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Empowering leadership and its impact on work- family interaction among employees in the higher education sector.

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Acknowledgements

The inspiration for this study comes from my time as an intern at ARK NTNU last spring. Through this practice, I was involved in several survey feedback meetings where I gained insight into the work environment in several departments at colleges and university colleges. At this time, I got insight into how stressful the work- day is for several academics, and was inspired to do research on work- family interactions among employees in this sector. I find the higher education sector an interesting sector, because I have the impression that the employees both love what they do, and at the same time experience lots of stress in their workday.

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II

Abstract

Academic employees work in a demanding work environment where they are sensitive to experiencing work- family conflicts. The goal of this study was to investigate whether empowering leadership had an impact on work- family interactions among employees in the higher education sector. Additionally, the study investigated whether social support from supervisor and job autonomy would moderate the effects of empowering leadership on work- family interactions. Using the JD-R model and work- family enrichment theory, this study adds to the literature by studying work- family interactions in the higher education sector. Moreover, this is the first study to investigate the effects of empowering leadership on work- family interactions. Based on a self- reported questionnaire, collected by ARK Intervention Programme, data from 12159 respondents from the higher education sector in Norway were analysed. A PLS- SEM analysis was conducted with work- family facilitation and work- family conflict as the dependent variables. The results showed that empowering leadership had a positive effect on work- family facilitation. However, there were no significant findings of the effects of empowering leadership on work- family conflict. Nevertheless, the results indicate that social support from supervisor may enhance the negative effect of empowering leadership on work- family conflicts. Additionally, social support negatively moderated the positive effects of empowering leadership on work- family facilitation. Finally, job autonomy reduced the effects of empowering leadership on work- family conflict. More research is requested on what factors affect work- family interaction in the higher education, and additionally studies on group differences between academic and administrative employees.

Keywords: Empowering leadership, work- family conflict, work- family facilitation, JD-R model, work- family enrichment theory, PLS- SEM, higher education.

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Introduction

Today, employees are constantly trying to juggle their work and personal lives (Bell, Rajendran, & Theiler, 2012). An increase in more dual- earner couples and working single parents has led to an increase in the number of employees who struggle with the competing demands of work and family (Byron, 2005). In this struggle, the influence of either work or personal life can lead to a positive or negative "spill over" (Bell et al., 2012). Academic staff at universities work in an increasingly demanding work environment with complex work (Houston, Meyer, & Paewai, 2006). They work in general ten hours more a week than the contractual working hours for government employees (Egeland & Bergene, 2012). Research have found that work-family conflict (WFC) is higher among those who work longer hours or have greater work demands and greater autonomy (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). This research show that the academic context could be sensitive to work-family issues (Metcalfe, Woodhams, Gaio Santos, & Cabral-Cardoso, 2008). Furthermore, scientific work involves high expectations. This sets terms for potential conflict between work- and non- work domains (Fox, Fonseca, & Bao, 2011). Previous studies have shown that work-family conflict (WFC) can lead to several negative impacts such as stress related health problems and depression (Major, Klein, & Ehrhart, 2002). Yet, there are very few studies that have examined academics opportunity to balance work and personal life, and overcome WFC (Bell et al., 2012).

Research on industrial organizational psychology has earlier focused mainly on challenges at work. However, in the last decade there have been increased focus on the positive factors that affect employees´ workday. This includes factors that lead to increased engagement, satisfaction and well- being at work (Christensen et al., 2008). In line with the positive focus in psychology research (Seligman & Csikszentmihalyi, 2014), research on work-family interaction has included focus on the benefits of work and family have on each other (Bakker & Schaufeli, 2008). This new focus complements the dominant conflict perspective by identifying new ways to grow strength in employees (Siu et al., 2010). However, up to date, very little research has focused on the idea that work and family can benefit each other (Wayne, Grzywacz, Carlson, & Kacmar, 2007). There have been different ways of describing the positive synergies between work and family in the literature (Greenhaus & Powell, 2006; Grzywacz & Butler, 2005). This study will use the label work-family facilitation (WFF) when describing the positive interactions between work and family. WFF includes that participation at home gets easier because of specific work factors (Frone, 2003).

The university and the university college sector in Norway are changing. The sector shows stronger management functions, and improved strategic and professional management. It seems like leadership will be more of more importance in this sector in the future (Egeland & Bergene, 2012). At the same time, leadership in higher education is an emerging area of scientific investigation (Macfarlane & Chan, 2014). Leaders play an important role in how employees experience their work, and have a great influence on employees' happiness (Tuckey, Bakker, & Dollard, 2012). Several studies show benefits of empowering leadership (Bass & Riggio, 2006). Tuckey et al. (2012) argue that by giving employees self-determination and control, empowering leaders can make them use the resources they have available to be able to cope with job demands and overcome challenges. They further argue that this process can help employees transform feelings of stress into feelings of energy.

Research has shown that certain types of leadership behaviours can increase employees' abilities to overcome work-family conflict and increase working family enrichment (Li, McCauley, & Shaffer, In press). However, work-family outcomes have not had much attention in the existing leadership literature (Zhang, Kwong Kwan, Everett, & Jian, 2012). This suggests that there is not enough research on the effects of leadership on employees' work-family interactions. One purpose of this research is to participate in filling this gap in the literature by examining the effect of empowering leadership on work-family interactions. Additionally, the study will investigate the assumed moderating effects of social support from supervisor, and job autonomy, on the relationship between empowering leadership and work-family interaction. This research contributes to the literature in several ways.

 First, it analyses the effects of empowering leadership on work-family interaction. The identification of empowering leadership as a protective factor may lead to important practical implications. Especially in the higher education sector, where there is increasing amounts of demands (Houston et al., 2006). There have been some studies investigating the effects of leadership on work-family interaction (Liao, Liu, Kwan, & Li, 2015; Zhang et al., 2012). However, this study gives insight into the effects of empowering leadership on work-family interaction. Moreover, based on work-family enrichment theory, which assumes that resources gained at work can transfer to the family domain (Greenhaus & Powell, 2006), I argue that empowering leadership can increase employees' resources at work that can facilitate their home- life. The information about how to increase work-family facilitation, gives us insight into how employees get benefits transferred from their work- life to their home- life.

Secondly, the present study provides insight into autonomy and social support as moderators of empowering leaderships effects on work-family interaction. These assumptions is agrees with studies showing that a lack of social support can lead to WFC (Kossek, Pichler, Bodner, & Hammer, 2011) and additionally have an effect on WFF (Demerouti & Geurts, 2004). Moreover, job autonomy has shown to have an impact on both WFC and WFF (Innstrand, Langballe, Espnes, Aasland, & Falkum, 2010). Next, I will describe the theories that substantiate my research question, and relevant empirical findings. Then, I will state the research questions and hypotheses of the study. After that, there will be information about the procedure of the study, and how the analyses were conducted. This will be followed by the results of the study. Finally, I put forward a discussion of the findings of the study, including implications, limitations, future research suggestions.

Theoretical Foundation

Work-Family Interaction

Research on work-family interaction emphasize both how family impacts work, and how work affects families (Frone, 2003). According to Clark (2000) people daily cross the borders between the domains of work and home. Specifically, they describe that home and work can be described as two different domains, which people associate with different behaviour, rules and thoughts. Work-family interactions can have important implications for organizations, individuals, and society. Therefore, a growing body of research has investigated the intersection between work and family domains (McNall, Nicklin, & Masuda, 2010). This study will focus on examining how work affect employee's life at home, because it is investigating how leadership affect work-family interactions. Work-family spill over can be viewed from a negative perspective, like WFC (Greenhaus & Beutell, 1985), a positive perspective like WFF (Greenhaus & Powell, 2006) or a more integrative perspective called work-family interaction (Demerouti & Geurts, 2004). There seems to be an agreement among several researchers that an understanding of work – family interaction should include a focus on both conflict and facilitation (Ford, Heinen, & Langkamer, 2007; Frone, 2003; Greenhaus & Powell, 2006). Therefore, this study includes both WFF and WFC when studying work-family interaction.

Work-family conflict. WFC is one of the most studied factors in the work-family literature (Greenhaus & Allen, 2011). WFC is described as something that happens when difficulties arise in a person's family role because of participation in the person's job role. The reason why this happens, is because of pressure from participation in one role, makes it difficult to finish the obligations in the other role (Greenhaus & Beutell, 1985). The definition of work-family conflict is as follows: "*A form of inter role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect*" (Greenhaus & Beutell, 1985, p. 77).

Previous studies have shown that WFC can have an influence on both employees and organizations results (Madsen, 2003). There are several factors that can influence WFC either directly or indirectly. Some of them are control and autonomy, coping strategies, conflict, overload, and social and organizational support (Madsen, 2003). Research shows that job demands increase the likelihood of a WFC to occur (Bakker, Demerouti, & Dollard, 2008). Voydanoff (2004) argue that there are two types of demands that are associated with WFC: strain- based and time- based demands. Time pressure is strain based demands that can increase negative emotions, stress and fatigue (Voydanoff, 2004). For example, an employee

may not be able to miss work to watch their child's school event (Lambert, Minor, Wells, & Hogan, 2015). Strain based conflict occurs when the stresses and demands of the job, negatively affect the quality of a person's family life. For example, a correctional staff who has been working with a verbally abusive inmate, may take his or her anger and frustration home, and take it out on family or friends (Lambert et al., 2015). These demands may spill over to family life, which can increase employees WFC (Voydanoff, 2004). This is in line with studies of Lambert et al. (2015). They found that employees that have a high level of job demands, are more likely to report conflict spilling over from work to their home domain.

According to the literature, access to certain resources can reduce WFC (Voydanoff, 2004). Factors that have been shown to have a negative relation to WFC is for example autonomy (Voydanoff, 2004), job satisfaction (Armstrong, Atkin-Plunk, & Wells, 2015; Lambert, Hogan, Camp, & Ventura, 2006) and supervisor support (Kossek et al., 2011). These studies denote the importance of access to resources, in order to reduce WFC.

The work role is prominent for professionals in scientific fields. Thus, the work sets high expectations among the employees that can lead to potential conflict with their family-domain (Fox et al., 2011). Because employees in this sector is especially at risk of experiencing WFC (Metcalfe et al., 2008), it is important to address how to reduce WFC in this sector. Although experiencing strain and stressors at work, many academics seems to experience work engagement (Kinman, 2001; Winter, Taylor, & Sarros, 2000). This means that even though academics may experience a work environment with a high degree of demands, they sill experience engagement in their work. Previous studies have shown that positive aspects of the work like engagement not only is gives employees positive outcomes at work. It can also affect the home domain in a positive way (Siu et al., 2010). In the next section, there will be more information about how work can spill over to the home domain in a positive way.

Work-family facilitation. Frone (2003) proposed that WFF may be an additional component of work-family interactions. Researchers have used different labels to describe the positive synergies between work and family (Greenhaus & Powell, 2006; Grzywacz & Butler, 2005). This includes positive spill over, enhancement, enrichment and facilitation (McNall et al., 2010). Research by Wayne (2009) claimed that enhancement is when a person get benefits from a specific domain, and positive spill over occurs when individuals transfer advantage of this to another domain. This thesis use the label work-family facilitation, when describing the positive synergies between work and family. Frone (2003) defines work-family facilitation as:

... the extent to which participation at work (or home) is made easier by virtue of the experiences, skills, and opportunities gained or developed at home (or work). As with work-family conflict, work-family facilitation has a bidirectional dimension, where work can facilitate work life (p. 145).

Wayne et al. (2007) argue that there are three components of facilitation: gains, engagement, and enhanced functioning. Engagement refers to what extent individuals are willing to invest in domain- related activities. Through individuals' active engagement in a life domain, they will experience privileges, gains and benefits that can contribute the functioning of the other domain (Wayne et al., 2007). Gains can be divided into four categories describing the main individual gains acquired in a life domain: developmental gains (acquisition of knowledge, values, skills or perspectives), affective gains (exchange in attitudes, moods or other aspects of emotion), capital gains (acquisition of social, health or economic advantages) and efficiency gains (the enhanced attention or focus covered by multiple role responsibilities) (Carlson, Kacmar, Wayne, & Grzywacz, 2006). Enhanced functioning refers to improvements in basic processes that are important for domain performance, such as problem solving or interpersonal communication (Wayne et al., 2007).

Previous studies argue that the primary driver of facilitation is reception and use of individual and environmental resources (Wayne et al., 2007). In particular, facilitation is expected to result from resources that mobilize or engage people in family activities. This is probably a result of accessibility to resources and not a lack of demands (Voydanoff, 2004). For instance, research has found that individuals with more autonomy and variety in their jobs report a higher degree of WFF (Grzywacz & Butler, 2005). These studies demonstrate that access to resources at the workplace is important to increase WFF.

In sum, WFF can contribute to increased functioning in the home domain, because of experiences and resources gained at work (Grzywacz & Butler, 2005; Wayne et al., 2007). There are a number of studies that support the notion that work experiences can enrich family life (Greenhaus & Powell, 2006). For instance, Greenhaus and Powell (2006) have established a model called work-family enrichment theory. There will be more information about this theory in the next section.

Work-Family Enrichment Theory

This theory suggests that work resources can be transferred to the family domain and facilitate the role performance in the family domain (Greenhaus & Powell, 2006).

Furthermore, Greenhaus and Powell (2006) argue that application of workplace- created resources can enrich employees family lives. They give examples such as using flexibility in the work schedule to spend more time with their family, or the use of a skill learned at work to better interact with family members. Work-family enrichment theory claim that other resources such as skills and perspectives can facilitate work-family enrichment (Zhang et al., 2012).

Greenhaus and Powell (2006) describe that resources are operationalized as social-capital resources, skills and perspectives, flexibility, psychological and physical resources, and material resources. In their study, they proposed two pathways by which work and family may complement one another. First, the instrumental pathway where resources are transferred directly from one domain to another. For the instrumental pathway, resources developed in Role A result in higher performance in Role A. Then this leads to high performance and positive affect in Role B. Second, the affective pathway where resources from work indirectly influence family performance through high performance or positive affect. For the affective pathway, resources developed in Role A result in positive affect in Role A. This then leads to high performance and positive affect in Role B.

Job Demand Resources Model

The job demands- resources (JD-R) model (Bakker, Demerouti, & Schaufeli, 2003; Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) can give us insight into how you can increase employees' wellbeing and improve their work effort (Bakker & Demerouti, 2007). More specifically, the model is based on the assumption that it is the balance between positive (resources) and negative (demands) job characteristics that is the antecedents of employees' health and well- being at work (Schaufeli & Taris, 2014). It suggests that all kinds of job characteristics can be described as either job resources or job demands (Bakker, Tims, & Derks, 2012). There are two processes that are described in the JD-R model. A motivational process and a health impairment process (Schaufeli & Bakker, 2004). Hakanen, Schaufeli, and Ahola (2008) found support for these two processes. More specifically, they found that job resources could influence future work engagement, and that job demands predicted burnout. Job demands are aspects of the job that are associated with certain psychological or physical demands because they require much mental or physical effort (Demerouti et al., 2001).

The presence of job demands can lead to health problems because they can exhaustion both physically and mentally (Bakker & Demerouti, 2007). Access to job resources can

reduce these job demands. Job resources are aspects of the job that helps individuals to reach work goals and affect the development and personal growth of individuals (Demerouti et al., 2001). Examples of resources are feedback, social support and job control (Schaufeli & Taris, 2014). The reason why job resources can play a motivational role, is because they increase employees´ willingness to spend compensatory effort. Thereby resources can reduce job demands and foster employees goal attainment (Crawford, LePine, & Rich, 2010; Schaufeli & Taris, 2014). Thus, availability of resources can lead to positive outcomes at the workplace. A lack of resources will make it harder for employees to handle the negative consequences of a high degree of job demands. This lack of resources also makes it hard for employees to reach their goals (Demerouti et al., 2001). This shows that access to resources is important to increase positive outcomes and reduce job demands in the workplace.

As said before academic staff at universities work in a demanding work environment that includes complex work (Houston et al., 2006), and high expectations (Fox et al., 2011). Based on the JD- R model, employees in this sector would need access to job resources in order to reduce the likelihood of experiencing negative outcomes at work (Demerouti et al., 2001).

The University and University College Sector

Academic freedom, local autonomy and critical reflection are values that run deep in Norwegian universities. These values reflect the way the system has been organised and governed (Larsen, 2003). Additionally, higher education has more autonomy than other public services (Middlehurst, Goreham, & Woodfield, 2009). Academic staff usually have primary emphasis placed upon the teaching and research aspects, and a secondary emphasis upon administration and service (Houston et al., 2006). However, since the 1980s there have been a change in the higher education system in Norway. Larsen (2003) argues that the sector is facing a new comprehensive reform, and this trend will continue in the years to come. One of the changes is that the sector has developed stronger management functions. Additionally, employees in the higher education sector in Norway, experience less formal influence on their own workday (Egeland & Bergene, 2012). Organizational changes, along with increased stress and pressure has led to an increased importance of studying the effects of work life balance and conflict among academics (Bell et al., 2012).

Research done by The Norwegian Work Research Institute show that employees in the universities and university colleges experience a lack of time to finish their work duties (Egeland & Bergene, 2012). High levels of educational obligations, pressure to attract

external funding, and a high degree of role conflict are major sources of job-related stress among academics (Boyd et al., 2011). At the same time, long workdays and a high degree of work effort is an important premise to beeing successful in publishing papers in the higher education sector (Egeland & Bergene, 2012). There are several studies that have addressed the challenges of balancing work and family life when you have an academic career (Howe-Walsh & Turnbull, 2016). Winefield, Boyd, and Winefield (2014) were one of the first to review the role of WFC in university employees. They argue that the reason why job demands reduce worker´s health is because of WFC. In order to improve worker's wellbeing, they argue that it is essential to reduce workers job demands. Consequently, to avoid reduced health and WFC among university employees, there should be a focus on how to reduce harming work demands.

In several cases, it is the units' managers that are responsible for allocating tasks, ensure that employees duties are done and that there is satisfactory documentation of this (Egeland & Bergene, 2012). However, research on leadership in higher education, found that operational control and the strategic responsibility in institutions of higher education, often was delegated. The aim of this was to stimulate the involvement of a broad constituency. Additionally, this gave wide opportunity for those at lower levels in the organizational hierarchy to innovate and influence direction within their organization (Middlehurst et al., 2009). Empowering leadership is a leadership style that can involve delegation of responsibilities (Bass & Riggio, 2006), and encouragement of participation in decision making (Tuckey et al., 2012). Therefore, this is a leadership style that seems suitable for the organizational context of higher education. There will be more information about empowerment and this leadership style in the next section.

Empowerment

In the last decades, empowerment has been a popular study area (Bass & Riggio, 2006). There have been different ways of thinking about this concept. This have resulted in some ambiguity to the nature of the empowerment construct. While some describe empowerment as the act of empowering other people, others describe it as the internal processes of the employee being empowered (Menon, 2001). It has been described as a motivational (Tuckey et al., 2012) and multifaceted approach that is composed of different practices aimed at sharing information, rewards, resources and authority with employees at lower levels (Fernandez & Moldogaziev, 2015). It is an agreement in the literature that empowered employees are characterized by being in a mental state called psychological

empowerment. This is defined as an intrinsic motivation manifested in four cognitions; competence, meaning, self- determination and impact (Thomas & Velthouse, 1990).

Spreitzer, Kizilos, and Nason (1997) argue that the concept of empowerment comes from theories of participative management and employee involvement. According to these authors, the basic premise of participatory management is that the sharing of leaders' decision power with employees will enhance performance and job satisfaction. From a managerial perspective, employee empowerment is a relational structure that describes how managers share information, power and resources with those who lack it (Fernandez & Moldogaziev, 2015). This thesis will use the term Empowerment as the act of empowering others (Menon, 2001), more specifically; empowering leadership.

Empowering leadership. In brief means, empowering leadership means giving employees more autonomy (Bass & Riggio, 2006). Empowering leaders also encourage people to participate in decision making (Tuckey et al., 2012), delegate responsibilities (Bass & Riggio, 2006) and encourage team members to work together and independently without direct supervision (Tuckey et al., 2012). Menon (2001) describes that successful empowering of followers depend on implementation of goals. Consequently, empowerment of followers can have negative consequences if the employees and the organization have different goals (Bass & Riggio, 2006).

Tuckey et al. (2012) found that empowering leadership could lead to increased cognitive job demands. They explain that this is a result of increased responsibility and problem-solving given by the empowering leader to followers. Additionally, they found that empowering leaders increase employees job resources, and that the combination of increased resources and demands increased employees work engagement. Based in this, it is possible that empowering leadership leads to a process that may transform feelings of stress to feelings of energy and interest in the work (Tuckey et al., 2012).

There are considerable findings that shows payoff of empowering leadership (Bass & Riggio, 2006). Previous studies have shown that this leadership style can increase employees' psychological empowerment, which in turn can increase intrinsic motivation (X. Zhang & Bartol, 2010). Additionally, empowering leadership have been shown to increase employees' creativity (Zhang & Bartol, 2010), engagement (Tuckey et al., 2012), knowledge sharing behaviour (Xue, Bradley, & Liang, 2011) and job satisfaction (Kim, 2002; Lee, Cayer, & Lan, 2006). This makes it interesting to investigate if this leadership style can give employees resources that make it easier to balance their work and home domains.

Leadership is interpreted in different ways by individual academics. In the literature, leadership in academia has been described with the word "effectiveness". Specifically, leadership is perceived as an instrument to support the academics development, planning and evaluation of their work, in order for them to perform better (Juntrasook, 2014). Tuckey et al. (2012) argue that the purpose of empowering leadership, is to teach employees self-leadership skills. They argue that this is done by giving them the opportunity to learn new things and help them develop their abilities and skills, as well as carrying out new responsibilities. Consequently, empowering leadership is a leadership style, that may be well suited for the academic context, considering how academics perceive leadership at their workplace.

Further, it seems like leadership in academia is much about support (Juntrasook, 2014). Social support from supervisor includes a general expression of concern from the supervisor that is intended to increase the well- being of the employee (Kossek et al., 2011). However, social support from supervisor is different from empowering leadership. Empowering leadership is more about giving employees possibilities to develop themselves and teach them new skills (Tuckey et al., 2012). Thus, social support and empowering leadership provide different kinds of resources to their employees. Additionally, social support has been found to be an important antecedent of both work-family facilitation and work-family conflict (Kossek et al., 2011). Therefore, it is interesting to include this aspect of leadership in the current study as well.

Social Support from Supervisor

There are reasons to expect that social support from supervisor moderates the effects of EL on WFC and WFF. As outlined by earlier research, supervisor support is negatively and significantly correlated to WFC (Kossek et al., 2011; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Individuals with greater access to supervisor support get more psychological resources that can provide a stress buffer to strain (Bakker & Demerouti, 2007; Kossek et al., 2011). Additionally, Demerouti and Geurts (2004) found that social support had an effect on WFF. Their research argues that people who experienced a positive interference between work and family had high levels of social support from their supervisor. This research demonstrates that social support can have an important effect on both WFF and WFC. As described earlier, previous studies have shown that employees in the higher education work in a work context that makes them sensitive to work-family issues (Metcalfe et al., 2008). Based on this, it is interesting to investigate whether a job resource such as social support can help

employees in the higher education to better balance their work and family lives in a better way.

Autonomy

Job autonomy refers to the extent to which employees' experience independence and influence over how the work is carried out (Näswall et al., 2010). It is a job resource that is related to academic identity (Henkel, 2005). According to Bakker and Demerouti (2007), job autonomy is crucial for employees well- being and health at work. They explain that this is because autonomy enables employees to better cope with stressful situations. This has been observed in other studies as well. Brauchli, Bauer, and Hämmig (2014) argue that autonomy can buffer job demands on well- being.

Innstrand et al.´**s** (2010) results show that job autonomy can have a negative association with WFC and a positive association with WFF. This is consistent with earlier research showing that having autonomy and flexibility at work can have an effect on work-life balance (Bakker, Demerouti, & Euwema, 2005; Lambert, Kass, Piotrowski, & Vodanovich, 2006). According to Deci and Ryan (2012) autonomy is a basic human need, which if satisfied will lead to increased motivation and psychological health. It is also described as a job resource in studies of the JD-R model (Bakker & Demerouti, 2007).

Research Question and Hypotheses

There are several arguments to support the assumption that empowering leadership can have a positive impact on WFF. First, WFF is a situation where participation at home gets easier as a result of opportunities and skills employees have gained at work (Frone, 2003). Secondly, Bakker and Geurts (2004) found that job resources such as possibilities for development can create a positive work- home interference. Research have found that empowering leaders can energise (Yukl, 1989) and increase employees' resources by giving them increased self- development skills and responsibility at work (Tuckey et al., 2012). Consequently, this leadership style may be beneficial to increase employees WFF, because it can increase employees job resources (Tuckey et al., 2012). Thirdly, the JD-R model postulates that job resources are aspects of work that help individuals develop at work (Demerouti et al., 2001). Previous studies argue that reception and use of individual and environmental resources is the primary driver of work-family facilitation (Wayne, 2009). Finally, work-family enrichment theory postulates that job resources can result in higher performance and positive affect at work which can transfer directly or indirectly to their

family domain (Greenhaus & Powell, 2006). Consequently, I hypothesise that empowering leadership will increase employees WFF.

Studies by Bakker et al. (2008) indicate that job demands increase employees' likelihood of experiencing WFC. The JD-R model argues that job resources can reduce job demands (Demerouti et al., 2001), because access to resources increase employees' motivation and willingness to spend an extra effort (Crawford et al., 2010). Furthermore, job resources have been found to reduce WFC (Voydanoff, 2004). Because empowering leadership can increase employee resources (Tuckey et al., 2012), I hypothesise that empowering leadership will have a negative effect on WFC. This is probably the first study to investigate the effects of empowering leadership on work-family interactions.

Additionally, I will investigate whether social support from supervisor and job autonomy moderate the effects of empowering leadership on work-family interactions. Several studies support job autonomy (Barrick & Mount, 1993; Langfred, 2004) and social support as moderators (Frese, 1999). Earlier research have found that both job autonomy and social support have an association with WFF and WFC (Demerouti & Geurts, 2004; Grzywacz & Butler, 2005; Innstrand et al., 2010; Kossek et al., 2011). Specifically, social support from supervisors can help to promote employees job performance. This can result in increased job role satisfaction, which in turn can spill over to the family domain and improve family role performance (Greenhaus & Powell, 2006; Ling Siu et al., 2015).

Brauchli et al. (2014) describe that the presence of a greater amount of opportunities can explain why autonomy has been found to increase employees' capability of coping with stressful situations. WFC is defined as a conflict that occurs when pressure from work makes it harder to finish obligations at home (Greenhaus & Beutell, 1985). One type of demand associated with WFC, is time- based demands (Voydanoff, 2004). This type of WFC occurs if employees don´t have time to family related responsibilities because of their responsibilities at work (Netemeyer, Boles, & McMurrian, 1996). When employees have access to job autonomy, they have more flexibility in their workday to decide what their work schedule looks like. Consequently, they can decide where and when they will do their job responsibilities during the day.

Based on this, I argue that job autonomy and social support from supervisor will positively moderate the negative effects of empowering leadership on work-family conflict. Additionally, I argue that they will positively moderate the positive effects of empowering leadership and WFF. As far as I know, this has not been studied before. This study has the following research question:

How does empowering leadership affect work-family interaction among employees in the higher education sector?

Hypotheses. Based on the empiri and theory described, I have formulated the following hypotheses:

Hypothesis 1: Empowering leadership is positively related to work-family facilitation.
Hypothesis 2: Empowering leadership is negatively related to work-family conflict.
Hypothesis 3a: Job autonomy is positively related to work-family facilitation.
Hypothesis 3b: Social support from supervisor is positively related to work-family facilitation.
Hypothesis 4a: Job autonomy is negatively related to work-family conflict.
Hypothesis 4b: Social support from supervisor is negatively related to work-family conflict.
Hypothesis 5: Job autonomy and social support from supervisor positively moderate the positive relationship between empowering leadership and work-family facilitation.
Hypothesis 6: Job autonomy and social support from supervisor positively moderate the negative relationship between empowering leadership and work-family conflict.
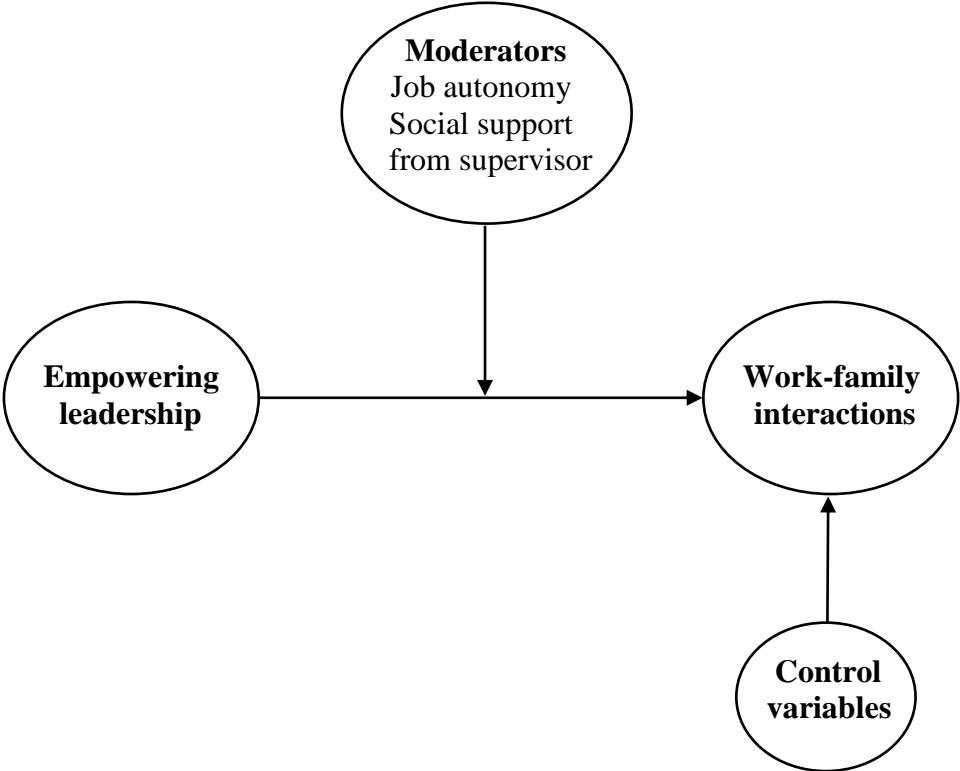
Figure 1. The research model

Methods

Study Design and Descriptive Statistics

The data for this study came from a work environment climate survey called ARK Intervention Programme (Norwegian acronym for "Working environment and working climate surveys). ARK Intervention Programme is a work- environment development tool that is developed by the university and university college sector. Its intention is to measure the most important psychosocial work- environment factors for universities and colleges. ARK Intervention Programme consists of the following elements: a questionnaire called KIWEST, FakaArk I and II, arrangements for monitoring and feedback of the results of KIWEST. KIWEST (Knowledge- Intensive Work Environment Survey Target) consists of standardised and validated questions about the organizations climate, work demands and work resources (Undebakke, Innstrand, Anthun, & Christensen, 2014). FaktaArk I measures facts about organizational matters. During survey feedback meetings, the employees develop actions that they believe will help to improve their work environment (Undebakke et al., 2014).

The respondents are employees from the higher education sector in Norway. A total of 12159 respondents were included in the dataset after nine responses were deleted due to missing data. The response rate was 65,43 %. The survey has been sent to the Norwegian Centre for Research Data, which means that ethical considerations have been made. In the beginning of the ARK Intervention Programme, the KIWEST was sent to all employees that had an over 20 % position. The survey was sent electronically, and the employees had three weeks to answer it. During this time, they were reminded to answer the sheet twice if they did not respond. Before answering the questionnaire, the respondents were informed that all answers would be treated anonymized and confidentially, and that the data would be incorporated in a research database for future research. Further, the participants were told that they would be asked about gender, age, occupation and so forth. Thus, the survey followed ethical guidelines that are required.

The respondents consisted of 46,4 % women, and 53,6 % men. It was 9,6 % participants under 30 years old, 23 % were 30- 39 years old, 26,9 % were 30 – 49 years old, 25,2 % were 50 – 59 and 15,3 % of the respondents were 60 years old or more. This means that the majority of the respondents were 40 to 49 years old.

Measures

To test my hypotheses, I used the scales that measure empowering leadership, work to family conflict and work to family facilitation, social support from supervisor and job

autonomy. The dependent variables were work-family conflict and work-family facilitation. The independent variable was empowering leadership, and the interaction variables were social support from leader and job autonomy.

Empowering leadership. The questions about empowering leadership was measured using a scale developed by Dallner et al. (2000). A high score indicates that employees perceive management to be empowering. The questionnaire had three questions that described empowering leadership. One of the questions was: "My immediate superior contributes to the development of my skills". The answer opinions were presented with a six point Likert scale that raged from 1 (*strongly disagree*) to 5 (*strongly agree*). It was also possible to answer *Not applicable.*

Work to family conflict and work to family facilitation. The way work impacts family life was measured with questions based on the questionnaire by Wayne, Musisca, and Fleeson (2004). The scale was made suitable for use in Norway by Innstrand, Langballe, Falkum, Espnes, and Aasland (2009). Four items were employed about work-family facilitation, and another four questions about work-family conflict in the questionnaire. Each were using a five point Likert response format that ranged from 1 (*strongly disagree)* to 5 (*strongly agree*). An example of a question about work-family facilitation was: "The things I do at work help me deal with personal and practical issues at home". An example of a work-family conflict question was: "My job reduces the effort I can give to activities at home".

Social support from supervisor. The extent to which employees feels a degree of support from her/his supervisor were measured by three items with a five point Likert scale (Pejtersen, Kristensen, Borg, & Bjorner, 2010). The items were: "My immediate superior listens to me when I have problems at work", "My immediate superior gives me the help and support I need from her/him" and "My immediate superior talks with me about how well I carry out my work".

Job autonomy. The extent to which employees have the freedom to decide how their work should be carried out, was measured using a questionnaire made by Näswall et al. (2010). Four items were used to measure job autonomy in the questionnaire using a five point Likert response format. These items also had the alternative to choose "not relevant". The items were as follows: "I have a sufficient degree of influence in my work", I can make my own decisions on how to organize my work", "There is room for me to take my own initiatives at work" and "I manage my work situation in the direction I want".

Control variables. This study included two control variables: gender and age. Gender was a nominal variable consisting of the categories male and female. Age was a continuous

variable. Previous studies have shown that working fathers reports long working hours, involvement in the household responsibilities as well as a work culture that were less supportive of their family life than working mothers (Hill, 2005). However, working fathers reported less WFC than working mothers. This indicates that there could be a gender difference in the experience of work-family balance (Hill, 2005). This is consistent with results from Innstrand et al. (2009) that showed gender differences in work-family conflict and facilitation. In this study the demographic variables, gender and age are therefore included as control variables.

Statistical analysis

To test the hypotheses, I used the Partial least squares SEM analysis (PLS- SEM). There are two types of SEM analyses, covariance based SEM (CB-SEM) that are primarily used to confirm or reject theories, and PLS- SEM (Hair Jr, Hult, Ringle, & Sarstedt, 2016). Compared to CB- SEM, which is more widespread, PLS- SEM provides fewer identification issues, and is more robust. The reason why I chose to use PLS- SEM, was because it is the preferred method to use if the research question is prediction and not confirmation of structural relationships (Hair, Ringle, & Sarstedt, 2011). One of the benefits is that it estimates everything simultaneously (Zhao, Lynch, & Chen, 2010), and you have the possibility to have more than one dependent variables (Haenlein & Kaplan, 2004).

The statistical program SPSS was used to prepare the data, and to transform missing values (IBM, 2016). The data contained 1572 missing values. To measure the effects of missing values a Little´s Missing Completely at Random (MCR) test (Little, 1988), was conducted. The Expectation Maximization (EM) means was significant ($p =<.05$). This indicates that the missing values could be not at random. Furthermore, nine of the participants with the most missing values were removed to test if the EM means would change. The results showed that this did not affect the significance. As a result, the missing values were replaced with the series mean. This is only recommended if there are less than 5 % missing values of each indicator (Hair Jr, Hult, Ringle, & Sarstedt, 2014), which was the case in this study.

Then the reliability and validity of the study were tested. Reliability was investigated through indicator reliability and internal consistency reliability, whereas validity was examined through convergent validity and discriminant validity. Further, a PLS– SEM analysis was conducted to test the effects of empowering leadership, social support from supervisor and job autonomy had on work-family conflict and work- family facilitation. The

statistical program XLSTAT was used to perform the PLS- SEM analysis (Addinsoft, 2017). The control variables age and sex were also tested. A moderated PLS- SEM was conducted to test if job autonomy and social support from supervisor showed a moderating effect on the relationship between empowering leadership and work-family conflict and facilitation. A moderator effect occurs when a moderator changes the direction or strength of a relationship between two constructs (Hair Jr et al., 2014).

Results

Descriptive statistics

The mean values for the variables empowering leadership, job autonomy, and social support from supervisor lies roughly around the mean score. While the variables work-family conflict (WFC) and work-family facilitation (WFF) lie roughly beneath the mean score. This indicates that most participants have answered disagree (=2) or neither/nor (=3) on questions about WFC and WFF. The variable social support from supervisor (*M*= 4.08) shows the largest mean, while the variable WFF (*M* = 2.70) shows the lowest mean (see Appendix A).

PLS- SEM model

PLS- SEM analyses consist of two measurement models. The first step is to analyse the measurement model. The second step is to analyse the structural model.

Measurement model. The measurement model, also called the outer model, describes the relationships between the constructs and the indicator variables (Hair Jr et al., 2016). Reliability is measured through indicator reliability and internal consistency reliability, while validity is measured through convergent validity and discriminant validity.

Reliability. The most common way of measuring internal consistency reliability is by measuring Cronbach's alpha. But Cronbach´s alpha generally tends to underestimate the internal consistency reliability (Hair Jr et al., 2014). Thus, it is more appropriate to use a different measure of internal consistency called composite reliability (Hair Jr et al., 2014), also called Dillon- Goldstein's rho (Vinzi, Trinchera, & Amato, 2010). The value varies between 0 and 1. A higher value indicate a higher level of reliability (Hair Jr et al., 2014) . The internal consistency is met if the value of D.G rho is over 0.70 (Van Phuc, Binh, & Quyen, 2017; Vinzi et al., 2010). Hair Jr et al. (2014) argue that values above 0.90 are unlikely to be a valid measure because it can indicate that all indicator variables are measuring the same phenomenon. Table 1 shows that the variables job autonomy, social support from supervisor, WFC and WFF shows an acceptable value of D. G rho. This indicates that they have a good internal consistency, and that the measure reflects the construct that it is measuring (Field, 2013). Empowering leadership showed a value of over 0.90 which could mean that it has a low internal consistency (Hair Jr et al., 2014). However, a number of studies describe that a D. G rho value over 0.70 is acceptable (Van Phuc et al., 2017; Vinzi et al., 2010). As shown in Table 1, all the items were above 0.70. Therefore, it is reasonable to assume that internal consistency is met.

Indicator reliability represents how much of the variation in an item that is explained by the construct. It can be evaluated by the indicators outer loadings, and should be higher than 0.70. (Hair Jr et al., 2014). The results from Table 1 shows that all indicators except from one, showed outer loadings over 0.70. Item number three of WFF exhibited a loading of 0.33. However, the item was not removed because it did not have a large effect on the composite reliability on the WFF construct which is above the suggested threshold value. Furthermore, the item is considered relevant for the work-family facilitation scale.

Validity. Convergent validity measures the extent to which a measure correlates positively with other measures of the same construct. A common measure of convergent validity, is average variance extracted (AVE). AVE should be over 0.50 to be appropriate. A value above .50 indicates that the construct explains more than half of the variance of its indicators (Hair Jr et al., 2014). As shown in Table 1, all of the indicators show a value above .50 except from WFF which has a value of .49. Because the value is very close to the limit, this is not considered to be problem, therefore none of the indicators were removed.

Discriminant validity measures if each of the constructs are different from other constructs (Hair Jr et al., 2014). The dominant approaches of measuring discriminant validity for PLS- SEM analysis is Fornell- Larcker criterion and examination of cross- loadings (Henseler, Ringle, & Sarstedt, 2015). The Fornell- Larcker criterion compares the square root of the AVE values with the latent variable correlations. Specifically, the constructs the square root of all constructs AVE should be higher than its highest correlation with other constructs. This is because a construct should share more variance with its associated indicators than with any other construct (Hair Jr et al., 2014). This study uses Fornell- Larckers criterion to measure discriminant validity. Based on the results in Table 2 this criterion is met (AVE>squared correlations).

In sum, not all of the statistical assumptions of the PLS- SEM analysis was met (e.g. indicator reliability of .33 on one of the items). One of the indicators of WFF was below the acceptable limit of the indicator reliability measure. This is probably the reason Convergent validity was not met for this construct as well. However, the item with the low outer loading in WFF was kept in the measure because it was considered relevant for the WFF scale. Furthermore, the assumptions of internal consistency reliability and discriminant validity was met (see Table 1).

Table 1.

Measurement model 1

Variables	Loading	D.G rho	AVE
Empowering leadership		.93	.82
Item 1: My immediate superior encourages me to participate in important decisions.	.92		
Item 2: My immediate superior encourages me to speak up, when I have a different opinion.	.89		
Item 3: My immediate superior contributes to the development of my skills.	.90		
Job autonomy		.87	.61
Item 1: I have a sufficient degree of influence in my work.	.82		
Item 2: I can make my own decisions on how to organize my work.	.76		
Item 3: There is room for me to take my own initiatives at work.	.75		
Item 4: I manage my work situation in the direction I want.	.81		
Social support from supervisor		.91	.78
Item 1: My immediate superior listens when I have problems at work.	.88		
Item 2: My immediate superior gives me the help and support I need from her/him.	.91		
Item 3: My immediate superior talks with me about how well I carry out my work.	.85		
Work-family conflict		.88	.64
Item 1: My job reduces the effort I can give to activities at home.	.74		
Item 2: Stress at work makes me irritable at home.	.83		
Item 3: My job makes me feel too tired to do the things that need attention at home.	.82		
Item 4: Job worries or problems distract me when I am at home.	.82		
Work-family facilitation		.78	.49
Item 1: The things I do at work help me deal with personal and practical issues at home.	.79		
Item 2: The things I do at work makes me a more interesting person at home.	.83		
Item 3: Having a good day at work makes me a better companion when I get home.	.33		
Item 4: The skills I use at work are useful for things I have to do at home.	.73		

Table 2.

Discriminant Validity test of Study Variables

Variables	1	2	3	4	5
1. Empowering leadership	1				
2. Job autonomy	.22	1			
3. Social support from supervisor	.67	.20	1		
4. Work-family conflict	.06	.09	.08	1	
5. Work-family facilitation	.08	.10	.07	.06	1
Mean Communalities (AVE)	.82	.61	.78	.64	.49

Based on the measurement model, it is reasonable to assume that the constructs used in this analysis are reliable and valid. Now that the measurement model is evaluated, the next stage is to evaluate the structural model.

Structural model. The structural model shows the relationships between the constructs (Hair Jr et al., 2016). As predicted by hypothesis 1, the results indicated that empowering leadership had a positive relationship with WFF ($\beta = .12$, p<.001) (see Table 3). Hypothesis 2 predicted that empowering leadership would have a negative relationship with WFC. However, empowering leadership was not significantly related to WFC.

As predicted by hypothesis 3a and 3b, both job autonomy and social support showed a positive relationship with WFF. The results showed that job autonomy had the strongest effect on WFF ($\beta = .23$, p<.001) while social support from supervisor had the lowest effect on WFF ($\beta = .07$, p <.001). Moreover, hypothesis 4a predicted a negative relationship between job autonomy and WFC, and hypothesis 4b predicted a negative relationship between social support and WFC. Both social support from supervisor ($\beta = -.20$, p<.001) and Job autonomy ($\beta = -.23$, p <.001) showed a small but significant effect on WFC. Therefore, hypothesis 4a and 4b were supported.

Further, PLS- SEM does not assume that the data are normally distributed. Therefore, it is not suitable to use the parametric significance tests used in regression analysis (Hair Jr et al., 2014). Instead, PLS- SEM relies on a bootstrap procedure to test statistical inferences (Streukens & Leroi-Werelds, 2016). Bootstrapping estimates the shape of the sampling distribution and show how much the β- value varies in the sampling data (Field, 2013). If a

bootstrap confidence interval does not include zero, we can assume a significant effect (Hair Jr et al., 2014). In Table 3 the confidence intervals of the β- values show that all coefficients except from one does not include zero. Therefore, we can assume that all the coefficients are significant, except from the effect of empowering leadership on WFC.

Furthermore, the models' predictive accuracy was measured through R^2 values, as recommended by Hair Jr et al. (2014). It represents the amount of variance in the endogenous constructs that is described by the corresponding model (Hair Jr et al., 2014). R^2 values of 0.75, 0.50 and 0.25 can be described as respectively substantial, moderate, or weak (Hair et al., 2011). As shown in Table 3, the model explains 14 % of the outcome of WFC, and 13 % of WFF. Consequently, the model explains a weak amount of variance in the endogenous constructs.

Table 3.

Main Effects of Study Variables on Work-family Conflict and Facilitation

Variables	β	Bootstrap	
		Lower bound (95%)	Upper bound (95%)
Work-family conflict			
Empowering leadership	-.02	- .02	.05
Social support from supervisor	-.20**	-.24	-.16
Autonomy	-.23**	-.25	-.19
Gender	-.05**	-.06	-.03
Age	-.12**	-.14	-.10
R^2	.14		
Work-family facilitation			
Empowering leadership	.12**	.08	.15
Social support from supervisor	.07**	.04	.10
Autonomy	.23**	.21	.26
Gender	-.07**	-.09	-.06
Age	.05**	.03	.07
R^2	.13		

Note. **$p < .001$

Moderated effects. The results of the structural models' interaction effects are shown in Table 4. Hypothesis 5 predicted a positive moderating effect of social support from supervisor and job autonomy on the relationship between empowering leadership and work-family interaction. The results show that social support from supervisor negatively moderated the positive relationship between empowering leadership and WFF (β = -.03, p<.001). Furthermore, job autonomy did not show a significant moderation effect. Therefore, hypothesis 5 was not supported. Moreover, social support showed a positive moderating effect on the negative relationship between empowering leadership and WFC (β = .04, p<.001). Job autonomy negatively moderated the negative effect of empowering leadership on WFC (β = -.02, p<.05). Hypothesis 6 is therefore partially supported.

Table 4.

Interaction Effects on Work-Family facilitation and Conflict

Variables	β	Bootstrap	
		Lower bound (95%)	Upper bound (95%)
Work-family conflict			
Empowering leadership*social support from supervisor	.04**	.02	.07
Empowering leadership*autonomy	-.02*	-.04	.00
Work-family facilitation			
Empowering leadership* social support from supervisor	-.03**	-.06	-.01
Empowering leadership*autonomy	.01	-.03	.04

Note. **p< .001, *p<.05

Discussion

The overarching hypothesis for this study was that empowering leadership affect employees work-family interactions even with controls for age and gender. Furthermore, it was assumed that job autonomy and social support from supervisor would moderate these relationships. As predicted, the results show that empowering leadership had a significant positive relationship with WFF. However, empowering leadership did not show a significant relationship with WFC. As predicted in hypothesis 3a and 3b, both job autonomy and social support from supervisor showed a positive significant relationship with WFF. This is consistent with other studies (Demerouti & Geurts, 2004; Grzywacz & Butler, 2005; Innstrand et al., 2010; Voydanoff, 2004). The results can be explained by the work-family enrichment theory, in that resources gained at the workplace can have positive effects on the home domain (Greenhaus & Powell, 2006).

Furthermore, it was found support for hypothesis 4a and 4b, which postulated that social support from supervisor and job autonomy would have a negative relationship with WFC. Consequently, when employees get social support from their supervisor or have autonomy in their workday, they are less likely to experience a conflict between their work domain and their family domain. This have been observed in other studies as well (Innstrand et al., 2010; Kossek et al., 2011). The results can be explained by research showing that social support from supervisor give employees psychological resources that can be beneficial when it comes to reduction of strain (Bakker & Demerouti, 2007; Kossek et al., 2011).

Additionally, the results showed that job autonomy buffered the effect of empowering leadership on WFC, while social support from supervisor increased the effects. Furthermore, social support from supervisor showed a negative moderating effect on the positive relationship between empowering leadership and WFF. Interestingly enough, job autonomy did not show a moderating effect on the relationship between empowering leadership and WFF . Further in the discussion, I will discuss the main findings of the study and possible causes based on theories and earlier studies. Furthermore, the methodological strengths and weaknesses will be discussed. Finally, I will discuss theoretical and practical implications of this study.

The effects of empowering leadership

One of the main findings of this study was that empowering leadership had a positive effect on WFF. However, the effect empowering leadership had on WFF was small ($\beta = .12$). This indicates that there are other aspects of the work domain that also have an impact on

WFF. Even though the effect was small, the results indicate that having an empowering leader at work can make participation at home easier for employees in the higher education sector. In a similar vein, research shows that increased possibilities for development can have a positive impact on the family domain (Bakker & Geurts, 2004). Developmental gains have been described as one of the components of facilitation (Carlson et al., 2006). Considering that empowering leadership may be described as a leadership style that provides employees with opportunities to develop their abilities and skills (Tuckey et al., 2012), it is possible that this leadership style increases employees' developmental gains. This might explain why empowering leadership had a positive relation to WFF.

The results support the assumption that empowering leadership can lead to a transfer of resources from the work domain to the home domain (Greenhaus & Powell, 2006). As far as I know, this is the first study to test the effects of empowering leadership on work-family facilitation. The findings agree with the contention from the work-family enrichment theory, that resources gained in role A, can result in higher performance in Role A, followed by a higher performance in Role B (Greenhaus & Powell, 2006).

The findings can be also explained by the job demands- resources model (Bakker & Demerouti, 2007) that postulates that job resources can lead to positive outcomes. As described earlier, Demerouti et al. (2001) describe how job resources help employees to reach goals and develop themselves personally in the job. Empowering leaders may contribute to a motivational process among followers. This may explain why this leadership style can increase WFF. Furthermore, it has been found that empowering leadership is associated with creativity (Zhang & Bartol, 2010), knowledge sharing behaviour (Xue et al., 2011), job satisfaction (Kim, 2002; Lee et al., 2006) and engagement in followers (Tuckey et al., 2012). Job resources have been described as aspects of employees' workday that affect their personal growth and development (Demerouti et al., 2001). With this information and the fact that empowering leadership showed an effect on WFF, the analyses suggest that empowering leadership can be described as a job resource that has beneficial effects on employees' work.

Hypothesis 2 suggested that empowering leadership would have a negative relationship with WFC. However, as shown in Table 3, the results did not show support for the hypothesis, because empowering leadership did not show a significant relationship with WFC. Research indicates that job demands increase the likelihood of WFC to occur in the workplace (Bakker et al., 2008). Based on the JD-R model that postulated that job resources can reduce job demands (Demerouti et al., 2001), I assumed that empowering leadership would have a negative effect on WFC.

Studies show that certain kinds of job resources, such as job satisfaction (Armstrong et al., 2015; Lambert et al., 2006) can reduce WFC. Bakker and Demerouti (2007) argued that job resources can buffer job strain if they are present in a sufficient degree. Similarly, Arnold, Arad, Rhoades, and Drasgow (2000) describe that a high amount of job demands, can be managed effectively if employees are managed with abundant job resources. Employees in the higher education sector experience increased stress and (Bell et al., 2012) time pressure (Egeland & Bergene, 2012). Additionally, academics work long hours beyond what is recommended (Egeland & Bergene, 2012). WFC have been found to be higher among those who work long hours, and have a high degree of autonomy in their workday (Eby et al., 2005). Thus, empowering leadership alone may not include a sufficient amount of resources to reduce the amount of job demands that employees experience in this sector. This could also be the explanation why the results showed a positive moderating effect of social support on the relationship between empowering leadership and WFC. When social support from supervisor were present, the negative effect of empowering leadership on WFC increased. These moderating effects, will be discussed in more detail next.

Moderating effects

In addition to investigating the direct effects of empowering leadership on WFF, the study also investigated the moderating effects of job autonomy and social support. The analysis showed that social support from supervisor showed a moderating effect between empowering leadership and WFF. The surprising thing was that the moderation effect was negative. Therefore, social support from supervisor seems to decrease the positive effects of empowering leadership on WFF (Hair Jr et al., 2014). More specifically, the relationship between empowering leadership and WFF is weaker for employees with a high degree of social support from supervisor than those with a low degree of social support from supervisor. Thus, if supervisors show a general concern for their employees, empowering leadership might have a lower impact on employees WFF. Nevertheless, it is important to point out that the effects between empowering leadership and WFF are still there, even though it decreases. However, the effect was very small ($\beta = -.03$) and based on cross- sectional data. This causes uncertainties of the findings.

It is noteworthy that job autonomy was unable to moderate the relationship between empowering leadership and WFF. Consequently, hypothesis 5 was not supported. This means that job autonomy does not affect the relationship between empowering leadership and WFF, in contrast to what the hypothesis suggested. More specifically, we can assume that

empowering leadership has a constant effect on WFF without significant changes across different levels of job autonomy (Hair Jr et al., 2014).

One of the main results of this study is that empowering leadership showed a positive effect on WFF. However, this effect seems to decrease when the level of social support increase. This may be explained by a model called the Vitamin Model developed by Warr in 1987 (as cited in Saksvik & Christensen, 2015, p. 62). The Vitamin model holds that job characteristics that affect well- being can be categorized into nine categories described as different types of "vitamins". These vitamins are a metaphor described as job characteristics that improve workers' health, but beyond a particular level of intake. When individuals reach a certain level of vitamins, the effect will diminish the improvement of health. Additionally, the model describes that increased intake of certain types of vitamins may be harmful when taken in large amounts (De Jonge & Schaufeli, 1998). Based on this model, one can assume that empowering leadership may lead to a certain level of vitamins where increased intake of other vitamins (e.g. social support) may lead to a lower effect of empowering leadership on WFF.

As the JD-R model contends, job resources and job demands can affect employees well- being at work (Schaufeli & Taris, 2014). Employees who experience job demands such as time pressure and strain can experience a conflict between their work and home domains (Voydanoff, 2004). Job resources can motivate employees' willingness to spend extra effort at work, and therefore help them reduce job demands (Crawford et al., 2010; Schaufeli & Taris, 2014). Consequently, this study assumed that social support and job autonomy would positively moderate the negative relationship between empowering leadership and WFC. The answer to the question "Does job autonomy and social support from supervisor moderate the relationship between empowering leadership and WFC?", seems to be yes. However, the results indicate that only social support from supervisor positively increased the negative effects of empowering leadership on WFC. Job autonomy showed a negative moderating effect on the relationship between empowering leadership. Thus, when employees have a higher degree of job autonomy, empowering leadership will have a lower effect on WFC. Thus, hypothesis 6 is only partially supported.

As argued by Kossek et al. (2011) employees with a higher degree of social support from their supervisor get more resources that can work as a buffer to strain. This may explain why the negative effect of empowering leadership on WFC is higher for employees who gets social support from their supervisor. The results are congruent with the precepts of the JD-R model (Bakker et al., 2003; Bakker & Demerouti, 2007; Demerouti et al., 2001). A key

assumption in the JD- R model is that resources can buffer the negative effects of stress (Kossek et al., 2011). WFC is a situation where the demands of the work role clear employees of resources, which makes it harder to meet the requirements of the family- role (Lapierre & Allen, 2006). Individuals with access to social support get extra job resources that may buffer the negative effects of strain (Kossek et al., 2011). Giving employees support may increase the negative influence of empowering leadership on WFC, because supervisors' appreciation and support add additionally job resources that might buffer the demands associated with WFC. This also agrees with the contention by Tuckey et al. (2012) that empowering leadership can help employees use the resources they have available to cope with job demands. However, the results indicate that employees with a sufficient amount of resources such as social support from supervisor and an empowering leader can manage their work and family roles more effectively.

Limitations and future research

This study has several limitations, which offer possibilities for future research. First, the participants were measured at only one occasion. This practice makes it impossible to determine the direction of causality in the study. Therefore, conducting longitudinal studies in future research will be useful in establishing a direction of causality. Second, the relationships where tested though web- based and self- reported data. Self- reported questionnaires can have several limitations, such as misunderstandings of questions, social desirability and misunderstandings of used concepts (Schwarz, 1999). Thus, future studies could collect data from multiple sources. However, research show that anonymous- and web- based questionnaires report less social desirability than questionnaires done with a pen and paper (Joinson, 1999).

One of the items of WFF had a lower indicator reliability than what is recommended. However, even though it was kept in this study, future studies should consider using a scale that shows higher indicator reliability on all items. This could lead to a higher explanation of the construct. Additionally, the internal consistency reliability of the result is somewhat questionable. This concern is mostly relevant for the reliability of the empowering leadership variable. It is questionable because the value of D-G rho was over 0.90, which is above the recommended value according to Hair Jr et al. (2014). A value above 0.90 is not desirable because it could mean that all of the indicators of the empowering leadership variable are measuring the same phenomenon. Thus, the item may have low internal consistency reliability. This can be taken into consideration in future studies. However, the questions of

the study were all validated questions. Additionally, the study consisted of a large number of participants.

It is also noteworthy that the interactions coefficients effects of this study showed very low scores. Thus, the practical implications of this study may be restricted. Nevertheless, the interaction effects were significant, and are interesting in a theoretical perspective. This is because they contribute to knowledge about the combination of different work conditions that may have an effect on work-family interactions among academics.

One of the strengths of this study is the use of PLS- SEM. It is a useful tool when measuring complex models (Bartram & Casimir, 2007), and it is not sensitive to normality assumptions (Voola & O'Cass, 2010). Consequently, it is suitable for large data which often are non- normally distributed (Voola & O'Cass, 2010). It is also a suitable method when measuring prediction of structural relationships (Hair et al., 2011). However, PLS- SEM has been criticised for PLS- SEM bias (Hair et al., 2011). This bias can occur because the PLS- SEM algorithm calculates construct scores as accurate linear combinations of the associated observed indicator variables (Hair Jr et al., 2014). This can lead to underestimated true path model relationships, and overestimated parameters for the measurement models. However, this is often in limited relevance in most empirical settings, because the PLS- SEM bias often occurs at low levels (Reinartz, Haenlein, & Henseler, 2009).

Future research comparing position in the higher education sector may reveal differences in the way respondents experience work- home facilitation and conflict. It would be interesting to see if there are any differences of the effects of empowering leadership on work-family interactions between academic and administrative employees in the higher education sector. This may give implications for how organizations in this sector can give their employees a better work-family interaction in the future. Thus, if I conducted a similar study later, I would measure group differences between academic and administrative employees. Although there were several reliable findings on the effects of resources on WFF and WFC in this study, the mechanisms that can help to increase WFF and reduce WFC require further exploration. The model explained 14 % of variance in WFC and 13 % of variance in WFF. This is considered as a weak effect (Hair et al., 2011). Consequently, more research is needed to investigate what variables in the psychosocial work environment affect employees WFF and WFC in the higher education sector.

Implications

      Theoretical implications. The role empowering leadership plays in the positive spill over between work and home is one of the main contributions in this study. This is the first study to suggest that empowering leadership could affect WFF. Research on what variables affect employees WFF is important because WFF can increase employees functioning in the home domain as a result of resources gained at work (Grzywacz & Butler, 2005; Wayne et al., 2007). Additionally, the findings of this study make contributions to the literature by demonstrating that empowering leadership can reduce employees WFC, if they also have access to social support from supervisor. The majority of research on WFC has focused on identifying the outcomes and antecedents of the same (Mortazavi, Pedhiwala, Shafiro, & Hammer, 2009). This study shows what variables might have a negative relationship with WFC among employees in the higher education sector.

      This research has shown important theoretical implications in several ways. First, it contributed to the literature by studying academics opportunity to balance work and personal life. Secondly, it provides support for the assumption that empowering leadership can increase work-family facilitation among employees in the higher education sector. Thirdly, the results indicate that empowering leadership can work as a job resource that can facilitate employees home-life. Furthermore, the results give theoretical support to the work-family enrichment theory. The results are important because they contribute to increased knowledge about how employees in the higher education sector can get benefits from their workday, that will make it easier for them to balance work and family lives. This is beneficial because they work in an increasingly demanding work environment (Houston et al., 2006).

      Since the findings of this study showed that empowering leadership does not have a direct effect on WFC, the effects of other aspects of the psycho social work environment should be measured on WFC. However, this study found that leaders play a role in reducing WFC among employees in this sector is they also get social support from supervisor. Thus, it could be interesting to look closer on other aspects of leadership, and their impacts on WFC.

      Practical implications. The practical implications on the findings of this study are of interest to leaders on the higher education sector. Employees in this sector are often faced with job demands (Bell et al., 2012; Egeland & Bergene, 2012). This study suggests that employees can befit from leaders that focus on empowerment of their employees. Moreover, the results suggests that the effect will be stronger if they at the same time get social support from their supervisor. The findings of this study suggest that leaders who focus on empowerment of their employees, can make employees life at home easier as a result of

resources gained at work. In order to achieve this, leaders in academia should focus on giving their employees more responsibility by encouraging them to participate in decisions, share information and implement common goals (Bass & Riggio, 2006; Menon, 2001; Tuckey et al., 2012).

The results of this study show the importance of social support from supervisors in order to reduce WFC. Major and Lauzun (2010) comes with five recommendations of how leaders can behave supportively in order to reduce WFC. Recommendation 1) is to create a supportive work-family organizational culture, 2) collect information about how the job is likely to contribute to work interference with family through a job analysis, 3) leadership training on how to develop a better leader- member exchange with employees, 4) strengthen and inform a manager to negotiate the best type of work-family ideal best suited to addressing employees work interference with family. The last advice focuses on increasing leaders' motivation to address work interference with family through assessment of performance.

Conclusion

The goal of this study was to investigate whether empowering leadership would have an effect on work-family interactions among employees in higher education. Additionally, the moderating effects of social support and job autonomy were tested. The results showed that three variables had a positive effect on work-family facilitation: empowering leadership, job autonomy and social support. Moreover, social support and job autonomy showed a negative relationship with work-family conflict. Social support increased the negative effects of empowering leadership on work-family conflict, and reduced the positive effects of empowering leadership on work-family facilitation. Finally, job autonomy decreased the negative effects of empowering leadership on work-family conflict. The findings indicate that empowering leadership is beneficial in order to increase employees work-family facilitation. Future studies should investigate group differences between academics and administrative employees in the higher education sector. The study also suggests several areas that can be improved in research on the same filed of interest.

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Appendix A- Descriptive Statistics

Descriptive Statistics of Study Variables

Variables ($n = 12159$)	Min	Max	*M*	*SD*
EL 1: My immediate superior encourages me to participate in important decisions.	1	6	3.87	1.12
EL 2: My immediate superior encourages me to speak up, when I have a different opinion.	1	6	3.82	1.10
EL 3: My immediate superior contributes to the development of my skills.	1	6	3.82	1.11
JA 1: I have a sufficient degree of influence in my work.	1	5	3.77	0.89
JA 2: I can make my own decisions on how to organize my work.	1	5	4.01	0.76
JA 3: There is room for me to take my own initiatives at work.	1	5	4.13	0.74
JA 4: I manage my work situation in the direction I want.	1	5	3.53	0.85
SSFS 1: My immediate superior listens when I have problems at work.	1	6	4.08	1.05
SSFS 2: My immediate superior gives me the help and support I need from her/him.	1	6	3.89	1.09
SSFS 3: My immediate superior talks with me about how well I carry out my work.	1	6	3.54	1.20
WFC 1: My job reduces the effort I can give to activities at home.	1	5	3.15	1.08
WFC 2: Stress at work makes me irritable at home.	1	5	2.85	1.08
WFC 3: My job makes me feel too tired to do the things that need attention at home.	1	5	2.83	1.02
WFC 4: Job worries or problems distract me when I am at home.	1	5	3.06	1.15
WFF 1: The things I do at work help me deal with personal and practical issues at home.	1	5	2.70	0.93
WFF 2: The things I do at work make me a more interesting person at home.	1	5	3.08	0.95
WFF 3: Having a good day at work makes me a better companion when I get home.	1	5	3.88	0.73
WFF 4: The skills I use at work are useful for things I have to do at home.	1	5	3.08	0.94

Note: EL: empowering leadership, JA: job autonomy, SSFS: social support from supervisor, WFC: work- family conflict, WFF: work- family facilitation.

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Appendix B- KIWEST Questionnaire

ARK
Arbeidsmiljø- og klimaundersøkelser

Velkommen til ARK-KIWEST - arbeidsmiljøkartlegging for universitets- og høgskolesektoren

Vennligst besvar alle spørsmålene i én økt. Bryter du av underveis, må du begynne på nytt. Vi kommer til å sende ut to påminnelser før datainnsamlingen avsluttes.

Du samtykker i å delta i undersøkelsen ved å svare på spørsmålene og sende inn skjemaet ved å klikke på «Ferdig» på siste side. Ønsker du å trekke deg fra undersøkelsen etter at du har sendt inn svarene, sender du en e-post til ark-kontakt@ntnu.no. Vennligst oppgi e-postadressen der du fikk tilsendt invitasjonen til å delta i ARK-undersøkelsen. To uker etter svarfristen fjernes e-postadressene fra datamaterialet. Deretter er det ikke lenger mulig å trekke seg fra undersøkelsen.

Norges teknisk-naturvitenskapelige universitet (NTNU) er ansvarlig for gjennomføring av undersøkelsen og oppbevaring av data.

Neste

Mellommenneskelige forhold

Hvor enig eller uenig er du i følgende utsagn om forholdene ved din enhet, ?

1.

Navn på egen enhet inn her

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5
Jeg opplever at jeg er en del av et fellesskap på min enhet	○	○	○	○	○
Det hender at noen ved min enhet hjelper meg i en vanskelig situasjon, men ikke på en saklig måte	○	○	○	○	○
Min jobb blir mer komplisert på grunn av maktkamp og revirtenkning på enheten	○	○	○	○	○
Klimaet på min enhet er stivbeint og regelstyrt	○	○	○	○	○
Det hender at noen ved min enhet hjelper meg i en vanskelig situasjon, men signaliserer at dette burde jeg klart selv	○	○	○	○	○
Det hender at noen ved min enhet hjelper meg i en vanskelig situasjon, men forventer evig takknemlighet	○	○	○	○	○
Jeg har store muligheter til å forbedre mine personlige prestasjoner i denne enheten	○	○	○	○	○
Klimaet på min enhet er mistroisk og mistenksomt	○	○	○	○	○
Det en god stemning mellom meg og mine kolleger	○	○	○	○	○
Det er et godt fellesskap mellom kollegene på enheten min	○	○	○	○	○
Det hender at noen ved min enhet hjelper meg i en vanskelig situasjon, men gjør dette motvillig	○	○	○	○	○
Klimaet på min enhet er konkurranseorientert	○	○	○	○	○
Det hender at noen ved min enhet hjelper meg i en vanskelig situasjon, men med bebreidende tone eller blikk	○	○	○	○	○
Intriger på min enhet forsurer arbeidsmiljøet	○	○	○	○	○
Det hender at noen ved min enhet hjelper meg i en vanskelig situasjon, men kombinerer dette med bebreidelser	○	○	○	○	○
Klimaet på min enhet er oppmuntrende og støttende	○	○	○	○	○

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5
Det er mye spenninger på enheten på grunn av prestisje og personlige konflikter	○	○	○	○	○
Klimaet på min enhet er avslappet og behagelig	○	○	○	○	○

2.

Om et utsagn ikke er relevant for din situasjon eller enhet, krysser du av for «Ikke aktuelt».

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5	Ikke aktuelt
Menn og kvinner blir behandlet som likeverdige ved min enhet	○	○	○	○	○	○
Det er rom for ansatte med forskjellig etnisk bakgrunn og religion	○	○	○	○	○	○
Enheten vår står samlet i sine anstrengelser for å nå sine prestasjonsmål	○	○	○	○	○	○
Det er rom for eldre medarbeidere ved min enhet	○	○	○	○	○	○
Jeg er fornøyd med min enhets innsats for å nå målene	○	○	○	○	○	○
Det er rom for ansatte med forskjellige sykdommer eller nedsatt funksjonsevne ved min enhet	○	○	○	○	○	○

Tilbake   Neste

Jobbkrav

Hvor enig eller uenig er du i følgende utsagn?

3.

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5
Jeg vet når en arbeidsoppgave er fullført	○	○	○	○	○
Jeg får ofte oppgaver uten tilstrekkelige hjelpemidler og ressurser til å fullføre dem	○	○	○	○	○
Det stilles krav til meg om stadig å utvikle min kompetanse	○	○	○	○	○
Det skjer ganske ofte at jeg må jobbe under sterkt tidspress	○	○	○	○	○
Jeg kan selv avgjøre når mine arbeidsoppgaver er fullførte	○	○	○	○	○
Jeg mottar ofte motstridende forespørsler fra to eller flere personer	○	○	○	○	○
Jobben min inneholder oppgaver som er i strid med mine personlige verdier	○	○	○	○	○
Det er opp til meg å bedømme om jeg er ferdig med en arbeidsoppgave	○	○	○	○	○
Arbeidets karakter gjør at jeg må utvikle meg og tenke nytt hele tiden	○	○	○	○	○
Jeg har ofte for mye å gjøre på jobb	○	○	○	○	○
Jeg må gjøre ting jeg mener burde vært gjort annerledes	○	○	○	○	○
Jeg føler press om stadig å måtte lære noe nytt for å kunne klare mine arbeidsoppgaver	○	○	○	○	○
Jeg har tilstrekkelig med tid til gjøre det som forventes av meg i jobben min	○	○	○	○	○

Tilbake   Neste

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Arbeidsorganisasjon og jobbinnhold

Hvor enig eller uenig er du i følgende utsagn om din arbeidssituasjon og din enhet, ?

4. *Navn på egen enhet inn her*

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5
Det er klart og tydelig uttalt hva som forventes av meg i mitt arbeid	O	O	O	O	O
Min enhet utvikles hele tiden for å kunne møte de ansattes behov	O	O	O	O	O
Jeg må utføre arbeidsoppgaver som jeg mener bør gjøres av en annen	O	O	O	O	O
Jeg synes at målene for mitt arbeid er diffuse og uklare	O	O	O	O	O
Jeg har tilstrekkelig innflytelse i mitt arbeid	O	O	O	O	O
Min enhet er åpen og tilpasser seg til forandringer	O	O	O	O	O
Jeg kan selv bestemme hvordan jeg skal organisere arbeidet mitt	O	O	O	O	O
Jeg må utføre arbeidsoppgaver som setter meg i ubehagelige situasjoner	O	O	O	O	O
Jeg har en klar oppfatning om hvilke arbeidsoppgaver som inngår i mitt arbeidsområde	O	O	O	O	O
På min enhet er det ingen som hører på nye forslag og ideer	O	O	O	O	O
Jeg må utføre arbeidsoppgaver som jeg mener det er urettferdig at jeg skal gjøre	O	O	O	O	O
Min enhet er fleksibel og tilpasser seg hele tiden til nye ideer	O	O	O	O	O
Det finnes rom for at jeg kan ta egne initiativ i jobben min	O	O	O	O	O
Jeg må utføre arbeidsoppgaver som jeg mener krever mer av meg enn det som er rimelig	O	O	O	O	O
Min enhet streber heller etter å beholde status quo enn etter forandringer	O	O	O	O	O
Jeg styrer selv min arbeidssituasjon i den retningen jeg ønsker	O	O	O	O	O

5. *Om et utsagn ikke er relevant for din situasjon, krysser du av for «Ikke aktuelt».*

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5	Ikke aktuelt
Jeg får den administrative støtten jeg trenger til planlegging og gjennomføring av undervisning og eksamen	O	O	O	O	O	O
Jeg får den administrative støtten jeg trenger til min forskning	O	O	O	O	O	O
Jeg får den tekniske støtten jeg trenger til min forskning	O	O	O	O	O	O
Jeg får den støtten jeg trenger til internasjonalisering av min forskning	O	O	O	O	O	O

Tilbake   Neste

Ledelse

Hvor enig eller uenig er du i følgende utsagn om ledelse ved din enhet, ?

6.

Navn på egen enhet inn her

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5
Ledelsen ved min enhet er alltid pålitelig	○	○	○	○	○
Jeg kan stole på informasjon fra ledelsen ved min enhet	○	○	○	○	○
Jeg kan forvente at ledelsen ved min enhet behandler meg konsekvent og forutsigbart	○	○	○	○	○
Ledelsen ved min enhet skjuler viktig informasjon for de ansatte	○	○	○	○	○
Jeg blir behandlet rettferdig av ledelsen ved min enhet	○	○	○	○	○
Ledelsen ved min enhet opptrer alltid ærlig mot meg	○	○	○	○	○
Mitt arbeid blir anerkjent og verdsatt av ledelsen ved min enhet	○	○	○	○	○
Det er mulig for de ansatte ved min enhet å uttrykke sine oppfatninger	○	○	○	○	○
Jeg har full tillit til ledelsen ved min enhet	○	○	○	○	○
Jeg blir respektert av ledelsen ved min enhet	○	○	○	○	○
Ledelsen ved min enhet stoler på at medarbeiderne gjør en god jobb	○	○	○	○	○
Jeg er sikker på at jeg kan stole på ledelsen ved min enhet	○	○	○	○	○

7. «Din nærmeste leder» er den du har eller skal ha medarbeidersamtaler med.
Om et utsagn ikke er relevant for din situasjon eller enhet, krysser du av for «Ikke aktuelt».

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5	Ikke aktuelt
Min nærmeste leder bidrar til at jeg får utviklet mine ferdigheter	○	○	○	○	○	○
Min nærmeste leder oppmuntrer meg til å delta i viktige avgjørelser	○	○	○	○	○	○
Min nærmeste leder oppmuntrer meg til å si fra når jeg har en annen mening	○	○	○	○	○	○
Min nærmeste leder behandler de ansatte rettferdig	○	○	○	○	○	○
Min nærmeste leder snakker med meg om hvor godt jeg utfører arbeidet mitt	○	○	○	○	○	○
Min nærmeste leder lytter til meg når jeg har problemer med arbeidet	○	○	○	○	○	○
Min nærmeste leder fordeler arbeidsoppgaver rettferdig	○	○	○	○	○	○
Min nærmeste leder behandler de ansatte upartisk	○	○	○	○	○	○
Min nærmeste leder gir meg den hjelpen og støtten jeg trenger fra henne/ham	○	○	○	○	○	○

8. Disse utsagnene gjelder enheten over din egen i enhetshierarkiet, *Om et utsagn ikke er relevant for din situasjon eller enhet, krysser du av for «Ikke aktuelt».*

Navn på overliggende enhet inn her

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5	Ikke aktuelt
Jeg kan forvente at ledelsen ved overliggende enhet behandler meg konsekvent og forutsigbart	○	○	○	○	○	○
Ledelsen ved overliggende enhet er alltid pålitelig	○	○	○	○	○	○
Ledelsen ved overliggende enhet er alltid ærlig overfor meg	○	○	○	○	○	○

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Jeg er sikker på at jeg kan stole på ledelsen ved overliggende enhet	○	○	○	○	○ ○
Jeg har full tillit til ledelsen ved overliggende enhet	○	○	○	○	○ ○

Tilbake   Neste

Ditt forhold til jobben

Hvor enig eller uenig er du i følgende utsagn?

9.

	Svært uenig 1	Uenig 2	Verken /eller 3	Enig 4	Svært enig 5
Jeg forteller med glede om min arbeidsplass	○	○	○	○	○
Bekymringer eller problemer på jobben distraherer meg hjemme	○	○	○	○	○
Jeg føler meg motivert og engasjert i arbeidet mitt	○	○	○	○	○
Mine oppgaver på jobb gjør det lettere å takle personlige og praktiske problemer hjemme	○	○	○	○	○
Mine oppgaver på jobb gjør meg til en mer interessant person hjemme	○	○	○	○	○
Mine arbeidsoppgaver er meningsfylte	○	○	○	○	○
Jobben min gjør at jeg har mindre overskudd til aktiviteter hjemme	○	○	○	○	○
Jeg vil kunne anbefale en god venn å søke stilling på min arbeidsplass	○	○	○	○	○
Stress på jobben gjør meg irritabel hjemme	○	○	○	○	○
Jobben påvirker helsen min på en positiv måte	○	○	○	○	○
Ferdigheter jeg utvikler på jobb kommer til nytte hjemme	○	○	○	○	○
Jobben påvirker helsen min på en negativ måte	○	○	○	○	○
Å ha en god dag på jobb gjør meg lettere å være sammen med når jeg kommer hjem	○	○	○	○	○
Jeg opplever at min arbeidsplass har stor betydning for meg	○	○	○	○	○
Jobben gjør meg for trøtt til å gjøre ting som trenger min oppmerksomhet hjemme	○	○	○	○	○
Jeg føler at arbeidet jeg gjør er viktig	○	○	○	○	○

10. Hvor ofte opplever du følgende?

	(Nesten) aldri 1	Noen ganger 2	Ofte 3	(Nesten) alltid 4
Jeg er travel og konkurrerer ofte mot klokka	○	○	○	○
Jeg tar meg selv i å fortsette å arbeide etter at kollegene mine har gitt seg	○	○	○	○
Det er viktig for meg å arbeide hard/mye, selv når jeg ikke har glede av det jeg holder på med	○	○	○	○
Jeg er travel og har mange jern i ilden	○	○	○	○
Jeg føler at det er noe i meg som driver meg til å arbeide hardt/mye	○	○	○	○
Jeg bruker mer av fritiden min på jobben enn på familie, venner, hobbyer eller andre fritidsaktiviteter	○	○	○	○
Jeg føler meg forpliktet til å jobbe hardt/mye, selv når jeg ikke liker det	○	○	○	○
Jeg gjør gjerne to eller tre ting samtidig, som å ta en telefon samtidig som jeg spiser lunsj og skriver et notat	○	○	○	○
Jeg får skyldfølelse når jeg tar meg fri fra arbeidet	○	○	○	○
Jeg har vansker med å slappe av når jeg ikke arbeider	○	○	○	○

11.

	Aldri 0	Noen ganger i året el. sjeld-nere 1	En gang i måneden el. sjeld-nere 2	Noen ganger i måneden 3	En gang i uka 4	Noen ganger i uka 5	Hver dag 6
Jeg er full av energi på jobb	○	○	○	○	○	○	○
Jeg føler meg sterk og energisk når jeg arbeider	○	○	○	○	○	○	○
Når jeg står opp om morgenen, har jeg lyst til å gå på jobb	○	○	○	○	○	○	○
Jeg er entusiastisk når det gjelder jobben min	○	○	○	○	○	○	○
Jeg blir inspirert av jobben min	○	○	○	○	○	○	○
Jeg er stolt av det arbeidet jeg gjør	○	○	○	○	○	○	○
Jeg føler meg glad når jeg er fordypet i arbeidet mitt	○	○	○	○	○	○	○
Jeg er oppslukt av arbeidet mitt	○	○	○	○	○	○	○
Jeg blir fullstendig revet med av arbeidet mitt	○	○	○	○	○	○	○

12. Hvordan opplever du din nåværende jobb og arbeidsplass generelt?

	1	2	3	4	5	6	7	
Håndterlig	○	○	○	○	○	○	○	Uhåndterlig
Meningsløs	○	○	○	○	○	○	○	Meningsfull
Strukturert	○	○	○	○	○	○	○	Ustrukturert
Lett å påvirke	○	○	○	○	○	○	○	Umulig å påvirke
Betydningsløs	○	○	○	○	○	○	○	Betydningsfull
Oversiktlig	○	○	○	○	○	○	○	Uoversiktlig
Kontrollerbar	○	○	○	○	○	○	○	Ukontrollerbar
Ikke givende	○	○	○	○	○	○	○	Givende
Forutsigelig	○	○	○	○	○	○	○	Uforutsigelig

Tilbake   Neste

Bakgrunnsinformasjon

13. Har du hatt medarbeidersamtale i løpet av *de siste 24 månedene*?
- ○ Ja
- ○ Nei
- ○ Ikke aktuelt (pga. permisjon eller fordi jeg nylig er ansatt)

14. *Hvis ja*: På skalaen fra 1 til 5, hvordan opplevde du medarbeidersamtalen(e) du har hatt i løpet av de siste 24 månedene?

	Bort-kastet tid 1	2	3	4	Svært positivt 5	Ikke aktuelt
Vennligst velg «Ikke aktuelt» hvis du ikke har hatt medarbeidersamtale i løpet av de siste 24 månedene.	○	○	○	○	○	○

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15. Hvor mange timer ut over avtalt arbeidstid arbeider du vanligvis pr uke?
- ○ 0
- ○ 1 - 5
- ○ 6 - 10
- ○ over 10

16. Hvor stor andel av stillingen din er avsatt til:

	0%	Under 25%	25 til 50%	Over 50%
Forskning	○	○	○	○
Undervisning	○	○	○	○
Formidling	○	○	○	○
Kunstnerisk utviklingsarbeid	○	○	○	○
Utredningsarbeid	○	○	○	○
Feltarbeid	○	○	○	○
Laboratoriearbeid	○	○	○	○
Klinisk virksomhet	○	○	○	○
Støttetjenester til forskning	○	○	○	○
Administrative oppgaver/tjenester	○	○	○	○
Teknisk tjenesteyting (drift og vedlikehold)	○	○	○	○
Annet (vennligst spesifiser nedenfor)	○	○	○	○

17. Annet:

[   ]

NB: Resultatene av undersøkelsen vil bli presentert slik at ingen enkeltpersoner kan gjenkjennes.

Data vil bare bli gjort tilgjengelig i anonymisert form.

18. Kjønn:

[   ]

19. Alder:
- ○ Under 30 år
- ○ 30 - 39 år
- ○ 40 - 49 år
- ○ 50 - 59 år
- ○ 60 år eller mer

20. Stillingskategori:
- ○ Vitenskapelig
- ○ Teknisk/administrativ
- ○ Enhetsleder (rektorat, dekan, instituttleder, direktør, avdelingsleder, seksjonssjef e.l.)

21. Ansettelsesforhold:
- ○ Fast
- ○ Midlertidig

22. Stillingsandel:
- ○ Under 25%
- ○ 25% - 49%
- ○ 50%
- ○ 51% - 99%
- ○ 100%

23. Ansettelsestid ved :

○ Under 5 år
○ 5 - 9 år   *Navn på egen enhet inn her*
○ 10 år eller mer

Tilbake   Ferdig

Fullført !

Takk for at du ville svare på spørsmålene!