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## On How and Why Line Managers are Drivers of Implementation

A qualitative study exploring the behaviours of line managers in the implementation of an organisational health intervention

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## Preface

The current thesis is the final work as part of my master's degree in work- and organisational psychology. I was introduced to how line managers work in interventions through my internship position at a consultancy company in spring 2017. Through that work it became apparent to me just how much these line managers do on their own in intervention processes, and how much is still unknown about how such processes work. For those reasons I found it a perfect fit when the research project that this thesis is part of was announced. I did the data collection, the development of the research question and the analysis on my own. In total, the project has taken a year to finalise, making it the biggest work I have ever completed. It has been a great motivation to find a project I personally think is meaningful and interesting. The feeling of finally entering the stage where I'm discovering something new in my own research has been incredibly fulfilling.

Working on my master's thesis has been challenging to say the least, and the process really had both its ups and downs. In the end, I can say that I'm very proud of the thesis I have produced. Thank you to my two advisors; Marit Christensen and Eyvind Helland. I would also like to express my gratitude and appreciation of all my amazing friends at university and at home. I never could have done this without you! Having you around me is priceless.

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### **Abstract**

The importance of line managers in intervention processes is well known, but their role is poorly defined. This qualitative study explored the behaviour of line managers in the implementation of an organisational health intervention. Applying realist evaluation theory provided the opportunity to investigate how and why the behaviours of line managers are important for driving the intervention process. Interviews were carried out with seven heads of departments of a large, Norwegian university, who had all led the implementation of a work environment intervention. A thematic analysis was performed, identifying three behavioural mechanisms; cooperation, follow-up, and communication of progress. In addition, five relevant contexts were identified; competing demands, degree of line manager expertise, degree of presence from other stakeholders, and line manager and employee perceptions of the intervention. The study contributed to explaining the underlying reasonings and reactions behind line managers' behaviours in implementation processes. It advocates a higher emphasis on the importance of line managers, and for evaluation literature to consider a broader aspect of their behaviour. Moreover, the expression of the behavioural mechanisms was found to be highly dependent on contexts. The study concluded that studying behaviour without assessing its interaction to contexts has little purpose.



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## Introduction

Despite their solid base in scientific theory, the stable effects of organisational health interventions have been difficult to establish (Karanika-Murray, Biron, & Saksvik, 2016). As organisational intervention programmes are complex and uncontrolled, involving interactions in social systems from multiple stakeholders, within changing contexts (Cox, Karanika, Griffiths, & Houdmont, 2007), it has been difficult to find standardised ways to evaluate them. For the same reasons, it is difficult to carry out organisational interventions. Take work environment interventions, which addresses the concerns of employees and the improving of wellbeing. A typical work environment issue, “work overload”, is complex, subjective and might have multiple causes. Managing to improve the burden of work overload when working within challenging boundaries, through a time-consuming implementation process, can be difficult. Moreover, evaluating whether such a complex intervention is successful is of little help if the evaluation method is unable to identify what went wrong. As a result, a shift from understanding *whether* an intervention programme works, to *how* and *why* it works has been called for (Biron & Karanika-Murray, 2014; Nielsen & Randall, 2013).

A possible solution for these problems can be taken from the realist evaluation theory (Nielsen & Miraglia, 2017). The purpose of realist evaluation can be viewed as building explanations (Pawson & Tilley, 1997). It offers a framework to find mechanisms of change, which in turn can offer understanding and guidance in creating and implementing organisational interventions. The current thesis is aimed at elaborating the understanding of *how* and *why* the implementation of organisational interventions work. It has been proposed that the behaviour of line managers is important for determining interventional success (Nielsen, 2017). As such, the research objective guiding the current thesis will be; “through what behavioural mechanisms and their contexts do line managers influence the implementation of an organisational intervention?”.

The purpose of organisational health interventions is to improve the health of the employees. It is well established that line managers are important for the employees’ wellbeing (e.g. Breevaart et al., 2014). This is also true when it comes to interventions, where line managers have been said to be in the position to make or break them (Nielsen, 2017). In other words, the line managers’ choices and reasonings could be vital for a successful outcome of interventions. Subsequently, many have investigated the role of line managers in interventions to understand why. The findings of Ipsen, Gish, and Poulsen (2015) suggest that management support throughout the whole intervention process was critical for its success. Others have

found the importance of the line managers supportive behaviour in implementation (Björklund, Grahn, Jensen, & Bergström, 2007), and the line managers' communication (Saksvik, Lysklett, Oyeniyi, Lien, & Bjerke, 2014). Altogether, line managers' behaviours have been found to be drivers of interventions (Lundmark, Hasson, von Thiele Schwarz, Hasson, & Tafvelin, 2017). In sum, there is strong consensus and evidence that the management is important for shaping interventions and their outcomes. As such, the role of line managers is included in intervention evaluation models (Fridrich, Jenny, & Bauer, 2015; Nielsen & Randall, 2013). However, an uncertainty of what the role of line managers entails still apparent, and there is currently a need for knowledge elaborating line managers' behaviour in interventions (Nielsen, Randall, Holten, & González, 2010). To this day there is a lack of knowledge that explain how and why line managers are drivers of implementation.

Making use of realist evaluation might provide a valuable contribution to investigate these questions. Mechanisms can be understood as the underlying explanations of how intervention works (Dalkin, Greenhalgh, Jones, Cunningham, & Lhussier, 2015), and it has been proposed that the behaviour of line managers is important for interventional outcomes (Nielsen, 2017). Exploring line managers' behaviour as mechanisms in implementation could provide insight into what makes them such important drivers of the implementation process. Realist evaluation offers a theoretical unit of analysis that makes it possible to understand the line managers' role in implementation.

When it comes to organisational intervention theory, there is a need to understand the underlying mechanisms of what makes interventions work (Nielsen & Miraglia, 2017). The objective for the current thesis is to understand the behaviour of line managers in the implementation of an intervention. Applying realist evaluation provides an explanatory framework to inform how and why the line managers behaviour can affect interventional outcomes. This will be investigated from the line managers' own perspectives, an angling providing insights into their thoughts and motivations behind their behaviour. More research on the role of line managers in intervention evaluation is necessary, underlined by the previous lack of successful evaluations (Karanika-Murray et al., 2016). The objective relates to organisational psychology in that it aims to identify the mechanisms that are involved in changing employee's work environment, elaborating intervention theory.

## **Structure of the Thesis**

The thesis is built on five parts, theoretical and empirical background, methods, results, discussion and conclusion. In the theoretical and empirical background, the background of the study will be explained in detail, informing the theoretical and empirical background of which the research objective is guided. In the methods section, the choices made concerning the data collection and analysis will be described. A thematic analysis will be presented as the method of choice, and the steps taken in performing the analysis will be elaborated. In the results section, the themes and subthemes of the analysis will be presented as behavioural mechanisms and contexts. Next, the discussion section will put the findings of the analysis in relation to theory and empirical findings. Realist evaluation theory will be applied to the findings. Furthermore, implications for theory and practice will be made and discussed, and methodical considerations will be considered. The thesis ends with a concluding section.

## Theoretical and Empirical Background

### Interventions

The overall objective of the thesis is to inform intervention literature. When the implementation of actions occurs on the organisational level, the intervention is classified as an organisational intervention (Kelloway, Hurrell, & Day, 2008). There are many forms of organisational interventions. Organisational health interventions are especially relevant to the research objective, which have been explained as “planned, behavioural, theory-based actions to remove or modify the causes of job stress (stressors) at work and aim to improve the health and well-being of participants” (Nielsen et al., 2010, p. 234). In both aiming at preventing stressors and enhancing already positive dimensions of employee health, they can be characterised as health-promoting. Such interventions with health-promoting orientations has been understood as building health, a foundation backed in psychological theory. A good example is provided by the conservation of resources (COR) theory (Hobfoll, 2002). Its main contribution is the idea that increasing resources creates positive ripple effects for the employees. This results in them achieving more and increases the likelihood of good results. Thus, resources can work as buffers from stressors. Note that while the current thesis is investigating the processes of organisational health interventions, the term organisational intervention will occasionally be used, depending on the sources discussed.

In the last decades, there has been an increase in knowledge of the implications of unhealthy psychosocial working conditions (e.g. Bakker & Demerouti, 2007; Karasek, 1979). As such, in the field of occupational health research, much attention has been put on finding ways to structurally improve working conditions (Cox, Taris, & Nielsen, 2010). Organisational health interventions have had an increasing popularity of use, perhaps because they are focused on employee health outcomes. While popular, there also reigns an uncertainty regarding the actual effects of interventions. Meta reviews show that while organisational interventions have proved to increase employee health, the effects are inconsistent across designs and organisations (Montano, Hoven, & Siegrist, 2014; Neumann, Eklund, Hansson, & Lindbeck, 2010). It seems that researchers are struggling to develop good intervention programmes that consistently provide positive changes to the work lives of employees. Many problematise the interventions for being too comprehensive, as they include interactions of multiple stakeholders, long time spans and psychological variables as

outcomes (Cox et al., 2007). As such, organisational health interventions have been termed as complex. Because of the mixed evidence of the effects of organisational health interventions, the field of intervention evaluation has called for a shift in direction, aiming at evaluating the processes of interventions. As the objective of this thesis is to inform intervention literature, intervention evaluation theory could provide methods to understand if and how interventions work.

### **Evaluation of Interventions**

The goal of any evaluation is to make interventions increase their effects in organisations. Currently, there are many different standpoints on how to evaluate interventions. Randomised control trial (RCT) evaluations, based on positivist evaluations from standardised and controlled conditions, has previously been viewed as ideal to evaluate organisational interventions (Guyatt et al., 1995). None the less, this method has faced criticism, among else because it assumes that stakeholders are passive recipients of the intervention and that contexts are reducible confounding variables (Blamey & Mackenzie, 2007), as well as for not being sophisticated enough to produce answers that are satisfactory for the complexity of organisational interventions (Nielsen & Miraglia, 2017). Alternatively, Nytrø, Saksvik, Mikkelsen, Bohle, & Quinlan (2000) called for the use of process evaluation, by arguing that the process of an occupational health intervention can be just as important as the content. They understood process as “individual, collective or management perceptions and actions in implementing any intervention and their influence on the overall result of the intervention” (Nytrø et al., 2000, p. 214). An example of the reasoning used in process evaluation is that the quality of the content of an intervention programme has little say if it is implemented inadequately by stakeholders. Investigating the processes in which the interventions occur may increase our understanding of key factors involved in successful interventions (Egan, 2013). It might produce an answer to “what works” in intervention programmes.

There are several examples of models aiming at evaluating organisational interventions (e.g. Fridrich et al., 2015; Nielsen & Randall, 2013), which both value the impact of content and process. Nonetheless, it has been suggested that the theoretical foundation in which these frameworks are based is not sufficient (Biron & Karanika-Murray, 2014). Consequently, several researchers have called for improving the understanding of the underlying mechanisms that affect the outcomes of interventions (Biron & Karanika-Murray, 2014; Nielsen & Randall, 2013). It is proposed that realist evaluation might provide a method

to do so. As the objective of the current thesis is to understand the role of line managers in implementation, applying a realist evaluation perspective could contribute to this.

### **Realist Evaluation**

Realist evaluation seeks to “unpack the black box”, to find what makes a programme work. According to realists, to evaluate complex interventions it is just as important to explore the way change happens, and in what context that change occurs in the implementation (Berwick, 2008). In order to understand why the same manipulation can generate different outcomes, the term mechanism was introduced. Mechanisms are the underlying changes in the reasoning and reactions of participants, which interacts with context (Pawson & Tilley, 1997). Essentially, it is a framework that enables the building of explanations. It articulates hypotheses based on theory and tests them empirically to assess which can be supported. An important precedent to realist evaluation is that it assumes individuals make the outcomes of interventions, not the intervention programme itself (Greenhalgh et al., 2015). The intervention triggers certain reactions of reasonings in participants, creating an agency which in turn produces the outcomes of the intervention. Realist evaluation has been presented as a possible key to assert the effectiveness of interventions, by being able to answer what elements of interventions work, and also to whom and in what circumstances they do (Nielsen & Miraglia, 2017). To fully understand the nature of realist evaluation, a further elaboration of its characteristics is needed.

**Context – mechanism – outcome.** Realist evaluators assert that the method to find effects in interventions is through theoretically developing context + mechanism = outcome (CMO) configurations (Pawson, 2013; Pawson & Tilley, 1997). Some factors of the context may enable certain mechanisms to be triggered. At the same time, other contexts may prevent a mechanism to be activated. The theory establishes that interactions between context and mechanisms exist, and the interactions create the outcomes of the intervention. Realist evaluators seek to find explanations for programme changes by understanding the mechanisms that produces outcomes, the context where these mechanisms are activated, and the outcomes of those together (Pawson, 2013). They specify what it is about a programme that works, for whom and in what circumstances. To understand them, CMO-configurations are tested within intervention programmes, for instance by applying the intervention on different stakeholders or different locations (Greenhalgh et al., 2015). As they are central for the research question, the concepts of mechanisms and contexts will be described in detail below.



**Mechanisms.** Mechanisms are what makes interventions work. In evaluation research, the focus of mechanisms is on developing an explanation of how a particular programme works (Dalkin et al., 2015). Mechanisms are what brings about changes through the implementation of an intervention (Lacouture, Breton, Guichard, & Ridde, 2015). Based on an extensive meta review, they offer an extended three-part definition of mechanisms. First, a mechanism is an element of the reasoning and reactions of participants, and results in the interactions between stakeholders, structures and the intervention. Second, mechanisms are hidden but always real. They might only reveal themselves during implementation and be sensitive to context, but they produce outcomes that might favour the intended change. Third, mechanisms can evolve and interact. They have the ability to interact with other mechanisms, elements of context or outcomes already produced, creating feedback-loops. These could be both reassuring or negative to the wanted outcome.

In sum, according to realist evaluators, mechanisms occur through social interactions, and are the underlying driving forces of change in organisational interventions. Numerous mechanisms that affect intervention outcomes have been proposed, including collective processes such as employee participation (Nielsen & Randall, 2012), and individual psychological process such as emotional contagion, shared meaning, and social identity (Karanika-Murray & Biron, 2013). In the current thesis, this realist understanding of mechanisms will be used to guide the research question. This also applies for their understanding of context.

**Context.** The importance of context has been highlighted by many. Johns (2018) concluded that careful attention to context can clarify both the boundaries of theories and facilitate the practical application of research. Realist evaluators acknowledge the richness of context, and that the outcomes of an intervention can depend on context through the agency of the participants. For instance, in a participatory intervention programme (Aust, Rugulies, Finken, & Jensen, 2010), the focus on participation became a constraint, as the employees did not have the necessary training to understand the intervention programme, and the line managers were uncertain about their role. The intervention was intended to gain positive outcomes, but did not, most likely because the contexts (employee training and line managers' uncertainty) inhibited its change mechanisms. Pawson & Tilley (1997) describe context as the characteristics of the conditions of which the intervention operates. Organisations operate within numerous of context, being ongoing mergers, the world economy, or interpersonal conflicts. The context is important to investigate and understand in what conditions

interventions become effective (Greenhalgh et al., 2015). The context is thought to influence and manipulate the mechanism that is happening (Pawson & Tilley, 1997), and some contexts are necessary for triggering mechanisms. As such, the interplay between context and mechanisms has impact on the outcome of the intervention.

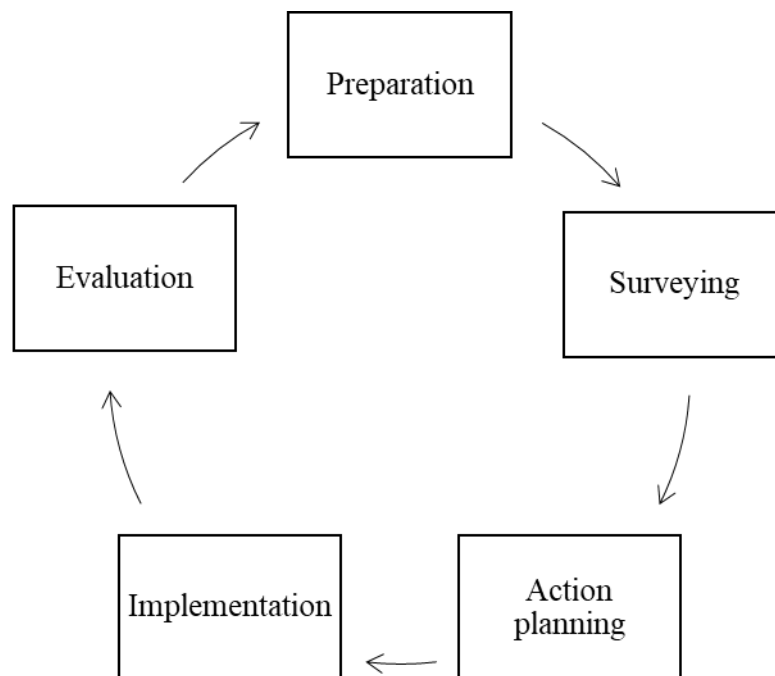
**Realist evaluation explaining interventions.** Realist evaluators offer the opportunity to produce theories of how organisational interventions work. As their line of reasoning is growing across disciplines, a consensus on the vital importance of context, and that correlations without mechanisms are not sufficient to support causal claims, is gradually established (Jagosh, Tilley, & Stern, 2016). While the CMO-solutions cannot be transferred to other interventional settings as they contain different context and different mechanisms (Goodridge, Westhorp, Rotter, Dobson, & Bath, 2015), the value of constructing CMO-configurations comes from the transferability of the in-depth understanding of what works for whom in what circumstances. As such, identifying mechanisms and acknowledging the conditions in which they operate contributes to intervention theory (Nielsen & Miraglia, 2017). The explanations produced can be used to modify or improve the efficiency of organisational health interventions. In the current thesis, realist evaluation theory will be applied in order to understand the change occurring in organisational health interventions. Using realist evaluation can contribute to further understand the role of line managers in interventions, especially the contexts and the mechanisms in which the line managers might affect intervention outcomes. This could improve knowledge on what makes organisational interventions work.

### **An Intervention Framework**

Realist evaluation use programme theories as units of analysis, and an example of a programme theory is the framework of organisational health interventions proposed by Nielsen et al. (2010). The analysis of the current thesis uses a case in which this framework serves as a base for the intervention programme. The framework of Nielsen et al. (2010) was developed with the objective of providing a scientifically based model to guide the development of new interventions. The intervention model is based on an extensive review of European organisational health interventions, using up-to-date field-specific research. The framework is presented in a five-phase structure, each including success factors that has been found to contribute to intervention outcomes. The five phases are shown in model 1 (Nielsen et al., 2010).

*Model 1.*

Model of occupational health interventions that show the five phases of an intervention.



First, the preparation phase entails making the organisation ready for the change process and adjusting the programme to the unit's specific problems and needs. Second, extensive surveying is done to map out relevant indicators. This phase also includes survey feedback meetings, where the results are presented, discussed, and interpreted in cooperation between managers and employees. Third, the development of action plans has the purpose of finding implementable solutions for the present problems. The development is usually participative. Forth, the initiatives are implemented into the workplace. Fifth, in the evaluation phase the intervention is evaluated to assess if the programme brought about the desired results. Together, the five phases constitute a complete intervention framework that can be used to improve working conditions in organisations. While the whole intervention is important, the five phases all have different contributions in improving working conditions. Nielsen et al. (2010) emphasise that interventions should be circular processes, in accordance to the health promoting perspective. They should include regular repetition and evaluation throughout the process.

**Implementation.** The focus of the current thesis will be the implementation phase of organisational health interventions, keeping in mind that it is important to consider the whole intervention process to understand its outcomes. The implementations of organisational interventions are known for being difficult to do successfully (Biron, Gatrell, & Cooper, 2010). This notion is also evident in the framework of Nielsen et al. (2010), where few guidelines for implementation are provided. It recommends focussing on monitoring, the role of the managers, and communication in the implementation phase. Nonetheless, little specification on how to use these factors are provided, nor how to ensure well performed implementations. Other authors adds that a clear division of roles and responsibilities, good communication plans, and some degree of employee participation are important for good implementation processes (Biron & Karanika-Murray, 2014). Considering the lack of knowledge of what works in implementation, further investigations are needed. The focus of the current thesis will be on understanding the mechanisms steering the implementation processes of interventions. In the analysis of the thesis, the term “implementation” will be used in reference to the phase of the framework of Nielsen et al. (2010). The word implementation is often used in a broader sense, where the implementation part of the intervention is understood as the process of the intervention, including how any intervention is introduced and set into practice. Note that some sources used in this thesis utilise the broader understanding of implementation.

### **Stakeholders in an Intervention**

Before specifically investigating the role of line managers in implementation, the roles of individual stakeholder groups and their roles will be elaborated. Because organisational interventions involve the interactions of multiple stakeholders (Cox et al., 2010), understanding who interacts and how those interactions affect the line managers’ roles is needed. The roles of line managers, senior management and other stakeholders, as well as employees will be elaborated, as those stakeholder groups have been presented as important by evaluators (Nielsen & Randall, 2013). Following that, research on employee participation and the perceptions of the stakeholders will be described.

**Line managers.** The majority of organisational intervention models put line managers in a prominent position, finding that they are often the focus of the interventions (Hasson et al., 2016; Ipsen et al., 2015). As such, understanding their roles is necessary. Nielsen (2017) made a list of reasons the line managers’ influence make a difference in interventions. First, they function as bridges between senior management and employees. They are described as

communicators of decisions received from above, as well as providers of feedback-loops from employees to senior management. Second, line managers are seen as translators of senior management decisions into specific strategies, usually being responsible for making the change occur. They cooperate with employees in developing and implementing the change. Third, they have the responsibility of keeping the enthusiasm and the perceived relevance of the intervention high. Forth, they manage the employees' perception and expectations of the change happening.

Other researchers have explored the roles of line managers in interventions from their own perspectives (Hasson, Villaume, von Thiele Schwarz, & Palm, 2014). The line managers reported that it was especially important for them that they were formally responsible for their employees' work environment, as that responsibility meant ensuring that the intervention provided concrete actions and positive results. Furthermore, line managers understand their own roles as being role models for workplace wellbeing and as evaluators of work health. They also thought their own engagement was essential for motivating and involving of employees.

**Senior management and other stakeholders.** Senior management are seldom able to take part as active participants of interventional activities, usually because of their own work demands and their seniority (Hasson et al., 2014). Augustsson et al., (2015) reported that senior management were absent for the facilitation of integrating initiatives, suggesting that they see their roles as more communicative than active. They are usually responsible for the division of resources to the interventions, and view themselves as important role models in intervention processes, through their own actions and attitudes (Hasson et al., 2014). In terms of other stakeholders, the usefulness of professionals experienced in dealing with change processes has been indicated as important for intervention success (Nielsen & Randall, 2013). For instance, Sørensen and Holman (2014) argued for the benefit of experts in implementing the intervention programme.

**Employees.** As organisational health interventions aim to improve the employees' working conditions and health, arguably one can claim that employees are the most important stakeholders of any such intervention. Pawson & Tilley (1997) put it nicely when they wrote: "intervention theories begin in the heads of policy architects, pass into the hands of practitioners and, sometimes, into the hearts and minds of subjects" (p.28). The employees' perceptions of the intervention can be seen as vital. Hasson, Brisson, et al. (2014) found that where employees felt exposure to implementation, they also reported higher wellbeing

afterwards, compared to employees who felt less exposure. These findings indicate the importance of the employees' closeness to the intervention process. While traditional interventions apply a top-down approach viewing employees as passive participants (Cox et al., 2010), in European organisations today, employees' roles are often as actively shaping and deciding the interventions (Irastorza, Milczarek, & Cockburn, 2016). Such interventions are often labelled participative.

**Employee participation.** The aims of increased employee participation are many. One is to ensure intervention fit by using employees' expertise and knowledge of their own work environment (Nielsen & Randall, 2012), another is to increase employees' control and ownership, enhancing personal involvement and motivations for intervention success (Sørensen, 2013). Regardless of the objectives behind, employee participation has proven to be important. Participation has been explained as the process where employees are able to gain some influence over their work, or over the conditions within their work (Heller, 1998). The importance of employee participation has been identified and strengthened a number of times (Nielsen, 2013; Nielsen et al., 2010). Participatory approaches have been shown to help ensure implementation by giving employees a perceived ownership of change (Roskam, 2009), to increase autonomy and social support (Nielsen & Randall, 2012) and organisational commitment (Lines, 2004). Altogether, there is strong empirical evidence of participation being linked to the successfulness of an intervention (Augustsson et al., 2015; Ipsen et al., 2015; Nielsen & Randall, 2012). Some suggest that participation is a form of mechanism that influences intervention outcomes (Nielsen & Randall, 2013).

**The perspectives of stakeholders.** In understanding the interactions occurring in organisational interventions, it is also important to consider the reasonings behind those interactions. Nielsen & Randall (2013) recommend including an assessment of the perceptions of the stakeholders in process evaluation models, as they could have effects on intervention outcomes. The differences in the perceptions of line managers and their employees have been shown to be important for intervention outcomes (Nielsen & Randall, 2011). A theory explaining these differences is the theory of perceptual distance (Gibson, Cooper, & Conger, 2009). They define the distance of perceptions as "differences between a leader and a team in perceptions of the same social stimulus". A high perceptual distance signifies high variations in perceptions between line managers and employees. Their findings suggest that the less perceptual distance there is, the higher is team performance. Differences in perceptions have also been shown to affect intervention outcomes. For instance, Tafvelin,

von Thiele Schwarz, & Hasson (2017) found that perceptual distance between the line manager and their employees in an intervention explained differences in its outcome. A suggested solution to decrease the perceptual distance between line managers and their employees is through communication (Gibson et al., 2009).

### **Line Managers Making or Breaking Interventions**

It has been suggested that line managers have prominent role in interventions. Their role of as the key player in interventions has been emphasised by several researchers (Hasson et al., 2014; Nielsen, 2017), and support of the notion that line managers influence interventional success has been found empirically on numerous occasions (Ipsen et al., 2015; Saksvik, Lysklett, Oyeniyi, Lien, & Bjerke, 2014; Tafvelin et al., 2017). The importance of line managers in interventions can be exemplified by the fact that their behaviour, attitudes and roles are included into intervention evaluation frameworks (Nielsen & Randall, 2013). Because line managers are key players in interventions, they have been suggested to be villains of the piece, having the power to make or break them.

The purpose of the current thesis is to explore the role of line managers in the implementation process, specifically how that role can function as a mechanism of change. Biron and Karanika-Murray (2014) suggested three ways to further develop the theoretical foundations of organizational interventions: understanding what can drive the change, how to prepare for change, and the possible mechanisms of change. However, it seems unclear how the three differ from each other. Based on the current understanding of line managers, it is possible that their roles function both as drivers the change and as mechanisms of change. However, there is a scarceness in the evidence on how this would be. While it has been argued that line managers need to actively support the whole intervention process (Ipsen et al., 2015), investigating their role in specific phases of the intervention can contribute to understanding their influence.

### **Line Managers as Drivers of Change**

Line managers most likely influence the implementation process of interventions. An important context to this is that reviews show that they are usually responsible for the implementation process (Kompier, Cooper, & Geurts, 2000). While relatively little evidence exists, some research indicates what line managers do to make the implementations of interventions successful. It has been argued that having drivers of change is vital for implementation outcomes (Augustsson et al., 2015; Nytrø et al., 2000), and Nielsen (2017)

put forward that line managers are the drivers of the implementation, suggesting that the behaviours of line managers may be vital. In investigating the role of line managers in implementation processes, the current thesis will focus on the behavioural part of that role. The empirical evidence presented in the following paragraphs will elaborate the reasoning behind that choice.

Some findings support the notion that line managers' behaviours in implementation is related to the outcomes of the interventions (Lundmark et al., 2017; Lundmark, von Thiele Schwarz, Hasson, Stenling, & Tafvelin, 2018). In both studies, behaviour was measured by applying transformational leadership theory. Lundmark et al., (2017) found an indirect link between transformational leadership and outcome, mediated by the line managers' attitudes and actions. These findings suggest that the behaviours of line managers indirectly affect interventional outcomes, supporting line managers' roles as drivers of change. The same role can be further supported by investigating the prominent roles of line managers when implementation fails, standing out through their absence or restrictive behaviours. Ipsen et al. (2015) suggest that the manager in charge of a failed implementation prioritised other tasks, and Mellor et al. (2013) concluded that the unavailability of the line managers to the employees was a prominent reason for the implementation failing. The notion that line managers can put breaks on change processes is also supported by Dahl-Jørgensen & Saksvik (2005), who found that managers obstructed the implementation of interventions by not prioritising the implementation.

Summarised, strong evidence suggest that line managers act as drivers of change in implementation. However, these findings do not elaborate in explaining how and why the actions of line managers affect implementations. Exploring the full aspect of behaviours could shed light on the underlying mechanisms of how interventions work.

### **Line Managers' Behaviours in Implementations**

To explore the behaviours of line managers in implementation, a description of previous findings that have found behaviours important for implementation outcomes is needed. Communication might be important for implementation success (Nielsen, 2013). Empirical findings suggest that the line managers' supportive behaviour increased employee participation, which in turn increased their positive appraisals of the interventions' benefits afterwards (Björklund, Grahn, Jensen, & Bergström, 2007; Coyle-Shapiro, 1999; Nielsen & Randall, 2009). The line managers' communication provided the employees with an increased



knowledge of the effects of the intervention. This is consistent with the findings of Sørensen & Holman (2014), which elaborate how the line managers' supportive behaviour in implementation works. In their evaluation of a work environment intervention involving knowledge workers, the importance of management support in implementation was highlighted, as it ensured that the initiatives were widely adopted. This was especially true in conditions with high employee participation, where there was higher acceptance of the new initiatives. This suggests the importance of close communication between line managers and the employees for positive employee appraisal of interventions. Moreover, a case study suggested that line managers and employees have an interdependent relationship, and that line managers have a prominent role in shaping the employees' perceptions and attitudes of interventions, informing their understanding (Nielsen & Randall, 2011). Summarised, there is some support that line managers' communicative behaviour is closely related to employee participation, and that they can affect intervention outcomes through shaping the employees' perceptions. There is little evidence elaborating other behaviours of line managers affecting implementation. Some has suggested that line managers' monitoring of the implementation (Nielsen et al., 2010), but has not specified what good monitoring activities entail.

Altogether, line managers are most likely important drivers of the implementation process, for instance by acting supportive and communicating the implementation. Moreover, the research assessing the behaviours of the line managers' effect on outcomes does so quantitatively (Lundmark et al., 2017, 2018; Nielsen & Randall, 2009). While providing important knowledge, using existing measures also limits the types of behaviours assessed. A solution for this is to explore the behaviours of line managers qualitatively, to not only develop the understanding of what line managers do in implementation, but also how and why they do it. While Nielsen (2017) theorised the importance of line managers' behaviour, the evidence of what that behaviour entails, and examinations of the reasons behind its importance, seems scarce. Few researchers have mapped how line managers act in implementation, and their motivation for such behaviour. Exploring these behaviours might shed light on how line managers influence the implementation process.

In order to fully understand how and why the behaviour of line managers affects the implementation process, there is a need to access the reality of the line managers. Previous investigations on line managers' behaviour are usually conducted from other stakeholders' perspectives. As such, there is currently a lack of knowledge on how line managers view their own behaviours in implementation, especially when considering the reasoning and

motivations of that behaviour. Altogether, conducting qualitative research on the line managers' perspectives of their own behaviour would complement current knowledge on the subject, and inform intervention theory and practice. Finally, this research objective aligns to the realist evaluation signature "what works for whom in what circumstances, and why" (Pawson, 2013, p. 15). Applying a realist evaluation approach could further inform the knowledge of line managers' behaviour in implementation.

### **Line Managers in Implementation and Mechanisms**

Realist evaluation has been suggested as a solution for an in depth understanding of intervention processes and how they work (Nielsen & Miraglia, 2017). Several authors have called for the need to understand the underlying workings of organisational health interventions, also specifically to explore what mechanisms explain their outcomes (Biron & Karanika-Murray, 2014; Nielsen & Randall, 2013). As line managers' behaviour can be viewed as a driver of implementation, it has been proposed that the behaviour can make or break their outcomes (Nielsen, 2017). It is proposed that the behaviour of line managers are mechanisms of the change. Few previous studies explore the line managers' behaviour in implementation within the field of organisational health research, especially applying realist theory. Some previous studies have identified managerial mechanisms related to line managers' behaviour. To identify how these mechanisms may work, they will be elaborated below.

In a review article, Higgins, O'Halloran, and Porter (2012) identified three mechanisms on the managerial level in an intervention targeting employees returning to work after sick-leave. These were line managers' contact with employees on an early stage, line managers communication with employees, and senior managers providing clear guidance to the managers. The two latter ones are the most relevant in investigating implementation. The significance of these findings is that they suggest that communication and clear guidelines from management directly influence the outcomes of the intervention. The importance of context for these mechanisms was also emphasised by the authors. Based off a case study of an obesity-reduction organisational health intervention, Jalali, Rahmandad, Bullock, and Ammerman (2017) developed a model for understanding the mechanisms of implementations. The motivational alignment of stakeholders, as well as communication between them were among the mechanisms identified. Importantly, Jalali et al. (2017) found that the interactions between these mechanisms produced benefits for implementation. The authors highlight the benefits of using such explanatory feedback loops in further research. The feedback

mechanisms finding is coherent with the argumentation of Higgins et al., (2012), who noted that the mechanisms they found had mutually interactive properties that took place in various contexts of organisations. In sum, the examples show how a realist perspective can be applied to understand how intervention outcomes come to be. They found that stakeholders' perceptions and various communication of the intervention are mechanisms influencing the success of interventions. However, these studies lack details on how line managers act when these mechanisms work, although behaviour is a clear component. In the current thesis, this will be explored further.

### **Behavioural Mechanisms**

Based on the previous literature review, there is agreement that line managers have a key role in determining interventional outcomes. Nielsen et al. (2010) called for a better understanding of this, but 8 years later, there are still questions as to how line managers do exactly that. Summarised, many assert that line managers are the drivers of implementation, and empirical evidence support this. Moreover, some researchers have elaborated what constitutes the line managers' behaviour in implementation, for instance forms of communication and supportive behaviour has been noted as important. Nonetheless, many questions remain as to what this behaviour entails. The literature review shows that a description and explanation of the line managers' behaviour in the implementation of organisational interventions is needed.

Because line managers act as drivers of implementation, the line managers' behaviour has been suggested to work as a mechanism. It is proposed that such behaviours can be specified as behavioural mechanisms. As mechanisms are the reasoning and reactions of human agents (Pawson & Tilley, 1997), it is proposed that the line managers' behaviour makes the reasoning and reactions of interventional stakeholders, contributing to interventional outcomes. Behavioural mechanisms are the mechanisms that work through the behaviour of relevant stakeholders of interventions. The behavioural mechanisms behind the line managers' activities will be explored in the current thesis. As mechanisms are always accompanied by contexts (Pawson & Tilley, 1997), relevant contexts will also be explored.

### **Summary and Purpose of the Current Thesis**

The theoretical and empirical background above has introduced evaluation literature and presented realist evaluation as a possible solution for exploring the underlying workings of organisational health interventions. Moreover, there is a need for further theoretical

foundations of the implementation phase in the intervention framework of (Nielsen et al., 2010). The purpose of the current thesis is to explore the role of line managers and how they influence the implementation process, using the theoretical perspective of realist evaluation. While the interactions of all stakeholders in interventions are important for its outcomes, line managers seem to be driving forces in implementation. Research on how and why their role is vital at the implementation stage is needed. The line managers' behaviour can be understood as a mechanism affecting the outcomes of interventions. Applying realist evaluation theory to the investigation of the line managers' behaviour in implementation provides an opportunity for increasing the understanding. Based on the argumentation above, the research question steering the further analysis of the current thesis will be "through what behavioural mechanisms and their contexts do line managers influence the implementation of an organisational intervention?".

The thesis will explore and elaborate what constitutes the line managers' behaviour in an organisational intervention. The study will be conducted qualitatively, using the information and perspectives of the line managers themselves. Doing that might contribute to further understand the motivations behind that behaviour, informing how and why line managers are drivers of the implementation. The purpose of the current thesis is not to perform a realist evaluation, but rather to apply the realist evaluation theory to inform intervention theory. The findings have value in exploring the mechanisms of the line managers' behaviour, as well as identifying their adherent contexts, knowledge that has potential to be applied in other settings.

## Method

In the following section, all the choices that were made in regard to answering the research question will be described. First, the context of the research project will be described. The choices made in selecting appropriate research methods and the procedures of collecting the data material will be discussed next. The next part will describe the ethical considerations made during the research process. Finally, the reasons for choosing a thematic analysis and a description of how the thematic analysis was conducted will be presented.

### Contextual Factors

Summarised, the research was conducted by investigating the experiences of heads of departments of a large, Norwegian university, who in 2014 all participated in a work environment intervention programme (ARK). Information about the relevant contexts of the intervention will be elaborated below.

**The intervention programme.** ARK (arbeids- og klimaundersøkelser) is an organisational intervention based on the framework of (Nielsen et al., 2010). It is classified as a work environment intervention, as the ARK programme is intended to address employees' concerns and improve their wellbeing. The ARK programme is a research-based tool made to develop and improve the work environment of knowledge intensive organisations in Norway. It uses the employees' own experiences of their daily work, recommending a participatory approach (Underbakke, Innstrand, Anthun, & Christensen, 2014). By participating in the five phases of the intervention, the aim is to achieve that the employees work to improve their own work environment. ARK is based on theory from the organisational research field, applying a process perspective with the objective of securing that the work environment is always on the agenda. It is intended to be repeated biannually, and targets to be well incorporated in the organisation's main strategy.

**Participants.** The line managers that participated in the research project were heads of departments of a large Norwegian university in 2014. There were seven line managers participating in total. In regard to representativeness, both men and women were represented, and they were line managers working at a variety of faculties and campuses across the university. The heads of departments can be characterised as line managers, as they had full formal responsibilities of all the staff of that department, including personnel responsibilities.

In most of the cases the heads of departments had unformalized middle managers, who aided them with some responsibilities. The middle managers formed leader-groups, with the head of department in charge. Note that one participant had formalised middle managers with personnel responsibilities, as a result of the large size of the department. Because the head of department was in charge of implementing the relevant intervention, she will be considered a line manager equal to the other participants. The heads of departments will hereby be referred to by the term "line manager". Most of the line managers were highly educated and experienced researchers in their respective fields. In most of the cases they had little formal leadership training, except for the training that was provided for by the university.

**The departments.** A characteristic of the departments in question was that the line managers were responsible for a large body of staff. In the current selection the number of subordinates directly below them ranged between approximately 50-200 employees. Most of those employees were knowledge-intensive workers. Knowledge intensive workers use their own knowledge as their most important tool, and are characterised as being independent and self-managed (Walumbwa, Christensen, & Hailey, 2011). In addition, some of the subordinates were administrative or technical staff. In terms of organisational structure, the line managers answered to their closest leader at faculty level. In the faculties they were part of leader-groups, together with other line managers from related departments. The faculty leaders answered directly to the principal's leader-group. Each faculty had responsibility for the ARK-intervention to be initiated at each department, as well as preparing the line managers for the interventions.

**Legislation.** The Norwegian legislation emphasises the responsibilities of organisations for their employees' health, putting pressure on organisations to regularly perform organisational interventions. The importance keeping a justifiable work environment is constituted in the Norwegian work environment act, that states; "the work environment should be completely justifiable both from an individual and collective consideration of the factors in the work environment that can affect the workers physical or psychological health and welfare" (ASD, 2006, § 4.1). The legislation entails that it is mandatory for organisations in Norway to systematically assess their work environments and address the parts that are non-satisfactory. In the context of the current ARK-intervention, the line managers had little say in it being initiated.

**Merger.** At the time of the intervention, the university in question was in the initial stages of a merger. All the employees were informed of the planned merger when the

intervention took place. The official date of the merger was the 1st of January 2016. Although the intervention period was approximately spread out between autumn 2014 throughout 2015, it is most probable that the whole organisation, including the line managers and the employees, were affected by it. Although not relevant to the research question, the merger most likely influenced the line managers' experiences of the intervention.

## **Research Approach**

**Background.** The current thesis was part of a bigger research project investigating the role of line managers in organisational health interventions. In total there were four members of the research project; one research associate, one doctoral candidate and two master's degree students. It was led by doctorate candidate Eyvind Helland. Research associate Marit Christensen was also involved in this project. She took part in developing ARK and is currently a member of the ARK steering group. As the ARK intervention is founded on up-to-date intervention theory (Nielsen et al., 2010; Underbakke et al., 2014), it presented a good opportunity to explore the role of the line manager in the intervention processes.

**Choosing an approach.** The research question; "through what behavioural mechanisms and their contexts do line managers influence the implementation of an organisational intervention?", dictated all the methodical decisions made in the current research process. This decision was based on the argument that the research question optimally can be answered by choosing methods that produce the most adequate knowledge on the subject (Larkin, 2015). The research method can be considered a tool for finding adequate knowledge. In terms of ontology, a critical realist standpoint was chosen in the handling of the data collection and the analysis. In the research process an emphasis was put on acknowledging the participants' understanding of their experiences. This fit well with critical realism, which assumes that the understanding of reality is subjective, but that it is meaningful to try to access an authentic reality (Braun & Clarke, 2013). Thus, aiming the interpretations in the analysis to stay close to their understandings was important. In line with this, a postpositivist approach was chosen to retrieve knowledge on behalf of their perspectives. Postpositivism seeks to find true meaning while controlling for the subjective, while still acknowledging the role of the researcher and theory in that process (Clark, 1998). In sum, the research process will provide an exploration of the implementation process by staying close to the experiences of the line managers.

**A qualitative approach.** A qualitative approach was considered appropriate. There were several reasons behind that choice. A qualitative perspective can be informative in exploring phenomena that there currently is little knowledge of, or to collect the experiences of someone (Howitt, 2010). Regarding the research question, a qualitative approach is necessary in order to identify mechanisms (Pawson & Manzano-Santaella, 2012). The authors argue that exploring the mechanisms and their properties must be done qualitatively before quantitative research can be done, underlining its importance for their scientific quality and integrity. In accordance to this, Nielsen & Randall (2013) argued that a qualitative approach is necessary to explore mechanisms that bring about change. Summarised, a qualitative approach was best suited to the gain knowledge of the line managers' experiences, as well as to explore the mechanisms contributing to change in interventions. Qualitative interviews were considered most appropriate to answer the research question. As the purpose of qualitative interviews is to collect knowledge and "see the world from the perspectives of the interviewees" (Kvale & Brinkmann, 2009, p. 21), it fitted well with exploring the line managers experiences of the implementation process.

### **Data Collection**

**The interview guide.** The interview guide was developed in cooperation with all members of the project group. Creating a common, general interview guide made it possible for the project members to tailor individual research objectives from the same data material. The questions were developed from a theoretical approach, as the project's objectives were founded on previous research and gaps in literature. Most of the questions were based on suggestions proposed by Nielsen and Randall (2013), who outline several topics and specific questions relevant for qualitative evaluations of intervention programmes. In addition, some questions were based on general literature reviews and previous knowledge on the topic. The interview guide was semi-structured, and several of the questions had potential follow-up questions attached. The guide contained questions regarding what concrete actions occurred during all stages of the interventions, as well as questions regarding the line managers' own opinions, experiences and reflections about the process. Its development was an iterative process, and the finished product was a result of several meetings. The interview guide was also pilot-tested before the interviews took place, resulting in another revision. Finally, the interview guide was revised once more after the initial interviews, as some of the questions were considered to be overlapping and thus unnecessary. The complete interview guide can be found in the attachment section of the current thesis.



**Selection process.** As the purpose of the project was to investigate the role of line managers in intervention, interviewing the line managers who oversaw the last round of ARK seemed a natural choice. Having contacts in the ARK steering group provided the advantage of gaining access to a list with the contact information of all relevant line managers. The connection to the steering group possibly also gave the project increased credibility when recruiting participants. The recruitment strategy consisted of sending out initial emails containing information about the study and why they were contacted, together with a request to join. The line managers who did not respond to the emails were contacted by telephone. The contacting was done in a random order, until a satisfactory number of participants was reached. For the current thesis, seven interviews were considered sufficient for the scope of a master's thesis (Braun & Clarke, 2013), all of which were performed by the author.

**Conducting the interviews.** The 7 interviews were conducted during a time span of three weeks in October 2017, with an average of 2 interviews per week. An average interview lasted for approximately one hour. The interviews varied in length, from the shortest one being 45 minutes long, to the longest one having a duration of 1 hour and 30 minutes. All the interviews were held in the line managers' offices, usually of medium size with sufficient space. Initial memo-notes were written directly after each interview, with the purpose of documenting first impressions and contextual information. All interviews were conducted in Norwegian. From here on all quotations and references to them will be my own translations into English.

### **Ethical Considerations**

The project was approved by the Norwegian centre for research data (NSD) for corresponding with the Norwegian law for preserving personal information. In the initial email sent to the possible participant, all information of ethical interest was stated clearly. The email contained information on the purpose of the study, what it entailed to participate, confidentiality, anonymity, data storage, the right to withdraw from the study at any time, as well as contact information to everyone involved in the project. Lastly, the letter contained a clause of informed participation. The letter was in line with the recommendations from NESH (De nasjonale forskningsetiske komiteer, 2006, p. 14), and the internal guidelines for treating personal information from the Norwegian University of Science and Technology (NTNU). It was required that all participants signed the clause before initiating the interviews. To ensure confidentiality, all information that could be traced back to the participants was excluded from the transcriptions. For the same reason, they were not separated by code-names in the

written analysis. During the transcription process, the participants were re-generated as well as ordered in a randomised way to ensure anonymity. The audio recordings of the interviews were only available to the members of the researched project, and they were stored securely on encrypted, password-protected disks on external hard drives. The audio recordings were deleted upon finishing the research project. The approval from NSD and the clause of informed participation can be found in the attachment section of the current thesis.

## **Analysis**

**Thematic analysis.** Thematic analysis was chosen for analysing the data. Thematic analysis is a method for “identifying, analysing, and reporting patterns (themes) within data” (Braun & Clarke, 2006). It was chosen because it allowed flexibility in the method. As the research question was based off previous research and theory, it allowed for an analysis free of a particular theoretical or epistemological position. A thematic analysis also had the advantage of being an explorative method of analysis, without the limitations of strict rules (Braun & Clarke, 2006). This provided a good fit for exploring the experiences of the line managers.

To best fit the method to the research question, some decisions were made prior to the start of the analysis, as recommended by Braun and Clarke (2006). In summary, the thematic analysis was semantic with a theoretical approach. As only the explicit parts of what the participants communicated was considered as meaningful, the data material was used semantically. The language of the participants provided an access to make assumptions of their experiences. While their experiences were interpreted, this interpretation was aimed to stay close to the experiences of the line managers. Moreover, as the research question guided the analysis, it was considered theory-driven. Note that while the theoretical framework informed the coding and theme development, the line managers’ own perspectives were always the primary focus. Finally, it was acknowledged that conducting a thematic analysis is a reflective and iterative process (Nowell, Norris, White, & Moules, 2017), as such, the analytical process was characterised by a continual changing between literature reviews and new understandings of the data.

To ensure quality throughout the analysis, an emphasis was put on following the five steps outlined by Braun and Clarke (2006). These were “familiarisation yourself with the data”, “generating initial codes”, “searching for themes”, “reviewing themes”, and “defining

and naming themes”. The completed procedure followed in the current analysis is described below.

**Familiarisation.** The transcription process served as a familiarisation of the data material. The first analytical step of the analysis can be seen as the transcription of the interviews. An orthographic transcription was performed (Clarke, Braun, & Hayfield, 2015), with extra attention put on retaining all verbal meaning on paper. To keep the words of the participants as close to reality as possible, all the words audible to the transcriber were included in the written transcripts. Furthermore, the recordings were listened to a twice and the transcriptions were proofread, to ensure quality. In addition, to secure sufficient immersion in the written transcriptions, they were read through several times before starting the coding. Memo notes were taken for each interview, with initial analytic thoughts and ideas for later. Even though a thorough familiarisation process required a significant amount of time, it was advantageous in that it made it easier to identify what parts of the data material was relevant to the research objective.

**Generating initial coding.** The coding was done with the analytic computer software NVivo Pro 11. The coding process consisted of reading through all of the transcriptions, searching for units of meaning that could be interpreted as instances of interest to the phenomenon in question, in this case, mechanisms (Braun & Clarke, 2013). The units of meaning were then coded. The codes were derived from the explicit content found in the written transcriptions. Because the analysis was theory-driven, the codes were identified with the research question in mind. Notice that in the first phases of the analysis, the research question was broader than the current one; “through what mechanisms and their contexts do line managers influence the implementation of an organisational intervention?”. In the initial coding phase, an emphasis was put on doing the coding in an inclusive manner. An equal attention was given to all the data material, preferring to include rather than exclude. The intention was always to make the codes capture the essence of the written text, and to keep the theoretical preunderstanding minimal. As a result of that openness, around 600 codes were produced. The main reason for that high number of codes was that initial research question was broad, and as a result most units of meaning were coded. An example from the initial coding process is produced in table 1.

Table 1.

*Example of the initial coding process.*

Quote from line manager	Initial code
“If people are content with what has been done, right, then that’s an action that is kind of completed. And when it’s completed, then that implicitly entails that people are happy about it”	Employee contentment marks finished implementation

Finally, at the end of this step all codes were revised, as recommended by Braun & Clarke (2013). This was done to control for the organic and progressive nature of coding.

**Searching for themes.** In the third phase, all the codes were sorted into temporary themes. The purpose of searching for themes is to identify and report meaning from the data material (Braun & Clarke, 2013). It assumes that some patterns are psychologically or socially meaningful will recur across the dataset, often representing that more codes together become themes. The patterns found in the data material guided this phase, together with early hypotheses discovered from doing the analysis. By intentionally attempting to locate possible mechanisms through which the line managers influenced the implementation process, the codes were separated and sorted into themes that fit the research question. The temporary themes made in this phase are displayed in table 2.

Table 2

*Table displaying the temporary themes made in an early phase of the analysis.*

Research objective	Temporary themes
Mechanisms	Monitoring Delegation for participation Communicating progress Reliance on other stakeholders
Contexts	Contexts

Note that as there was a large amount of codes, the temporary themes often comprised of numerous coding clusters. This was required to sort and organise the large amount of codes

produced. In addition, at this point a considerable amount of time was spent making visual models, such as mind maps and hypothetical “code hierarchies” containing various ideas stemming from the patterns noticed in the codes. The visual models worked as tools in developing an understanding of the interconnections between the themes, as well as refining the differences between the mechanisms, the contexts, and finding their relevance to each other.

**Reviewing themes.** The next phase consisted of reviewing the themes (Braun & Clarke, 2006). In this phase both the internal consistency within the themes was determined, as well as the external heterogeneity between them. A comparison between the developed temporary themes and their coherence to the written transcriptions was also done at this stage, in line with Braun and Clarke (2006). This was done to make sure that the themes fit with the data set. This was considered particularly important as the literature review could bias the interpretation of data in the analysis. The themes were also checked up against each other, and as a consequence the temporary themes proposed previously were redefined. In addition, a considerable amount of codes was also discarded for no longer being relevant at this point.

In reviewing the patterns, it became clear that the themes all had behavioural components in common. This assumption was checked by reviewing the original transcriptions. Together, the experiences of the line managers were often accounts of their actions, and their thoughts and reflections related to those actions. The revision of the codes and the transcriptions ended in the understanding that the line managers behaviours were driven by the objective of making progress in the implementation. This resulted in specifying the research question into “through what behavioural mechanisms and their contexts do line managers influence the implementation of an organisational intervention?”. The specified research question was also in line with literature on the subject, as reflected in the theoretical and empirical background of the current thesis.

**Defining and naming themes.** The last phase of the analysis included going through all the themes, giving them definitions and setting their boundaries. To have a finished definition of the themes, it is recommended that it should be possible to “describe the scope and content of each theme in a couple of sentences” (Braun & Clarke, 2006, p. 92). While also aiding to define the main three final themes, this refining process made it possible to see some new commonalities between them. Seeing the differences and similarities in the themes made their separations clearer. The last phase of analysis entailed writing the finished results, which are presented below.

## Results

In the following results section, the thematic analysis will be presented. The purpose of the thematic analysis was to explore the line managers' behaviour in implementation as behavioural mechanisms. In addition, the contexts related to the behaviours were explored. The final themes are based off the line managers' own experiences of an interventions process, and are interpretative accounts of those perspectives (Howitt, 2010). The main contributions of the thematic analysis will be presented first. The analysis ended in three main themes, named behavioural mechanisms. Next, the five contexts will be presented. Finally, in the end of the results section, the proposal that line managers' behaviour could be the driving force of the implementation will be presented.

First, the behavioural mechanisms will be presented. The final thematic analysis consisted of three main themes. They have been understood as behavioural mechanisms, and were named *cooperation*, *follow-up*, and *communication of progress*, all of which are behaviours that influence the implementation process. Each theme represents what is considered prominent aspects of the line managers' behaviour in implementation. The final themes and subthemes are summarised in table 3.

Table 3

*Summary of the behavioural mechanisms and the subthemes*

Behavioural mechanisms	Subthemes
Cooperation	Delegating for participation
	Supporting
	Creating ownership
Follow-up	Evaluating status
	Adjusting to context
	Keeping focus
Communication of progress	Including through communication
	Showing the change

Each behavioural mechanism consists of several subthemes. These subthemes represent some uniqueness within the theme, further describing different aspects of the main behaviour. Together, the three themes account for what behaviours the line managers have in the implementation of an intervention, as well as their motivations and thoughts about those behaviours. As the research question has taken inspiration from realist evaluation theory, the behaviours have been proposed to be behavioural mechanisms. The behavioural mechanisms and their subthemes will be elaborated below.

### **Cooperation**

A central part of the line managers' behaviours in the implementation phase were various aspects of cooperation. The line managers cooperated with central stakeholders of the intervention and employees in order to make implementation successful. In total, the cooperation behaviours were characterised by several aspects. Perhaps most prominently, the line managers spent time on delegation activities to relieve themselves of tasks and responsibilities. Furthermore, line managers engaged in supportive and support-seeking behaviour and worked to create ownership for the employees. Some of the reasoning and reactions of the line managers were apparent in how they were highly influenced by other stakeholders. A central tenet of this theme was that the stakeholders of the intervention were mutually reliant on each other, especially apparent in the line managers supportive and support-seeking behaviour. The cooperation theme consisted of three subthemes; *delegating for participation*, *supporting*, and *creating ownership*. Together, the cooperation behaviour of the line managers may be viewed as a behavioural mechanism. The way the cooperative actions of the line manager influenced the progress and outcome of the implementation is elaborated below.

**Delegating for participation.** An important part of the line managers' cooperation was their delegation activities. Implementation involved several tasks and responsibilities. While the line managers emphasised that they had the main responsibility of implementing the action plans, they used delegation as a tool to get those activities done. As a result, the line managers made the implementation a collective effort to relieve themselves of some workload. A consequence of the necessity of delegation seemed to be that the line managers were left somewhat dependent on others in order to complete the implementation. In sum,

many of the line managers viewed their own roles as delegators of tasks and responsibilities. Two of the line managers expressed it like this;

*“I mean, I have the final responsibility to complete it. But that doesn’t mean that I have to be the one to complete. And that’s obvious... Cause I can’t do all of it by myself, and that’s why a kind of delegation gets done”.*

*“To get something done, someone needs to take the responsibility for it. And then you have to distribute the responsibility, who does what”.*

The delegation activities they described were characterised by a distribution of responsibilities dependent on who was most suited for the task. As the line managers had the final say, they had the task of choosing “who does what”. Moreover, the line managers reported that delegation of responsibility was a way to strategize before implementation. They spent time finding the stakeholder who best “fit” the implementation each action plan, with the objective of ensuring their success.

In addition, the reports on delegation behaviour were interpreted as a way to actively involve other stakeholders in implementation. It could be viewed as a behaviour to ensure some degree of participation. This participation usually involved just a few, selected stakeholders, as the action plans usually required few participants. The stakeholders involved were typically a leader-group (for instance unofficial first-line managers), external stakeholders (for instance contractors building a new kitchen), or a safety officer. While the participation of first-line employees was high in the previous phases of the intervention, employees usually did not participate to a high degree in implementation. A prominent reason for this was that the action plans made required little participation. Still, in some cases, the implementation process reached the employees, like in the case below;

*“Because then when the academic groups were implementing themselves. It could be for example that they started a series of seminars. And someone started an initiative where the post-doctorates themselves arranged a series of seminars, and invited, there was a small budget involved, and they invited speakers. One of those spaces on the intranet was also started for the PhDs to use for social stuff. So, those kinds of initiatives”.*

While the degree of participation seemed to depend on the content of the action plans, the line managers also had a say in the level of participation in implementation. Specifically, they had some decisive power in how much they chose to delegate. The line manager from the



quote above chose to let the employees take charge of the implementation of the action plans themselves. Others, like the line manager behind the quote below, chose to implement the task in cooperation with few, selected stakeholders. In total, their behaviour could be seen as delegating to ensure different levels of participation.

*“... It ended up being me and the ones from the administration. I mean, to get things up on the screens for example, that’s something the administration has to do”.*

**Supporting.** The stakeholders involved in the implementation could be viewed as having a mutual reliance on each other. It seemed like while the line managers relied on other stakeholders to complete the tasks they were delegated, those stakeholders also relied on the line managers for support in following through. The line managers provided them with support through offering to help with some of the activities, as well as giving advice and ideas, if necessary. The line managers seemed to understand their role as providers of expertise and knowledge. Note that an important reason behind their “superior” expertise is that the line managers were the only ones who received training, as well as having leadership experience. According to some line managers, their own supportive behaviour to the employees was important for the implementation to be successful;

*“Yes, if I were to consider something that I would do differently, if I were to this do one more time, then I would say that it would be to have even closer cooperation with those academic group leaders that didn’t manage to initiate a good process in their group”.*

On the other hand, the line managers also relied on support from others. They reported often finding themselves depending on other stakeholders involved in the intervention, and viewed their help, expertise or closer relationships as solutions to the problems facing them in implementation. When interpreting the interviews, the importance of this interdependency to manage a successful implementation became apparent. The availability of support from others seemed to be important for the implementation outcome. One line manager described having to stand alone in the implementation process, lacking support from senior management, while facing resistance from the employees. Another characteristic of the mutual reliance could be the degree of which line managers actively seek help from other.

*“And then I sought help centrally, and asked for advice: how do we handle a case like this? I didn’t really receive any... or. I actually wanted to tell them that I shouldn’t be*

*that person, but that it should have been someone centrally, or someone else that came and helped out with that bit right there. But of course, they didn't have the capacity".*

While there was a high presence of senior management support reported in the previous stages of the intervention, the line managers expressed a lack of support and presence from senior management in the implementation phase. Unlike the case above, when situations were stable most of the managers viewed the absence as only problematic in theory, and it did not present a serious obstacle.

*"But often, it's more like, you receive some foils, get a direction, and then they wish you good luck... And then after that there is no more emails from the systems above us. And then it's on us".*

The importance of support from others was especially prevalent when a situation in implementation became critical, and support-seeking seem to be prevalent in those cases. Then, the lack of support was reported to be cause for failure of the implementation. To summarise, the line managers actively cooperated with other stakeholders because they in various ways were mutually dependent on each other. This cooperation was expressed in both supportive and support-seeking behaviour.

**Creating ownership.** The cooperation behaviour of the line managers was interpreted as being closely related to their belief that the employees were the owners of their work environment. While they had the responsibility for implementing the action plans, the real changemakers were, in their view, the employees. The line managers viewed it as part of their responsibility to facilitate in creating that ownership. They were motivated by the employees getting better working conditions as a result of that work. An example was how this was expressed by the line manager in the quote below;

*"And it boils down to everyone contributing to a good work environment. So that it doesn't become like, you point at management or someone else, in order to get a better environment. You have to contribute yourself as well, right? So people need to be made responsible".*

While they viewed themselves as being in charge of the progress of the implementation, the line managers emphasised that they were not the only ones that needed to make an effort. They viewed it as necessary that the employees were active and responsible for the change, and that the line managers' role was to give them that responsibility. This was

interpreted to that the line managers worked towards giving their employees more autonomy in manoeuvring their own work environment. They described this in the context to the employees being academics, professionals characterised by a high need for having few rules and limitations in the tasks they perform. The line managers reported that they found motivation in creating employee ownership of the work environment. Some of them described that their personal motivation for the intervention was to create change in everyone's work environment, in order to see improvements in their employees' work lives. For example;

*“Because if we have an ambition to get a better work environment, and we do, I think we all do. That's an area where one can be good - but you will never - can always be better. And that's pretty important to us. We spend such a big part of our lives at work that if we don't have well-being at work, we don't have well-being in our lives”.*

The line managers saw themselves as standing beside their employees, not hierarchically above. Altogether, the line managers' motivation to enhance employee participation seemed to enforce their cooperation behaviours in implementation. Their work to create employee ownership illustrates that. In total, the reasoning and reactions of the line managers might be highly influenced by other stakeholders, motivating their behaviour and ensuring progress.

### **Follow-up**

The next behavioural mechanism is the follow-up activities of the line managers. While a lot of the time the tasks of implementing specific action plans was delegated, a vital role of the line managers was their responsibility of the overall progress. The line managers contributed to the success of the intervention by managing the activities of others. As such, an important aspect of the line managers' behaviour in implementation was follow-up. The follow-up activities consisted of using feedback loops to continually evaluate the status of the action plans and planning the next move. By assessing the change of context in the work environment of the departments, adjustment behaviour became important in order to keep the intervention relevant. Moreover, the line managers used follow-up activities as a way to keep focus and perceived relevance of the intervention. The most prevalent reasonings and reactions that influenced the expression of the line managers' follow-up behaviour is described below. In total, the behavioural mechanism of follow-up consists of three subthemes, *evaluating status*, *adjusting for context*, and *keeping focus*, all of which will be described in detail below.

**Evaluating status.** The follow-up activities of the line managers can be seen as a way to ensure the progress of the implementation. According to them, they organised follow-up activities in order to ensure that the department was on schedule in implementation. They ensured progress by keeping an overview and monitoring all the delegated activities, as well as making arrangements so that other stakeholders were able to come through with their implementation responsibilities. The line manager in the quotes below described this as assessing the needs of the department.

*“Because I’m the manager, I think it’s important that I catch what the situation is, and find what the further needs are. And make sure that when we make budgets and finance things, that these things are prioritised over other things”.*

While the line managers themselves were in charge of planning the structural organisation of the implementation, an important aspect of follow-up was that it occurred in cooperation with other stakeholders. The role of the line manager was not an authoritative one. They described that the decisions to ensure progress were made in cooperation with others, usually by organising meetings to check the status on each action plans. There, they discussed each of them with relevant stakeholders. Based on the agreements made, they planned the next step of the process. The line managers described this as organising feedback-loops, a process which can be viewed as a continual evaluation to ensure follow-up. Altogether, the line managers spent time organising feedback-loops to evaluate status, as illustrated by quotes from two managers below;

*“And also we had feedback-loops. That we had, with a certain frequency we had feedback at the leader meetings, and where they are in the process. Where do they stand, what have they implemented? And so on... And we took rounds on that, so that we could sum up all of this”.*

*“And this is a topic of discussion, and an arena for follow-up when we have our leader-group meetings, right? What have we done since last time, how did that work? Where do we have to push a bit further? What is it? So it’s kind of like, that’s the way we keep a bit of an overview of what’s going on, because I have group leaders that are sort of listening posts in their own groups, out there where everything is going on”.*

The line managers’ activities show that while the responsibility to do the specific tasks to implement the action plans were delegated, the total making of progress remained their own task. They emphasised personally following-up action plans as a success factor of the

intervention, highlighting the importance of such activities. Moreover, the line managers did not only listen to central stakeholders, but also to some degree the employees. The following quote is a good example of the line managers' communication with their employees in order to evaluate the status of implementation.

*“Keep track of them, know that they're there, repeat that they're there, talk about it over and over again, say something about status when we have general meetings. “we agreed on the following, we have done this and this”. And then, to keep account of how things develop. That's definitely my role of the implementation side of things”.*

Thus, the follow-up activities were also characterised by cooperating and listening to feedback from all employees. The motivation behind this could be seen as related to creating ownership. Note that communicating with all the employees seemed to be important only to some of the line managers. Nonetheless, the focus on ensuring feedback from the employees highlight the listening role of the line managers when following-up. Finally, some of the line managers expressed that follow-up activities were not necessary, and they expressed that the content of the action plans did not require that level of attention.

*“But I can't remember that there was anything that required different kinds of follow-up, other than being able to sign it off when we have done it, if you know what I mean. So, there wasn't any stepwise processes”.*

It seemed like the degree of which the line managers focused on evaluating their follow-up strategies depended on the nature of the action plans. In sum, the line managers evaluated the status of implementation to ensure its progress. While arranging the structural conditions for the follow-up to take place, like meetings, the follow-up activities occurred in organising feedback-loops and evaluating status. The feedback from other stakeholders were important for the evaluation to take place. Not all the line managers participated in evaluating the status, but as the behaviour is highlighted as vital to ensure progress, it seemed to constitute a vital part of implementation.

**Adjusting for context.** The line managers described how they continuously adjusted the action plans depending on the context in the surrounds of the departments. They can be seen as actively adjusting the strategies of the implementation during the whole process. Because all actions plans are of a different nature, the follow-up activities often needed to be tailored to each specific action plan. One line managers said;

*“we have to consider all the cases separately, and then also consider how its suitable to follow-up”.*

The implementation strategies used by the line managers often depended on the nature of the action plans. The plan changed when the relevant contexts changed, making the decision-process continual and dynamic. One line manager especially helped highlighting this:

*“Not everything is just as easy to get done, like for example when it was suggested that there should be a norm for number of master students getting advice per academic employee. And then you could say “okay, there shouldn’t be more than for example five for each employee”. But what’s happened the last two years is that we have doubled the number of master students in their fifth year that has received tuition and advising. And even more for next year, seeing the course is so popular. I mean, there is little help in setting a numbered norm when the number of students explode. And they need advisors, so yeah. So, then the action plan becomes that we need to hire more scientific employees”.*

The line manager took into consideration circumstances and events outside the scope of the intervention that affected the action plans. As the context always changed, adjusting for context was done throughout the whole implementation process. Thus, the line managers showed flexibility by always re-evaluating the action plans. In order for the intervention to stay relevant, they often reported continually adjusted their implementation strategies accordingly. The outcomes of this varied, but in this case, the line manager decided that the action plan was no longer relevant and thus stopped its implementation.

*“But the development of number of students, that’s outside of our control. So, on that point, we have to be pragmatic, right? Because if one sets a norm, and one can’t stick to that norm, it becomes meaningless”.*

It seemed like the adjustment was used as a method for the line managers to make sure the implementation stayed relevant, and the choices they made were considered pragmatically. Notice that the always-changing context sometimes dictated how the adjustments were made. The line manager above acknowledged that they had little control of some circumstances.

**Keeping focus.** Some line managers put great efforts in implementation while others did not, this often depended on the action plans. Another important aspect of the follow-up activities was how the line managers worked to keep the interventions relevant. The implementation process was not a sudden one, it often involved a long timeframe. There was a consensus among them that they spent great efforts trying to keep focus on the implementation process throughout its time span. The line managers expressed difficulties in keeping the enthusiasm and focus on the intervention activities all the way to the finishing line.

*“And I think that generally we’re pretty good and enthusiastic until the development of initiatives, and then I’m very uncertain of, now I think I’m talking about it in general, I’m a little more uncertain if we manage to come through until the very end”.*

In implementation, the line managers expressed that the enthusiasm was lower than in other parts of the intervention. For that reason, keeping the engagement of all the stakeholders involved was a central part of the follow-up. An important context to the keeping of focus are the competing demands of other tasks in the daily activities, in a sense fighting for the attention of the stakeholders. The line managers viewed it as part of their role to be enthusiastic about the intervention. Some of the follow-up activities entailed reminding other stakeholders of the interventions’ continued relevance.

*“I mean, as a leader it’s easy to assume that now that we have a plan, and have delegated the task, then the tasks get done. But then we know that daily life takes over, and that stuff like that easily becomes a paper tiger that’s not being balanced up against what happens from day to day”.*

A paper tiger is a task that has lost its meaning and relevance. The line manager in the example above described the risk of the intervention content becoming a burden if there was no engagement in working on it. In an environment without enthusiasm to work towards change, the action plans potential loss of relevance was seen as a risk. The line managers worked to prevent this from happening by engaging in follow-up behaviour. The quotes below illustrate how follow-up activities were used to decrease the lack of focus on the implementation process;

*“First and foremost, at academic group level, it was to keep the issues hot. To be on those feedback loops periodically, and especially to catch those academic leaders who didn’t have good enough speed in the process”.*

*“And I would have wanted, especially in the beginning, closer feedback loops. Because when the initiatives were developed, and we had a good plan, then I think that probably too much time passed by before I started to call for “where is it now?””.*

The latter quote is from one line manager’s retrospective evaluation of the intervention, expressing that having closer feedback-loops would have been a solution for some of the problems they faced. In other words, closer feedback-loops were a way for the line managers to increase the exposure to the intervention for all stakeholders involved, and to keep the enthusiasm high. The feedback-loop meetings were important channels to keep that focus.

### **Communication of Progress**

The last behavioural mechanism is the line managers’ communication of progress to their employees. This behaviour entailed involving the employees in the implementation process and helping them understand the progress. Through communication of progress the line managers aimed at achieving a collective change that all employees stood by, ensuring success of the implementation. Some of the most important motivations and reasonings behind this behaviour was to share the implementation process with the employees, and to help shaping the employees’ understanding of the implementation. From the line managers’ perspective, the employees’ perceptions of the implementation were vital for intervention success. The behavioural mechanism of communication of progress consisted of two subthemes, *including through communication* and *showing the change*.

**Including through communication.** An important reason for the line managers to put emphasis on the communication of progress was that the implementation tasks were often carried out by a few, selected people. To involve all relevant stakeholders in implementation, it was necessary for the line managers to convey its activities to all the employees. The line managers reported that their initial communication usually involved showing the employees that the implementation process had started, and that they should prepare themselves for change. The conveying of such information seemed to be a way for the line managers to help employees gain access to the implementation process. One line manager used a simple form of communication to achieve this;



*“But there were some concrete things we were going to do as a department, and that we as leaders of said department communicated. We posted it on the intranet and said, “this is what we’re going to do””.*

The communication of activities involved conveying what stage each action plan was at, and how the process was going. There were various communication channels through which the information-sharing occurred, most prominently general meetings for the whole department. Meetings with smaller employee groups were also common, as well as written notices through the intranet or email, like in the example above. While some action plans required a large amount of communication to employees to make sure the change was perceived, some line managers described how other action plans were self-explanatory and that a close level of attention was unnecessary. As such, there seemed to be a degree of adjustment in the choice of communication channels, depending on which best served to get the message out. For instance;

*“And then it is everything from that we have to talk about this in a meeting, or that this is a thing we need to push through email”.*

Moreover, the line managers often saw their choice of communication strategy as important for the implementation outcome. This became apparent through their descriptions of putting efforts in choosing the right approach to reach the employees. For example, one line manager chose to visualise their strategy so that the employees could understand and agree with the choices that had been done on behalf of their work environment;

*“And when we operationalise our strategy, which is really important to me, we do it as a way of showing everyone that this is the strategy we went for, for all the employees and for ourselves. And saying that this is our strategy, and we have done the following...”.*

Another way the line managers included the employees was through conveying what had, and what had not been working;

*“We have had general meetings and other meetings in the aftermath of this, and sometimes then we had those points up for discussion. And then people see that this is realistic, this is easy to implement, and that other thing is not that easy to implement”.*

By communicating the specific details of the progress through meetings, the line managers expressed wanting the employees to become familiar to the implementation

process. Some line managers emphasised the importance of communicating the reasoning behind their choices. When they included the rationalisation of the decisions that were made in their communication, it seemed like their goal was to get the employees to join in on that reasoning. It can be seen as a way to create employee ownership of the implementation process. Put differently, they both worked towards enabling the employees to join in on making the decisions. In addition, some of the line managers also described that there was a two-way communication between them and their employees, a characteristic that was also apparent in the example above. While the line managers conveyed the progress, they also often listened to feedback from the employees. Some put emphasis on letting the employees decide how implementation should happen;

*“But I feel that it is about being open, that is to not put any guidance in relation to what the main focus of the follow-up will be, I think that’s important. That you really allow people to come up with everything, it being positive or negative”.*

Thus, a characteristic of including through communication was the degree of which they gave the employees the opportunity to give feedback on their view of the progress. For instance, the employees could convey that one action plan was more important to them than another. The importance of employee feedback could be reflected in the fact that the action plans were developed by the employees. In sum, the line managers often found it important for the employees to be involved in the progress and included them by communication.

**Showing the change.** Another aspect of the communication of progress was that the line managers viewed it as important that all employees had the right understanding of the implementation. It seemed like the line managers got motivation from showing the employees the progression of the implementation process, which can be seen through how the line managers spent time communicating the change process to their employees. An example comes from one line manager who emphasised the importance of showing the employees that the intervention was part of the bigger picture. The line manager communicated how the improvements they were making in the intervention affected their daily work lives.

*“One things is that I have tried to have the focus on having a strategy, and that we have an action plan below that strategy. And what was important for me was connection those two things, ARK and the action plans below the strategy. And communicate that they weren’t separate things. To have a good work environment is a part in reaching our strategies”.*

By explaining and repeating the purpose of the intervention in the implementation, it can be interpreted as if the line manager was shaping the employees' perceptions of the significance of the change they were going through. In other words, the line managers can be seen as shaping the employees' perceptions of the importance of the intervention. Along similar lines, they also highlighted the importance of showing the employees the consequences of the implementation.

*“So you have to pull them all the way through, not just say that we made some plans, or that we had a meeting like this or that, and then came up with a few action plans. If you don't say what the consequences of those action plans were, in a way you didn't actually deliver”.*

The line managers expressed that they considered the implementation as incomplete until everything was communicated to the employees. It seemed that when they communicated the results of the implementation to their employees, it was to give the employees a closer shared understanding of the change occurring. In line with that, they implicitly stated that the progress and completion of the implementation depended on the employees having perceived the change. The line managers can be said to have used communication as a tool for the employees to understand the progress of the implementation. They were shaping the perceptions of the employees with communication. Related to this, the line managers expressed that their motivation for communicating the progress was to ensure that the employees understood the results of their common efforts.

*“I think the most important way to highlight it is to show that what they respond actually had an effect... If nothing happens to it afterwards, then we undermine the whole intervention. So what's important is that we afterwards now can say that the following has been dealt with”.*

The line manager in the quote above emphasised that without communicating the changes made, the employees would not have knowledge of the effects of the interventions, thus undermining its purpose. Furthermore, some line managers viewed the effects of the intervention as depending on the employees' perception of it.

*“If people are content with what has been done, right, then that's an action that is kind of completed. And when it's completed, then that implicitly entails that people are happy about it”.*

If the employees had no knowledge of it, in a way it had not happened. This is a natural consequence of the line managers' emphasis on that the owner of the work environment were the employees themselves. In sum, the analysis indicated that the line managers viewed it as their job to communicate the progress of the changes made. They shaped the employees' perceptions of the intervention by communicating, thus affecting how they viewed the implementation and the consequences of it. This seemed important for real progress.

### **Contexts**

The next result of the thematic analysis are several themes that are viewed as contexts to the behavioural mechanisms. Five contexts were identified, and they were named *competing demands, degree of line manager expertise, degree of presence of other stakeholders, line manager perceptions of the intervention* and *employee perceptions of the intervention*. These contexts were picked out on the basis of seeming especially relevant to the behavioural mechanisms. Their connection to the behavioural mechanisms will be elaborated. Note that they are not a complete list of all relevant contexts.

**Competing demands.** The daily operations; the tasks, responsibilities and activities that happens at a work place, also needed the attention of the employees and the line managers, in addition to the intervention. The intervention did not happen in a vacuum, and as time passed after the implementation process starts, competing demands became more apparent. The competing demands were especially likely to interfere with the intervention activities in implementation, as implementing the action plans often required time. Especially relevant is the effect the competing demands had on the line managers' follow-up activities, and the line managers' effort to keep focus. It could be understood as a hindering context that affected the line managers' resources to perform their follow-up activities. For example;

*"It was good right after, and now we should give it more attention again. It gets a lot of attention straight afterwards, and then there are so many other things".*

Part of the competing demands context was that the line managers described having to constantly prioritise their resources to make time for the intervention. While they always had time, there were always one too many tasks that required that time;

*"But it's impossible for me to have time available, to put it like that. Because I have the employees I have, and I have a lot. And resources, those are, resources are time".*

As the line manager above put it; time is resources. In able to get things done, they needed to prioritise. The time frame of the implementation made it difficult to keep it relevant and competing demands could get prioritisation. For instance, the amount of resources the line managers had to prioritise implementation could affect the number of tasks they had to delegate. A consequence of this was described by them as a possible loss of control of where the intervention is headed.

**Degree of line manager expertise.** The interviews indicated that very few of the line managers at the university had specific education in dealing with work environment development. They reported receiving training before doing the intervention, but still often described uncertainty in the intervention process, especially in implementation. In addition, many line managers described how the implementation turned out to be more difficult than what they imagined in advance. This could reflect that some of the line managers had insufficient expertise in implementation. It seemed that they often lacked insight in the research behind the intervention, and knowledge on how the interventions was intended to work. For instance;

*“Most of us department leaders are primarily academics. I mean, we’re pretty good within one field. But we don’t have any special competency in leadership. At least very few of us have any form of formal education in leadership, not counting that leadership training that the university provided, which is fair enough. So having proper support systems on both specific cases, but also in general tasks regarding the work environment”.*

In order to succeed, the line managers described the necessity of having an effective support system. They had a dependency of others in able to perform well, for instance by building on their experience and learning from others. The degree of line managers’ expertise is especially relevant to the cooperation mechanism, with support-seeking behaviour in managing the implementation. Furthermore, this context seemed to also be related to the communication of progress mechanism, and whether the line managers had the competency to communicate the implementation process. As line managers differ in skills, having a higher degree of competencies might have affected the communication behaviour, thus affecting the outcome.

**Degree of presence of other stakeholders.** The context of the degree of presence of other stakeholders was closely related to the behavioural mechanism of cooperation. The

stakeholders especially relevant were those that had connection to the intervention. Stakeholders that were mentioned as important by the line managers were their unofficial first-line managers, administration, HR-personnel, the safety officers, and the employees. An example of the importance of this context comes from the absence of senior management. The line managers agreed that the presence of support from senior management was important for the implementation and reported that they in most cases were absent. This could have consequences for the outcome of the implementation, like in the example below, where the line manager was left standing alone.

*“But they at least didn’t have the resources to be part of the process. And they didn’t give me any other advice than to just run it like I had planned it myself... Yes, I did it on my own. I didn’t manage to get anyone to help me”.*

It is possible that the low presence of senior management inhibited the support-seeking behaviour in the cooperation mechanism, possibly affecting the outcome of the implementation. It seemed like the influence of the context was especially apparent when the situation was critical. It is likely that the degree of presence from the other stakeholders had opposite effects.

**Line manager perception of the intervention.** How the line managers viewed the intervention seemed to affect their behaviour in the implementation process. The line managers all had numerous different views on how the intervention worked and whether it had effects. An example is the line manager in the quote below, who, along with others, expressed their certainty that some parts of the work environment were impossible to change.

*“And many of the people we are hiring here will always have high scores regarding lack of time. That’s how it is. They are busy people”.*

It is likely that having a predisposition of not believing an intervention had effects influenced how the line managers acted in the implementation. Other line managers, in turn, had strong beliefs that the intervention could lead to actual change. Another good example on how the line managers’ perceptions affected their implementation activities was from their preparation of the intervention. Most of the line managers’ main motivation was to create change, and they viewed this as the purpose of the intervention. Many of them had personal beliefs that the intervention could lead to positive change. Furthermore, some of the perceptions the line managers reported could also be thought to affect the implementation

negatively. For instance, many of them had somewhat negative perceptions of the intervention content, especially regarding the survey.

*“I mean, when the survey was presented to us, we felt that it was something that was actually developed for other types of operations than a university. Many of us felt that a lot of the questions that were raised didn’t really fit”.*

In total, it is likely that this context to some degree influenced all the behavioural mechanisms. The communication of progress might have been particularly affected. Whether the line managers had a positive, neutral or negative perception of the implementation progress probably affected their communication of it.

**Employee perception of the intervention.** The employees’ perceptions of the intervention might also have affected the implementation process and the behaviours of the line managers. As the employee group consisted of many individuals, it is likely that there were different perceptions within the group. The line managers might have had to adjust their behaviours to facilitate that. One line manager exemplified this by describing the difficulty in understanding the work environment.

*“But the work environment is not a very precise term. For instance, in regards to “respect” and all that, it depends a bit on who. I mean, someone can express themselves very negatively about something in a meeting, and someone else might think that it’s not respectful. But from my point of view it’s not about respect at all, but it’s about a topic you’re passionate about, that you want to improve... It could be that some would say that we understand these terms differently”.*

The line managers understood it as the employees had different understandings of the same aspects of the work environment. Thus, the line managers needed to consider that the employees had different perceptions of the same input. This context was especially relevant to the communication of progress, where it affected how the line managers chose their communication strategy. For instance;

*“Yes, I think that when the plan was developed, we should at the same time have had a plan that everyone was familiar with, that we developed together. “When are we having feedback in the leader groups?” right?”.*

In retrospect, the line manager from the example above wishes to have increased the employees’ exposure to the implementation, so that they could have had a more positive

perception. The employees' perception can be thought to closely interact with both cooperation and communication of progress behaviour.

Another aspect of this context was the employees' negative perceptions of the intervention, in the form of employee resistance. According to the line managers, if the employees had negative perceptions, there was a risk of them blocking the implementation process. Some line managers reported employee critique of the intervention in several of the phases and described their employees as critical by nature. As one line manager put it;

*"Yes, well, I work in an environment where people by definition are critical".*

The line managers expressed that a prominent explanation for the negative perceptions of the employees was that some employee groups did not believe that the action plans presented good solutions. The negative perceptions of the employees can be thought to affect the line managers' behaviours in implementation in spending their energy on convincing the employees otherwise.

### **The Line Managers' Behaviour Driving the Implementation**

The results of the analysis indicate that each main theme can be understood as mechanisms that drive the implementation towards completion. The constant aim to progress and finish the implementation was apparent in all the behaviours. Summarised, the line managers' behaviours can be viewed as a way for them to ensure progress, driving the implementation process. One line manager exemplified this explicitly;

*"I guess I became a driving force of the process. So that it wasn't my role to say, "we're doing this, we're not doing this", because it was actually a wish from the employees to do this and this. And then my role is to be able to implement it on behalf of the employees".*



## Discussion

The purpose of this study was to contribute to identify and explore the mechanisms that influence the implementation of organisational health interventions, specifically how the behaviours of line managers can affect its outcomes. A thematic analysis was performed and will be summarised below.

### Summary of the Analysis

A thematic analysis ended in identifying three separate behavioural mechanisms, or themes; cooperation, follow-up and communication of progress. Together, the line managers' motivation behind their behaviour was to drive progress of the intervention forward. In addition, several contexts were identified to be especially relevant to the behavioural mechanisms, namely competing demands, degree of line manager expertise, degree of presence from other stakeholders, line manager perceptions of the intervention, and employee perception of the intervention. The behavioural mechanisms will be summarised in more detail in the next three paragraphs;

**Cooperation.** The behavioural mechanism of cooperation explains how the line managers through cooperation with other stakeholders' influence implementation outcomes. It broadens the understanding of delegation by exploring the line managers reasoning behind sharing responsibility, which is far more than lacking resources to do it on their own. For instance, it is important for the line managers to involve employees in the processes, creating ownership and giving them autonomy in taking charge of their own work environment. Finally, the cooperation between stakeholders in implementation seems to occur because they are reliant on each other. The line managers are the drivers of implementation, but a nuance to it is their need for other stakeholders to manage it, engaging them in support-seeking behaviours. The presence of supportive behaviour of both the senior management and all parties involved seem instrumental for implementation outcomes.

**Follow-up.** The line managers evaluate and keep up the progress through follow-up behaviour. The follow-up behaviour has a structural side, where the line managers oversees the systems and structures around the intervention, in order for the change-makers to conduct their responsibilities and tasks. In doing this, the line managers are evaluating status and organising feedback-loops. Adjusting to the circumstances ensures the flexibility of this

behaviour. Finally, keeping the employees' focus throughout the whole implementation process is an essential part of follow-up. In sum, this behaviour is important for the progress of implementation by ensuring that they stay on schedule, are relevant and keep the enthusiasm of the stakeholders high.

**Communication of progress.** The line managers' communication of progress is the link between the line managers and the employees, which happens by including the employees in the progress of the implementation by conveying what happens at what time. The communication of progress is not only for information sharing, it also involves including the employees by shaping their perception. The line managers can be seen as trying to give the employees an optimal understanding of the implementation. In that sense, the line managers' communication moves the intervention forwards by getting everyone on board. For them, convincing the employees of the results is often a way of achieving results.

**Behavioural mechanisms.** Finally, an elaboration of how the findings can be viewed as behavioural mechanisms is in order. In the analysis, the three components of the line managers' behaviour can be viewed as overlapping to some extent. The three behaviours together can be viewed as the driving of progress, the total behaviour characterised by being interactive and adjustive. It can be argued that these overlapping elements of behaviour constitutes the basic workings of the behavioural mechanisms. Mechanisms are the components explaining how intervention works (Astbury & Leeuw, 2010), and the line managers' total behaviour of driving the progress can be viewed as exactly that. Altogether, the similarities can be seen as strengthening the concept of behavioural mechanisms, as well as further supporting that the line managers drive implementation through their behaviour.

### **Structure of the Following Section**

The analysis indicate that the behaviour of line managers drives the implementation process. The following section discusses the contribution of the analysis to intervention theory. According to realist evaluators (Greenhalgh et al., 2015), the purpose of finding associations and theorise outcomes is to explore and explain how and why these associations occur. Note that all the implications made are based off of the line managers own understanding of the implementation process, as well as within the contexts of the specific intervention. This must be taken into consideration when considering the contributions of the current thesis. In the following section, the behavioural mechanisms and their contexts will be elaborated and discussed in relation to previous empirical evidence and theory. The section

will be divided into several parts. First, based on the analysis, the line managers' behaviour will be proposed as a driving force of the implementation. Second, each behavioural mechanism and context will be discussed in relation to theory and empirical findings. Following that, applying realist theory allows to explore the interactions between the contexts and the mechanisms, and make assumptions of their importance for the outcome of implementations. Three CMO-configurations will be proposed as a result of that discussion. Finally, theoretical implications, practical implications and implications for further research will be discussed, as well as the methodical considerations.

### **The Line Managers' Behaviour Driving the Implementation**

It is proposed that the line managers' behaviour in implementation is a driving force of the implementation, affecting its outcomes. The proposal is based on the analysis, in addition to be supported by previous empirical evidence. The line managers seem to be key stakeholders for the success of the implementation. While Nielsen (2017) also proposed the behaviours of line managers as driving interventions, an elaboration of what that behaviour entails is missing, except for some focus on communication. The indications from the analysis contribute by further elaborating how the behaviours influence implementations, by separating them into three. At the same time, an understanding of their commonalities may strengthen the assumption that the behaviour is driving the change.

Investigating the three behavioural mechanisms separately, a commonality between them is that the line managers work towards ensuring the progress of the intervention. Progress occurred through adjustment and evaluating status activity in follow-up. The line managers' cooperative behaviour ensures progress by mutual supportive behaviour between stakeholders and the sharing of responsibilities. Finally, the line managers' communication of progress also ensures progress by visualising and shaping the employees understanding of the implementation. Altogether, the line managers ensured implementation through cooperation, follow-up and communication, encouraging the progress of the intervention. Moreover, the behaviours share some commonalities in that they involve complex interactions and a degree of involvement of numerous stakeholders. They all also involve some degree of adjustment behaviour, indicating that the line managers constantly evaluate the surroundings to secure intervention success.

In total, it seems that the line managers are key stakeholders in making sure that the implementation occurs. This is evident through investigating their behaviour. Based on this, it

is proposed that the line managers' behaviour is a mechanism of change in organisational health interventions, as the implementation outcomes seem dependent on that behaviour. These findings support the notion that line managers can make or break an intervention (Nielsen, 2017); the line managers' behaviour in implementation seems to be vital to its success. Importantly, the findings indicate that the line managers' behaviours are mechanisms in implementation. This is in line with others' views of managerial behaviours as mechanisms (Biron & Karanika-Murray, 2014; Higgins et al., 2012), and elaborate how line managers make change occur in implementations (Lundmark et al., 2017; Nielsen, 2017). Adding from that, it is likely that the line managers' behaviour in implementation is instrumental in the outcomes of interventions.

Finally, another important finding is that there seems to be an interaction between content and process. The analysis indicates that the degree of implementation behaviours of the line managers is dependent on the content of the action plans. Put differently, the behavioural mechanisms are only apparent when the content of the action plans allow for it. An example from the analysis is that delegation in cooperation only occurs when the action plans have been made to allow more stakeholders. One line manager described having the kitchen redone as an action plan. The implementation was simply hiring external contactors and there was no need for cooperation. It can be proposed that the content of the intervention is important for whether the behavioural mechanisms are apparent. Nielsen and Miraglia (2017) suggested separating process and content mechanisms, the findings support this separation. A suggestion for increasing the appearance of the behavioural mechanisms in implementation, is that the action plans should be developed with participation in mind. Participation has consistently been found to be important for the outcomes of work environment intervention (Nielsen et al., 2010), and as all the behavioural mechanisms consist of interactive components, participation should also be emphasised in the implementation process to ensure good outcomes. The findings imply the importance of considering the content of the implementation, and how it possibly affects the process.

### **Contributions of the Behavioural Mechanisms**

In the next section, each behavioural mechanism will be discussed and related to previous knowledge of the line managers' behaviours in the implementation of organisational health interventions. The contributions of the findings will be discussed. Altogether, the behavioural mechanisms contribute to current intervention theory by separating and

elaborating what actions the line managers use to ensure progress. In addition, the findings inform what behaviours line managers use in the context of a work environment intervention.

The first behavioural mechanism is the line managers' communication of progress. This finding supports the assumption that the communication of line managers is a mechanism influencing intervention outcomes (Higgins et al., 2012; Jalali et al., 2017; Nielsen, 2017). It also elaborates this behaviour, in how the line managers strategize to share information in an optimal manner, as well as actively work to get all employees on board with implementation. It was revealed that this occurs through including and showing the employees the change. The analysis indicates that the line managers see themselves as important for shaping the employees' perceptions of the interventions. This is in line with Nielsen (2017), who theorised that the line managers' shaping of perceptions is important for intervention outcomes. Moreover, the communication of progress as a mechanism can also be seen as a contribution to the theory of perceptual distance (Gibson et al., 2009). The results support that the line managers use communication of progress as a tool to decrease perceptual distance, thus working as a mechanism for a more successful outcome. This is consistent with other findings (Tafvelin et al., 2017). This underlines the importance of acknowledging the role of the line manager in shaping the perceptions of the employees.

Contrary to the findings of Jalali et al., (2017), another contribution of the current analysis is the distinguishing made between cooperation and communication. The separation serves to clarify the details of the behaviours, highlighting the different components in what some understand as only communication. While the cooperation mechanism is centred around support and the sharing of responsibilities, the communication of progress mechanism includes explicit communication components such as showing employees the change and information sharing. While Higgins et al. (2012) also distinguish cooperation and communication, their understanding keeps them closely related, and lacks an elaboration on what each mechanism entails.

The current analysis indicates that the line managers' cooperative behaviour affects interventions outcomes. The line managers distribute tasks and responsibilities down the organisational chain, interdependently working with others to drive the implementation forward. The cooperative behaviour can be seen to facilitate the process, contributing to implementation outcomes. This behaviour complements similar findings of the line managers' supportive behaviour as important in implementation (e.g. Sørensen & Holman, 2014), but emphasise the separation of this behaviour as cooperation. The importance of cooperation also

suggests that support from other stakeholders is vital for the line managers to perform well in implementation. An interesting finding in relation to the cooperation behaviour is that the implementation tasks were usually performed by a few, selected individuals. While the line managers expressed high motivation for the involvement of employees, their descriptions of who participated did not support that. Thus, it seems that participation in the implementation phase can be viewed as more idealised by the line managers, than reality. The analysis indicates that a higher degree of employee participation in the implementation could be beneficial for its outcomes.

The behavioural mechanism of follow-up contributes to intervention outcomes by ensuring that the conditions are right for others to perform in the implementation process, as well as evaluating and adjusting the progress of action plans, driving the process forwards. The findings elaborate a part of the line managers behaviour that to the authors knowledge is not previously described in the context of implementations of organisational health interventions. The findings show similarities to “monitoring” behaviours in implementation, as mentioned by Nielsen et al. (2010). While monitoring can be understood as a taking-charge behaviour, the follow-up behaviour differs in that the line managers work in collaboration with other stakeholders, instead of above hierarchically. Both the adjustment of action plans as contexts changes, as well as keeping the enthusiasm of others could be important factors to keep the implementation from failing. In total, these structural sides of the line managers’ behaviour contribute to inform intervention theory.

### **Contributions of the Contexts**

Understanding of the contexts of organisational interventions is proposed to be essential for understanding the outcomes of them. Below are the contexts found in the current thesis, discussed in relation to established knowledge on the subject. They can be viewed as enabling and limiting the actions and intentions of the line managers, through their own reasoning (Pawson & Tilley, 1997). In total, the importance of context in determining interventions should not be underestimated.

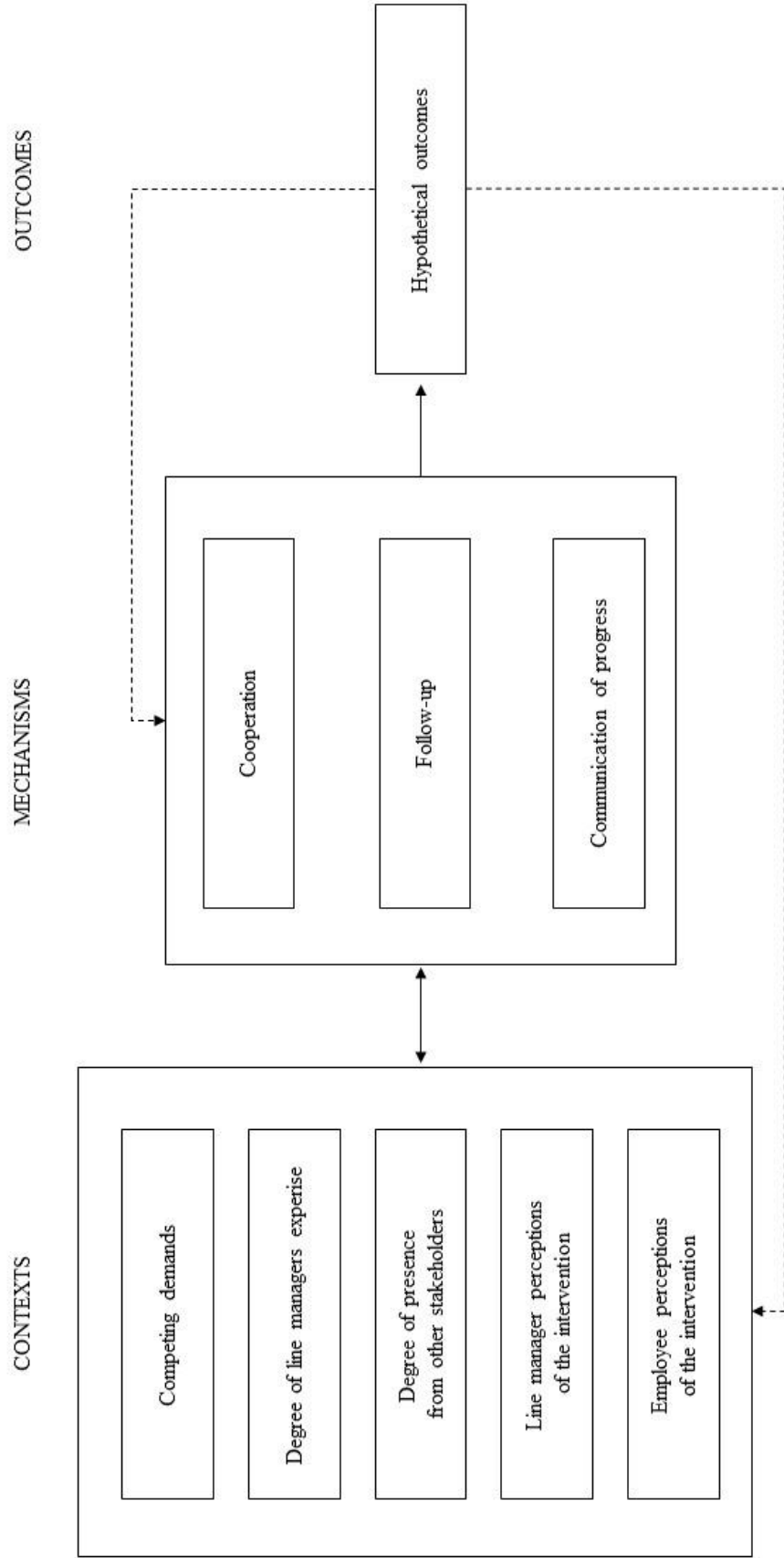
Previous empirical evidence show that the stakeholders of interventions should have the right perceptions of it in order to achieve successful outcomes. This highlights the importance of two of the contexts being adjusted right, the line managers’ and employees’ perception of the interventions. Nielsen and Randall (2011) argues that the role of line managers in shaping the perceptions of the employees must be emphasised. This suggests that

ensuring that stakeholders have a mutual understanding of the purpose and progress of the implementation has effects. Furthermore, the context of support from other stakeholders has been found as important for intervention outcomes previously. Senior management support was understood as a mechanism determining intervention outcomes by Higgins et al. (2012). In the current case, the absence of senior management was understood as a context rather than a mechanism. Still, the importance of their support remains. This significance is related to the context of line manager expertise. The line managers expressed their need for having external support stakeholders. They emphasised the usefulness of expert consultants with knowledge of psychological factors in the work environment and training in implementation processes. This is in line with Sørensen & Holman (2014), who advocated for the use of experts of change processes to help communicate the implementation process, and Augustsson et al. (2015) reported that implementation was more successful when line managers had successfully received training.

### **Exploring the Behavioural Mechanisms**

In sum, the analysis resulted in three behavioural mechanisms, as well as some contexts considered important for their activation. Their contributions and relations to relevant theory have been discussed above. Next, realist theory will be applied on the mechanisms and their context with the purpose of later theorising CMO-configurations. First of all, the findings of the current thesis come from a specific intervention programme, within a unique organisation with unique contexts. The value of understanding the interactions of contexts and mechanisms, as well as between mechanisms, lies in their potential to contribute to the understanding of how and why interventions work (Greenhalgh et al., 2015). Thus, CMO-configurations are used to theorise how components of interventions contribute to the outcomes of interventions (Pawson & Tilley, 1997), knowledge which might be transferable to other interventions or organisations. Next, a model with all the possible interactions between contexts and mechanisms from the current analysis is presented in figure 2 on the next page.

Model 2.  
Map of hypothetical interactions of the contexts, behavioural mechanisms and hypothetical outcomes





This section will sum up the model. In total, the model illustrates how all the results of the analysis might interact. Each component has independent properties, mechanisms and contexts alike. The contexts and the mechanisms likely affect and change each other. The contexts interact with the mechanisms, conditioning how the mechanisms appear in each setting. Although each mechanism has its own unique contribution to outcomes, they also function as feedback loops, mutually affecting each other, although each relationship interacts in a unique manner. Altogether the mechanisms are proposed to affect the outcome of the implementation. Finally, the dotted lines illustrate that the outcomes are thought to affect the interventional stakeholders and contexts after the intervention ends. The map is made with inspiration from realist evaluation CMO-building (Pawson, 2013), but is not an illustration of configured CMOs. Still, the behavioural mechanisms and their contexts are hypothesised to affect the outcomes of the intervention, and the model suggests possible expressions of causality. The next sections will elaborate each part of the model, explaining how the interactions are useful to understand how line managers' behaviour influence the implementation process.

**Interactions of mechanisms and their contexts.** Because the analysis indicates that the contexts interact with the mechanisms in several manners, it is proposed that the contexts presented in the results influence the expression of the behavioural mechanisms. According to realists, mechanisms and contexts go hand in hand, and cannot exist without one another (Astbury & Leeuw, 2010). Mechanisms work by being expressed when certain contexts are present, and are also expressed differently depending on the expressions of the contexts (Dalkin et al., 2015). It is not likely that the contexts alone are reasons for the change occurring in interventions, rather, they might affect outcomes through their effect on the mechanisms. An example of such an interaction where the behavioural mechanism was visibly influenced was between the competing demands and keeping focus, a part of the follow-up behaviour of the line managers. The line managers' keeping focus behaviour to follow-up should not be understood without acknowledging the effects of competing demands. When stakeholders meet competing demands they lose focus on the intervention. The line managers follow-up behaviour is a way to counteract the effect of that context. The more competing demands, the more follow-up behaviour is necessary. The example shows that the context influences how the behavioural mechanism is expressed.

It is proposed that the contexts can be viewed as explaining the behaviours of the line managers. Realist evaluation theory contributes to explain this proposal. The findings indicate

that the contexts seem to represent the motivation of the line managers, which affect their behaviour. Some examples from the analysis underline this. Less competing demands require less follow-up behaviour. Employees having the wrong perception of the intervention requires more communication of progress. A possible interpretation of this is that the contexts motivate the behaviours. In the examples above, the motivations of the line managers deciding their behaviour was the employees' perceptions of the interventions, and the amount of competing demands present.

In sum, finding out how contexts influence the behaviour of line managers is important to understand their influence of the implementation process. A detailed exploration of this has both theoretical and practical contributions for how to achieve successful implementation processes, further discussed in the implications section.

**Feedback-loops.** While the three mechanisms come from separate behaviours of the line managers, they have effects on each other. These interactions can be understood as feedback-loops (Pawson & Tilley, 1997). In total, feedback-loops between all the mechanisms have been found, characterised by their presence either increasing or decreasing the presence and effect of the other mechanisms. For example, the collaboration and communication of progress mechanisms are linked. An increase in delegation activities will increase the level of communication between the parties, by creating arenas for communication of progress to happen. Or opposite; a decrease in communication of progress will decrease cooperation activities, as the information of what responsibilities belong to whom will be less clear. Another example is the communication of progress and follow-up mechanisms. Lack of communication of progress from the line manager might make it more difficult to do follow-up. As stakeholders are dependent on that communication to understand the implementation, it will stagnate the progress and thus decreasing follow-up activities as well. Finally, an increase in collaboration activities by delegation could make follow-up activities more difficult. The delegation entails that responsibilities are more distributed, giving the line managers less control of the situation.

Feedback-loops are thought to enhance the effects of the mechanisms, and it is likely that they benefit the outcomes of interventions (Jalali et al., 2017). A suggestion is that the effects of feedback-loops work in line with COR-theory (Hobfoll, 2002), and that the positive expression of behaviours could have ripple effects on the other behavioural mechanisms. Numerous of the combinations exemplified are possible. In addition, it is likely that there simultaneously exist relationships between all three mechanisms. Those links will not be

elaborated further in the current thesis. In reality there will also be more mechanisms affecting the outcomes of the intervention than those stemming from the line managers' behaviours. For instance, assuming participation is an important mechanism (Nielsen & Randall, 2013), it is likely it has feedback loops with all the mechanisms, because they all involve interactions with other stakeholders. In another example, the motivation of other stakeholders has been proposed as a mechanism (Jalali et al., 2017), and it is likely that communication of progress might affect its expression by the line managers shaping the perceptions of the employees. Summarised, the analysis indicated that there are feedback-loops present, which might have benefits for interventions.

**Effect of the outcomes.** In terms of outcomes, as the current analysis did not have access to outcome data, those included in the model are hypotheses. Nonetheless, some proposals can be made from the hypothetical outcomes. The outcomes of the interventions can be seen as the effects on the stakeholders, and these effects are thought to change the expression of the mechanisms and the contexts after the completion of the intervention. Because the intervention theory and design of the intervention framework used in the current thesis are cyclical processes (Nielsen et al., 2010; Underbakke et al., 2014), the effects of the intervention might have effects on the next intervention process. This can be explained by the health-promoting perspective that organisational health intervention theory is founded upon (Nielsen et al., 2010). As the health-promoting perspective is based on theories of sustainability, such as COR-theory (Hobfoll, 2002), the stakeholders of the interventions collect resources from positive outcomes. The increased resources affect their performance in future interventions. Because of this, the expression of the outcomes is proposed to affect the expressions of the mechanisms and the contexts. For instance, a decrease in work strain of the employees likely affects the overall work environment, which again could affect the behaviours of the line managers in the next round of interventions. Of course, these effects could also be neutral or negative. The likely cyclical effects highlight the importance of considering the whole intervention process, where all its phases are important in creating successful, sustainable outcomes.

**CMO-configurations.** The list of context and mechanism combinations for each intervention programme is endless (Pawson, 2013), making it important to select CMO-configurations that contribute to explain the underlying workings of an intervention. To contribute to intervention theory, three CMO-configurations are presented. The selection of CMOs is based on their prominent interactions from the experiences of line managers, taken

from the analysis. It is proposed that the interactions of these mechanisms and contexts affect the outcomes of the current intervention programme. Note that the CMOs need to be tested to be full explanations, but that the hypotheses of CMOs contribute in being likely explanations. The three CMO-configurations are presented in table 4.

Table 4.

*Suggested CMO-configurations for the intervention programme.*

Context	+	Mechanism	=	Outcome*
Competing demands (C1)	+	Cooperation (M1)	=	Hypothetical outcome (O1)
Degree of presence from other stakeholders (C2)	+	Follow-up (M2)	=	Hypothetical outcome (O2)
Employee perception of the intervention (C3)	+	Communication of progress (M3)	=	Hypothetical outcome (O3)

*Note.* \*The current analysis does not have access to outcome data, as such, the outcome is hypothetical.

The CMOs work by the contexts conditioning the expression of the mechanisms, which likely has effect on the results. Each CMO-configuration will be explained in more detail. First, C1 (competing demands) triggers M1 (follow-up, keeping focus) which leads to better O1 (hypothetical outcome). For example, high levels of competing demands for other stakeholders will trigger the line managers follow-up behaviour, who will work to reduce their effect on the intervention tasks. The outcome will be affected positively. Second, C2 (senior management presence) triggers M2 (cooperation, supporting), which leads to better O2 (hypothetical outcome). By relating this example to a case in the results, a negative outcome is indicated if the context is not present. The line managers agreed that there was a lack of support from senior management in the implementation. In one case the line manager sought support without receiving it. According the same line manager, they considered the implementation of that action plan failed, as the line manager was unable to stand alone. Third, C3 (employee perception) triggers M3 (communication of progress, showing the change), which leads to better O3 (hypothetical outcome). Hypothetically, if employee perceptions of the interventions are good, there is less need for the line managers to show the employees consequences of the change and shape their perceptions. Thus, there is no visible

effects in the outcome. As the context is already present, there is no need for the mechanism to be activated.

The hypotheses made in these CMO-configurations are specific to the current programme theory in that context, and provides explanations to how it might have worked. High levels of senior management presence in implementation triggers supportive behaviours and are likely important for intervention outcomes. The presence of stakeholders of similar responsibilities in implementation likely has the same effects. This emphasises the importance of the presence of the unofficial first line-managers, employees with implementation responsibilities, and senior managers throughout the whole implementation process in future rounds of the intervention. A second knowledge obtained from the CMOs is that regularly showing the employees the progress and the consequences of the implementation should reduce the likeliness of their perceptions of the intervention being negative. This could work positively for achieving successful outcomes. Finally, working on keeping competing demands low in the implementation process should present an advantage in that stakeholders will be able to keep focus on the implementation. As realist evaluation seek to test CMO-configuration across a range of intervention and organisational settings (Pawson, 2013), the CMO-hypotheses could be tested to inform evaluators, and contribute with knowledge of the underlying workings of the behaviour of line managers in interventions.

A note to these configurations is that because the mechanisms contribute in different ways, they together produce the full outcome of the intervention. It needs to be taken into consideration that other mechanisms, like participation, will also be part of that total interaction. An important contribution of these CMO-configurations is their purpose of elaborating the underlying workings of how interventions work. Proposing an explanation to how the line managers behaviour work as mechanisms is a way to do that.

### **Theoretical Implications**

This section will summarise how the findings have contributed to theory regarding how the line managers' behaviour influences the implementation of organisational interventions. The findings indicate that the behaviours of line managers could be mechanisms influencing implementation outcomes. Intervention theory should consider the importance of the role of line managers. Moreover, the detailed investigation of line managers' experiences of an implementation process contributes with a perspective seldom investigated. Aligning the understanding of the different aspects of the line managers

behaviour with existing theory and empirical findings contributes to theory by highlighting their separate importance. It is likely that because each behaviour and each context was apparent in the analysis and later backed by previous empirical findings, they had different influences on the total outcome of the implementations. Thus, an important theoretical contribution of the current thesis is separating the behaviours into three; cooperation, follow-up and communication of progress. Considering behaviour in implementation without all its aspects could entail losing some of the influences of the outcomes. Altogether, the findings make a case for the need to consider a broader aspect of line managers behaviour when evaluating intervention programmes.

Moreover, understanding the behaviour of line managers in terms of behavioural mechanisms gave opportunities to explore the behaviour from new perspectives. Applying realist evaluation theory has contributed to increase the understanding of how the elements of this implementation process could work. This understanding could have implications for intervention theory. The CMO-configurations made in the current thesis are specific to the interventional settings they are founded upon. However, the underlying driving forces and the interactions within them are transferable to other interventional and organisational settings (Astbury & Leeuw, 2010). Moreover, the feedback-loops highlight that several aspects of line managers' behaviour should be considered, as the interactions of the mechanisms together possibly benefit the implementation process. Furthermore, an important theoretical implication was made from investigating the interactions of the contexts and mechanisms. It was proposed that the contexts of the implementation affected the expression of the line managers' behaviour.

In a book chapter, Nielsen (2017) asked whether leaders were the villains of the piece in interventions. The author argued that they are not, as the contexts, or resources, surrounding the leaders influenced their behaviour. The findings of the current analysis support this and adds that the contexts may be the motivations behind their behaviour. The line managers may find the motivations to the decisions that make their behaviour in the contexts. Furthermore, the circular understanding of contexts and outcomes proposed in model 2 illustrates the possible range of effects contexts can have on the behaviour of line managers. For instance, if the contexts are viewed in terms of resources then contexts may have benefits in the form of positive ripple effects. In sum, a theoretical implication is that mechanisms should not be discussed without also considering contexts, because of their apparent interactions and potential benefits. These findings also support the notion of how

important context is for outcomes (Higgins et al., 2012; Johns, 2018). In sum, applying realist evaluation theory in intervention research can be argued to have led to a possible deeper understanding of its processes. Hopefully, an important implication is that more researchers find inspiration to start similar projects.

### **Practical Implications**

The findings can be used to provide some recommendations for performing organisational interventions. As the implications are context specific, they might be particularly useful for work environment interventions working with knowledge intensive workers. Nonetheless, some transferability is likely. Taking that into consideration, the thematic analysis resulted in a comprehensive assessment of how and why line managers decide to express their behaviour in implementation. Primarily, line managers that have the implementation responsibility in interventions should take into account that their behaviours most probably impacts its outcome.

Some suggestions of how line managers can contribute to successful implementations have been made. First, creating a structural follow-up process would benefit the likelihood that the implementation process will result in actual change. Having regular meetings in cooperation with important stakeholders, using feedback-loops as a tool, could increase the continual focus on the intervention. Most of all, the line managers behaviour should be considered before the implementation is initiated, and it should be integrated into the intervention strategy. Furthermore, evidence suggests that employee participation in implementation is important (Ipsen et al., 2015). The analysis indicates that line managers can achieve higher participation in implementation through close communication of the progress, emphasising transparency and feedback-loops to the whole employee group. Higher inclusion of employees can also be done by a more widespread delegation of responsibilities in the implementation.

The support of the importance of the contexts of behaviours in implementation also has several practical implications. Because contexts also seem to have potential to make or break interventions, an implication is that it is vital to consider context when planning interventions. The analysis indicates that efforts should be made throughout the whole intervention process, especially in preparation, to motivate the employees and get them ready for change. As the perceptions of the stakeholders had large impact, both employees and line managers should ideally be motivated to believe that the intervention brings about

improvements in the work environment. Moreover, while the line managers reported to have received sufficient training for early stages of the intervention, they lacked guidance on how to perform the implementation. A suggestion for practise is that line managers receive training specifically aimed at the implementation process, or at developing action plans with a higher degree of participatory components. Empirical evidence has indicated that implementation was more successful when line managers had successfully received training (Augustsson et al., 2015). Another suggestion is considering the benefits of having consultants available when developing and implementing action plans (Sørensen & Holman, 2014). As shown, expert help in implementation seemed to have great significance when facing difficulties. In sum, important contexts should be carefully assessed and put into strategy before the implementation is initiated, as context has the potential of affecting the implementation process positively and negatively. Together, the importance of context suggests that there should be an emphasis on intervention programmes being tailored to fit the unique context of each organisation (Biron & Karanika-Murray, 2014).

### **Implications for Further Research**

For fully understanding the properties of the behavioural mechanisms and their contexts, they need to be tested in practice. Pawson & Manzano-Santaella (2012) argue that while identifying mechanisms and contexts requires qualitative evidence, linking those to outcomes requires quantitative support. Without quantitative evidence, the explanations provided in the current thesis remain hypotheses instead of theories. Thus, an implication for further research is that the behavioural mechanisms and their contexts need to be tested together with measuring the outcomes of the intervention. This implicates that the behavioural mechanisms and their context should be quantified. A suggestion for operationalising the behavioural mechanisms is transformational leadership, as done by Lundmark et al. (2017). However, quantifying the behavioural mechanisms comes with some disadvantages. One of the strengths of the results is considered to be their richness and detailed descriptions of the line managers' behaviour. In quantifying them, the behaviours will lose some of that depth. Another option is understanding the behavioural mechanisms qualitatively by applying them to job crafting theory (Wrzesniewski & Dutton, 2001). Future research could further explore the behaviour of the line managers and how it could fit to theories of behaviour. Furthermore, different suggestions that could fit the operationalisation of the contexts are suggested by Biron and Karanika-Murray (2014) in their process evaluation review. For instance, they recommend measuring the managers' vs. the employees' perceptions. The constructs



suggested show similarities to the contexts found in the current study. Similar suggestions have been made by Tvedt and Saksvik (2012).

Further research should further explore how contexts influence the behaviour of line managers. A suggestion is to develop an overview of important contexts for organisational health interventions. While this has not been the objective for the current analysis, it could improve the understanding of how implementation processes work, and the tailoring of specific intervention programmes. The understanding of context as presented by Pawson and Tilley (1997) has been criticised for being too simple, not acknowledging the dynamic nature of context (Dahler-Larsen, 2001). Putting context into alternative contextual frameworks responds to this critique and has potential to inform evaluation. Some suggestions for contextual frameworks possibly appropriate are John's (2006) model of discrete and omnibus contexts, or the IGLO-model (Nielsen et al., 2017), where the resources at multiple levels within and outside of the organisation could be viewed as contexts.

### **Methodological Considerations**

Most qualitative researchers acknowledge the importance of assessing the quality of qualitative research (Howitt, 2010), and it is recommended that it should be considered throughout the entire qualitative data collection and analysis. First, the dependability of a research project has been highlighted as important to evaluate (Nowell et al., 2017). Dependability represents that the research process is logical, traceable and clearly documented (Tobin & Begley, 2004). Ensuring the dependability of the analysis has been considered throughout the whole process, and the method section has been made comprehensive as a result. The author strived to make the choices made throughout the analysis visible, for instance by making an elaborate recording of all the steps in the analysis to ensure an open coding process. As a step in evaluating the dependability of the research, the reflexivity of the thesis will be recognised and addressed. Reflexivity is understood as “sensitivity to the ways in which the researcher and the research process have shaped the collected data, including the role of prior assumptions and experience” (Mays, 2000, p. 51). Two factors, my previous skills and knowledge of the research topic, most probably have affected the final product. First, I will consider my skills. As a student, I am not a skilled expert in performing semi-structured interviews, although I had previous interviewing experience. It was also the first time I conducted a thematic analysis. Several precautions were made to counteract the effects of this. I found it important to rigorously follow the guidelines of the acknowledged, published works of others. Particularly the quality criteria for

thematic analysis (Braun & Clarke, 2006), and the recommendations of Braun and Clarke (2013) for successful qualitative research were important in this. Second, I had a personal interest in the subject of intervention theory, as well as a growing knowledge of theory and empirical findings relevant to the project throughout the research process. This affected the collection of data material, for instance in influencing the follow-up questions asked, and in interpreting the data material. While an iterative process is not considered negative (Nowell et al., 2017), my own active role has affected the analysis.

Furthermore, it is recommended to evaluate whether the answers that are found in the analysis actually respond to what is asked (Tjora, 2012). First, some concerns will be raised with the process of data collection, where several biases might have affected the responses of the line managers. Another bias worth considering is that of socially desirable responding, or the tendency to give positive descriptions of the self (Paulhus, 2002). To counteract this, it was explicitly stated before the interviews that the purpose was not to evaluate their performance. Moreover, the differences in the organisational structures in each department might have provided the line managers with different understandings of their roles. Finally, the three-year time difference between when the intervention took place, and when the interviews were conducted might have affected the responses of the participants. They relied on their memories to remember details of their behaviour in the intervention. This effect has been termed recall bias (Hassan, 2005). This bias should be considered a weakness of the study. Using observation to assess the behaviour of line managers might have been advantageous for a full understanding of it, in addition to conducting the interviews. The advantage of observation as a method is that it can provide a fuller account of the contexts around the participants (Howitt, 2010). Still, as the purpose of the current research project included exploring the line managers' experiences, the interviews can be viewed to have provided an adequate source of information.

The interpretations of the data material should also be considered. In order to ensure that others understood how and why decisions were made, the author has strived to make the reasoning behind the theoretical, methodological and analytic choices visible. For instance, in the writing process of the results section, an emphasis was put on separating the voices of the interpreter and the participants. An advantage of the current research being part of a larger project was that other members contributed in the evaluation of the analysis. As they had knowledge of the content of the data material, their input and agreement of the interpretations can be said to have improved the credibility of the analysis.

## Conclusion

The purpose of this study was to explore the line managers' behaviour in the implementation of an organisational health intervention, to explain how and why line managers are important for implementation outcomes. Applying realist evaluation theory provided a method to make assumptions of the effects of behaviour, and to understand the interactions between contexts, mechanisms and outcomes. A thematic analysis was conducted. The line managers' cooperation, follow-up, and communication of progress behaviours were found to be prominent, pinned under the term "behavioural mechanisms". In addition, five contexts were found to be especially related to their expression, namely competing demands, degree of line manager expertise, degree of presence from other stakeholders, and line manager and employee perceptions of the intervention. Primarily, the analysis supports that the behaviour of the line manager is important for the outcomes of the implementation. The current thesis has provided possible explanations to the line managers' role as drivers of implementation.

The application of realist evaluation theory provided an increased understanding of how the behaviours of line managers are expressed. For instance, the CMO-configurations highlighted the interactions of mechanisms and contexts, a connection that should be considered when planning future interventions. All in all, the importance of line manager behaviours should be considered in organisational health interventions. Intervention theory should consider a broader aspect of the behaviour of line managers, as the different behaviours together have potential to produce benefits. Moreover, future interventions should not underestimate the difference contexts can make to implementation outcomes. As mechanisms and contexts go hand in hand (Astbury & Leeuw, 2010), considering the effect of the line managers behaviour without acknowledging their context undermines the purpose. In conclusion, to suggest that line managers are villains of the piece is a vast underestimation of the power of contexts.

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## **Appendix**

Attachment 1: Interview guide (in Norwegian)

Attachment 2: NSD approval (in Norwegian)

Attachment 3: Consent form to participate in the research project (in Norwegian)

## Attachment 1: Interview Guide (in Norwegian)

### Intervjuguide

Problemstilling: «Hva er lederens rolle i ARK-prosessen.»

Intro: Takk for din deltagelse. Formålet med forskningen er å komme med konstruktive bidrag til intervensjonsforskning og organisasjonsutvikling på NTNU. Intervjuet vil ta ca. 45 minutter. Formålet med intervjuet er ikke å evaluere din rolle, eller hvordan ditt institutt gjorde det, men heller å finne ut mer generelt om lederens rolle i ARK-prosessen. Det er frivillig å delta, og du har mulighet til å trekke deg fra prosjektet når som helst. Ditt bidrag vil forbli anonymt gjennom hele prosessen. Har du noen spørsmål før vi starter?

### Prosessevaluering av ARK med fokus på leders rolle

#### Forberedelse og forankring

- På hvilken måte ble du introdusert til ARK-prosessen?
  - Vet du hvem som bestemte at instituttlederne skulle kjøre prosessene? (Fikk du innflytelse i denne prosessen? Fikk du mulighet til å stille spørsmål?)
- Hva fikk du kommunisert at formålet med ARK-prosessen var?
- Har du noen tanker om det var noen andre formål med ARK-prosessen enn det som ble kommunisert?
- Fikk du opplæring i ARK-prosessen? (Fikk du tilstrekkelig informasjon, var den god nok? Hva skal til for at opplæringen blir bedre? Teoretisk bakgrunn, gjennomføring)
- Opplevde du at du hadde nok tid og ressurser til å gjøre en god jobb med ARK-prosessen? (Kan du fortelle mer om det?)
- Hva ønsket du å få ut av ARK-prosessen som instituttleder?
- Var du motivert for å gjennomføre ARK-prosessen?
- Hvordan motiverte du dine ansatte til å delta i ARK-prosessen? (Hvordan kommuniserte du med dine ansatte om dette?)
  - Møtte du motstand? (Hva var det motstand mot? Møtte du likegyldighet?)
  - Gjorde du noen risikovurderinger med tanke på motstand blant ansatte? (Deltakelse, egen rolle som prosessleder, negative tilbakemeldinger, lederstøtte).
- Hva var verneombudets rolle i ARK-prosessen hos dere?
  - Hva tenker du verneombudets rolle kan være i ARK-prosessen?
- Var du og dine ansatte like motiverte for ARK-prosessen? (På hvilke måter var dere enige/uenige?)

#### Kartlegging (spørreskjema)

- Hva ble gjort for å motivere de ansatte til å svare på spørreskjemaet? (oppfølging: hvordan?)
- Hvordan ser du nytteverdien av FaktaARK I?
- Hvordan har du benyttet deg av FaktaARK I i arbeidsmiljøutviklingen ved instituttet ditt? (FaktaARK I på grunn av loven, verneombud og leder må sette seg sammen).

#### Tilbakemeldingsmøte

- Gjorde du noen forberedelser med tanke på mulige negative resultater fra kartleggingen? (risikovurderinger og laget strategier)
- For deg som instituttleder, hva var målet med tilbakemeldingsmøtet?
  - Hva tror du var målet for de ansatte? (Hva tror du motiverte de ansatte?)
- Hva tenker du var din rolle i tilbakemeldingsmøtene?
  - Hvordan forberedte du til møtet?
  - Hvordan gjennomførte du tilbakemeldingsmøtet? (Hva gjorde dere? Kan du utdype i detalj?)
- Opplevde du at du hadde lederstøtte? (På hvilken måte? Var den tilstrekkelig?)
- En del av spørsmålene handlet om ledelse, var dette nyttig i utøvelsen av din rolle som leder? (Var det noen som var mer eller mindre nyttige?)
- Ble det gjort noe for å motivere de ansatte til å delta på tilbakemeldingsmøtet? (hva?)
- Hvordan synes du dine ansatte medvirket til tilbakemeldingsmøtet?
- Hva tenker du er sentrale suksessfaktorer og risikofaktorer for å gjennomføre et godt tilbakemeldingsmøte?

### **Tiltaksutvikling**

- Hva var gangen videre fra tilbakemeldingsmøtet til utvikling av tiltak? (Detaljerte handlingsplaner, kommunikasjon av tiltak som ble iverksatt)
- Hvilken rolle hadde du i utviklingen av tiltakene?
  - Hvilke tiltak ble utviklet?
  - Hvilke synes du var viktig? (på hvilke måter, bidro de til å nå instituttets overordnede målsettinger?)
  - Var det noen tiltak du var uenig i at ble laget? (oppfølging: hvordan håndterte du den eventuelle uenigheten?)
- Brukte dere begrepene fra spørreskjema til å utarbeide tiltakene? (for eksempel sosialt fellesskap på jobb, myndiggjørende ledelse etc.)
- Resultatene handler om begreper som “tillit, rettferdighet, engasjement, støtte”. Hvordan var det å gå fra disse begrepene til å utvikle konkrete tiltak?
  - Hva kunne eventuelt vært nyttige verktøy/hjelpemidler for å gjøre utviklingen av tiltak enklere? (feks. Kaizen)

### **Iverksetting av tiltak**

- Hva var gangen videre fra utvikling av tiltak til iverksetting av tiltak? (hva var iverksettingsstrategien?)
- Hvem hadde ansvaret for iverksetting av tiltakene?
- Hva var din rolle i iverksettingen av tiltakene?
- Hvem hadde ansvaret for å følge opp fremdriften i iverksettingen av tiltakene?
- Ble tiltakene satt inn i handlingsplanen til instituttet? (Hvordan ble handlingsplanene fulgt opp? Hvem hadde hovedansvar for å følge de opp?)
- Hvordan vil du vurdere iverksettingsprosessen av tiltakene? (I hvilken grad ble tiltakene iverksatt?)
- Når du ser tilbake, har du forslag til forbedring av iverksettingen av tiltakene?

### **Evaluering**

- Ble effekten av tiltakene evaluert? (På hvilke måter?)
- Hvordan ser du nytteverdien av FaktaARK II?
  - Mer konkret, hvordan har du brukt den på ditt institutt?

- Ser du behov for andre typer verktøy for å evaluere om tiltakene har effekt?
- Slik du ser det, hadde tiltakene en effekt? (Hvorfor, hvorfor ikke?)

### **ARK-prosessen sett som helhet**

- Fikk du som leder den støtten du trengte fra organisasjonen? (For eksempel HR/HMS/Ledergrupper/øvre ledere). På hvilke måter, motivasjon? informasjon?)
- Har dere opplegg for overføring av kunnskap og erfaring om ARK-prosessen gjennom lederskifter? (Hvilke?)
- Når du ser tilbake; ville du som instituttleder ha gjort noe annerledes?
- Med tanke på arbeidsmiljøutvikling. Hvilke verktøy trenger du for å gjøre en god jobb? (Utover det som ble tilbudt? Forankring, kartlegging, tiltaksutvikling, implementering og evaluering? Fra ARK, toppledelse, medarbeidere, verneombud, evt. andre?)
- Hva tenker du er de viktigste suksessfaktorene for en god arbeidsmiljøutvikling?

**Attachment 2: NSD Approval (in Norwegian)**

Marianne Høgetveit Myhren

Belinda Gloppen Helle

Kontaktperson: Belinda Gloppen Helle tlf: 55 58 28 74 / [belinda.helle@nsd.no](mailto:belinda.helle@nsd.no)

Vedlegg: Prosjektvurdering

Kopi: Marte Østensen, [marteoest92@gmail.com](mailto:marteoest92@gmail.com)

## Personvernombudet for forskning



### Prosjektvurdering - Kommentar

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Prosjektnr: 54958

Utvalget informeres skriftlig om prosjektet og samtykker til deltakelse. Informasjonskrivet er godt utformet, men masterstudentens kontaktopplysninger bør også tilføyes skrivet.

Det behandles enkelte opplysninger om tredjeperson. Tredjepersoner kan være andre ansatte, verneombud og ledere. Det skal kun registreres opplysninger som er nødvendig for formålet med prosjektet. Opplysningene skal være av mindre omfang og ikke sensitive, og skal anonymiseres i publisasjon. Så fremt personvernloespen for tredjeperson reduseres på denne måten, kan prosjektleder unntas fra informasjonsplikten overfor tredjeperson, fordi det anses uforholdsmessig vanskelig å informere.

Personvernombudet legger til grunn at forsker etterfølger NTNU sine interne rutiner for datasikkerhet.

Forventet prosjektslutt er 28.06.2018. Ifølge prosjektmeldingen skal innsamlende opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:

- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammensetting av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn)
- slette digitale lydopptak

## **Attachment 3: Consent Form to Participate in the Research Project**

### **Forespørsel om deltakelse i forskningsprosjekt**

**Tittel: Lederens rolle ARK-prosessen.**

#### **Bakgrunn og formål**

Formålet med studien er å kartlegge lederes rolle i ARK-prosessen gjennom intervjuer av ledere i universitets- og høyskolesektoren. Vi er for eksempel interesserte i lederens rolle i survey feedback-møtene og i iverksettingen av eventuelle tiltak. Studien er en del av et større forskningsprosjekt hvor vi undersøker organisasjonsutvikling i sektoren med formål å bidra til å skape bedre forståelse og gode verktøy for ledelse og HR. Vi har med forskere og masterstudenter i arbeids- og organisasjonspsykologi i dette prosjektet. Deltakere er instituttlede eller tidligere instituttlede på NTNU i Trondheim som var med på ARK i 2014.

#### **Hva innebærer deltakelse i studien?**

Studien vil basere seg på dybdeintervjuer, spørsmålene vil omhandle arbeidet rundt ARK. Intervjuene vil bli tatt opp med en båndopptaker for bruk i de videre analysene.

#### **Hva skjer med informasjonen om deg?**

Alle personopplysninger vil bli behandlet konfidensielt. Kun prosjektgruppen bestående av fire personer (to masterstudenter samt to veiledere hvorav én også er daglig ansvarlig for prosjektet) vil ha tilgang til personopplysninger. Personopplysninger vil bli behandlet etter NTNU sine interne rutiner for datasikkerhet. Det vil si at lydfiler krypteres ved lagring og oversendelse og transkripsjoner krypteres ved lagring og oversendelse.

Personer vil ikke kunne gjenkjennes i en eventuell publikasjon.

Prosjektet skal etter planen avsluttes våren 2018, den 28. juni. På det tidspunkt vil innsamlede opplysninger anonymiseres slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å slette direkte personopplysninger (som navn/koblingsnøkkel), slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn) og slette digitale lydopptak. Anonymiserte transkripsjoner vil kunne lagres til bruk for publikasjon. Disse lagres sikkert etter NTNUs interne sikkerhetsrutiner, og kun de nevnte fire personer vil ha tilgang.

#### **Frivillig deltakelse**

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert.

Dersom du senere ønsker å trekke deg eller har spørsmål til studien, eller generelt ønsker mer informasjon om forskningsprosjektet kan du kontakte masterstudent Marte Østensen på e-post [thomamis@stud.ntnu.no](mailto:thomamis@stud.ntnu.no) eller masterstudent Thomas Mølmen Isaksen på e-post [marteoest92@gmail.com](mailto:marteoest92@gmail.com). Daglig ansvarlig for prosjektet Eyvind Helland kan nås på tlf. 73591975 eller på e-post [eyvind.helland@ntnu.no](mailto:eyvind.helland@ntnu.no).

Studien er meldt til Personvernombudet for forskning, NSD - Norsk senter for forskningsdata AS.

#### **Samtykke til deltakelse i studien**

Jeg har mottatt informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker, dato)