selle lõputöö uuringu eesmärkidest on aru saada, mil määral toetab mindfulness tööstressiga toimetulekut. Mis on sinu jaoks tööstressi tekitavad faktorid? *(termini „tööstress" definitsioon selgitati intervjueeritavale)*

   - Kuidas saab mindfulness toetada nende faktoritega paremini hakkama saamisel?

   - Mis arvad, kas MTS programm on suutnud su stressitaset mõjutada?
   - Kui jah, siis kas stressitaset alandada või olemasoleva stressiga paremini toime tulla?
   - Kui jah, siis mil moel?

2. Mindfulness ja tööga seotus (*work engagement*)
   - Lisaks tööstressile vaatleb lõputöö uuring ka mindfulnessi mõju tööga seotusele. Kuidas ja kas tunnetad mindfulnessi mõju oma tööga seotusele? *(termini „tööga kaasatus" definitsioon selgitati intervjueeritavale)*

   - Mida oled MTS programmist endaga tööellu kaasa võtnud ja kasutanud?

   - Mille poolest on/ei ole Stora Enso organisatsioonina toetav ja hea koht, kus mindfulnessi põhimõtted ja praktikad võiksid laiemalt levida?

3. Mindfulness ja autentne juhtimine (*authentic leadership*)

- Lisaks tööstressile vaatleb lõputöö uuring ka mindfulnessi mõju juhtimisstiilile, täpsemalt autentsele juhtimisele. Kuidas ja kas tunnetad mindfulnessi mõju oma juhtimisstiilile? *(termini „autentne juhtimine" definitsioon selgitati intervjueeritavale)*

- Milline juht sa oled?

- Kas saad oma töös olla sina ise, käituda kooskõlas oma mõtete, emotsioonide ja eetiliste tõekspidamiste, vastavuses oma väärtuste ja põhimõtetega?

- Kuidas on MTS su tööd juhina selle programmi vältel kuidagi mõjutanud? Too palun näide.

4. Mindfulness ja juhtimise mõjusus (*leader efficacy*)

- Lisaks tööstressile vaatleb lõputöö uuring ka mindfulnessi mõju juhtimise mõjususele. Kuidas ja kas tunnetad mindfulnessi mõju oma juhtimise mõjususele? *(termini „juhtimise mõjusus" definitsioon selgitati intervjueeritavale)*

- Kuidas on MTS mõjutanud sinu käitumist juhina?
- Too palun mõni näide olukorrast, mille oled nüüd juhina mindfulness temaatikaga rohkem tuttav olles teisiti lahendanud kui seni?

- Kas mindfulnessi tehnikate kasutamine töökeskkonnas võib sinu hinnagul mingis olukorras ka negatiivset mõju avaldada?

<u>Lõpuküsimused:</u>

- Mis on olnud MTS programmis osalemisel ja harjutuste tegemisel kõige suurem kasu?

- Mis on olnud MTS programmis osalemisel ja harjutuste tegemisel kõige suurem väljakutse?

- Millises vormis võiks mindfulnessiga Stora Enso edasi tegutseda?

- Kuidas planeerid mindfulnessi temaatikaga peale programmi lõppu edasi tegeleda?

Suur aitäh!

Kati Kilk

Appendix 6. Summary of the results from pre-and post-program survey

Participant	Age Group	Work Engagement			Occupational Stress			MAAS			Leader Efficacy			Authentic Leadership		
		Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
1	25 - 37 (Gen Y)	67	54	-13	63	60	-3	68	78	10	65	75	10	77	89	12
2	25 - 37 (Gen Y)	73	68	-5	83	77	-6	73	66	-7	82	79	-3	73	78	5
3	38 - 55 (Gen X)	75	83	8	74	77	3	73	69	-4	75	78	3	72	84	12
4	38 - 55 (Gen X)	81	70	-11	80	77	-3	63	63	0	55	63	8	55	81	26
5	38 - 55 (Gen X)	65	46	-19	69	69	0	60	61	1	70	75	5	77	72	-5
6	38 - 55 (Gen X)	79	81	2	77	74	-3	52	73	21	45	55	10	64	70	6
7	38 - 55 (Gen X)	70	90	20	69	91	22	39	41	2	51	63	12	64	66	2
8	25 - 37 (Gen Y)	70	65	-5	49	29	-20	88	91	3	69	70	1	84	83	-1
9	25 - 37 (Gen Y)	79	84	5	60	69	9	77	77	0	77	80	3	80	75	-5

Appendix 7. Overview of the pre-and post-program results for Authentic Leadership subcategories

Participant	Age Group	Transparency			Moral/Ethical			Balanced Processing			Self Awareness		
		Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
1	25 - 37 (Gen Y)	75	80	5	81	100	19	67	92	25	81	88	7
2	25 - 37 (Gen Y)	75	60	-15	81	94	13	75	75	0	63	88	25
3	38 - 55 (Gen X)	75	80	5	88	100	12	50	75	25	69	81	12
4	38 - 55 (Gen X)	75	95	20	44	88	44	42	58	16	50	75	25
5	38 - 55 (Gen X)	85	80	-5	75	75	0	75	67	-8	69	63	-6
6	38 - 55 (Gen X)	75	65	-10	44	69	25	67	75	8	69	75	6
7	38 - 55 (Gen X)	75	75	0	69	75	6	67	58	-9	44	50	6
8	25 - 37 (Gen Y)	85	85	0	88	81	-7	92	92	0	75	75	0
9	25 - 37 (Gen Y)	85	75	-10	75	75	0	83	75	-8	75	75	0

Appendix 8. Permission to use Authentic Leadership Questionnaire (ALQ)

mind garden

To whom it may concern,

This letter is to grant permission for Kati Kilk to use the following copyright material for his/her research:

Instrument: *Authentic Leadership Questionnaire (ALQ)*

Authors: *Bruce J. Avolio, William L. Gardner, and Fred O. Walumbwa*

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Appendix 9. Permission to use Leader Efficacy Questionnaire (LEQ)

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To whom it may concern,

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Instrument: **Leader Efficacy Questionnaire**

Authors: **Sean T. Hannah and Bruce J. Avolio.**

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Sincerely,

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Appendix 10. Overview of Mindfulness Training Series program

Presence
• How to wake up to the autopilot? Why?
• How to master your attention? Mindfulness in practice and theory.
• Mindfulness and self-mastery.
Exercises: Hearing Meditation, 3-Minute Breathing Space, The Raisin Exercise, Body Scan

Thoughts
• How not to believe your every thought?
• Are the stories in our hears the reality itself? Mastering thoughts in practice and theory.
• Mindfulness of thoughts.
Exercises: Mindfulness of Thoughts, techniques for unhooking yourself from useless thoughts

Emotions
• How to be less influenced by our emotions?
• What makes us act as we do? Mastering emotions in practice and theory.
• Mindfulness of emotions.
Exercises: Mindfulness of Emotions, techniques for managing emotions

Relationships
• How to be kindly present for your self and others?
• Kindness in relationships.
• Self-kindness and self-compassion.
Exercises: Self-Compassion Break, Loving Kindness, the core question of self-kindness

Balance
• How to keep your batteries charged?
• Balance between depleting and nourishing activities.
• How to discover and change your attitude toward some task or activity?
Exercises: a list of nourishing activities, Mindfulness of routine daily activity

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