

Do Engaged Workers Attend Work While Sick More Often? A Thesis on the Relationship Between  
Organizational Norms, Work Engagement, and Presenteeism.

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Eyvind Helland, Trondheim, 13.05.2014

### Abstract

The aim of this thesis is to investigate how presenteeism research can be reconciled with positive psychology through exploring the relationship between organizational attendance pressure- and adjustment norms, work engagement and presenteeism. The working model this thesis uses to look at this adapts the job demands–resources (JD-R) model to predict whether workers will choose to exhibit presenteeism or be absent in the context of Johns’s dynamic model of presenteeism and absenteeism (2010). Participants were 280 workers from a wide variety of sectors who answered a questionnaire that asked about their psychosocial work environment. The design was cross-sectional. Covariance-based structural equation modeling (CB-SEM) was used to test the hypotheses. The results suggest that the motivational process of the JD-R model does not explain presenteeism to a statistically significant degree. However, the positive relationship between organizational adjustment norms and work engagement was significantly greater for workers with a high level of perceived organizational attendance pressure norms versus those who perceived it to be low. This thesis concludes that how presenteeism is measured and from what sectors workers are recruited to be respondents may influence the results and interpretations of it. Future research that investigates the relationship between work engagement and presenteeism may be warranted for finding new ways of measuring presenteeism and to recruit respondents who work in places where presenteeism is less likely to be perceived as negative for their health (e.g., knowledge workers in universities).

*Keywords:* presenteeism, work engagement, organizational norms

## Do Engaged Workers Attend Work While Sick More Often? A Thesis on the Relationship Between Organizational Norms, Work Engagement, and Presenteeism

There is a concern today for the health of workers in work environments that participate in a global competition for customers, contracts, labor, and so on. Many sectors of modern business must adapt and utilize their resources more efficiently if they are to meet the demands that result from global competition, which is even more relevant in today's environment due to instant access to information through, for example, the Internet, as well as increasing expectations for goods and services offered. At the same time, there is a concern about how workers experience these changes and their well-being in this environment. More specifically, what consequences do downsizings, mergers, corporate restructurings, job insecurities, or time restricted employment contracts, for instance, have for the health of people who face these challenges?

For scientific enquiries seeking to answer such questions, there are many relevant phenomena, for instance, stress, bullying, aggression, violence, various policies, organizational culture, group behavior, and absenteeism. Closely related to such concepts is the phenomenon of going to work while ill, also called presenteeism. Presenteeism has been a popular research topic in occupational health psychology over the last 15 years and will be of focus in this thesis as well. In some cases, going to work while sick is mostly determined by the nature of the health impairment (Johns, 2010). For instance, both severe physical accidents and minor impairments may force absence depending on whether the job and the nature of the impairment mismatch. However, in many situations the health incident only is one aspect pertaining to whether the worker chooses to go to work or stay home. Other aspects can be workplace policies, economic costs resulting from absence, the welfare and insurance environments, workplace norms, family situation, attitudes to work, and how engaged one is in the work.

Another trend in occupational health psychology research is positive psychology, which is the scientific inquiry into the positive aspects of the human experience (Seligman & Csikszentmihalyi, 2000). A central concept within this tradition is work engagement. Many scholars in occupational psychology, argue that the work environment in modern organizations promotes expectations of proactivity, initiative, workers' responsibility for their own professional development, and commitment to high-quality performance (Bakker, Schaufeli, Leiter, & Taris, 2008). In other words, organizations need workers who are energetic, dedicated, and absorbed by their work (Bakker & Schaufeli, 2008). While this may be true for some sectors of the workforce (e.g., knowledge workers), it is not clear whether this is a general rule that accounts for all work environments (e.g., assembly line work). Nonetheless, the case might be that workers who swear allegiance to high-quality standards and are energetic, dedicated, and absorbed by their work are

more likely to attend work while ill.

Several factors besides the nature of the health incidence could influence the relationship between work engagement and presenteeism. That is, work engagement might interact with all the other aforementioned aspects to influence the choice of whether to attend work while sick. One of those aspects is organizational norms, or more specifically as it pertains to this thesis, what is expected in terms of job attendance while ill, or what is expected concerning adjusting the workplace in response to health impairments.

The research question of this thesis, the answers to which might provide some indication concerning the issues raised so far, is as follows: What are the relationships between presenteeism, work engagement, and organizational norms of attendance pressure and adjustment?

As part of a project measuring good work environments, Bachelor students and two Master students of psychology at NTNU recruited in total 280 workers as part of a project about measuring good work environments. The respondents, representing a wide variety of sectors, branches, and ages, filled out a questionnaire about, among other things, presenteeism, work engagement, and organizational norms of adjustment and attendance pressure.

To answer the research question, this thesis relies on Johns's (2010) dynamic model of presenteeism and absenteeism, the job demand–resources (JD-R) model (Bakker & Demerouti, 2007), and the conservation of resources (COR) theory (Hobfoll, 1989, 2002). Johns's (2010) dynamic model of presenteeism and absenteeism is appropriate for this purpose because it explicitly regards both work context factors (e.g., organizational norms) and personal factors (e.g., work engagement) as important predicting of whether workers will choose to go to work sick or be absent when facing health events. Within this context, the JD-R model is apt because it provides a model for investigating the interplay of work context factors and personal factors in predicting presenteeism. Furthermore, COR is suitable because it describes the relationships between job resources, job demands, and work engagement.

The primary contributions of this thesis are a novel form of examining presenteeism through positive psychology as well as empirically founded indications of what the relationships are between presenteeism, work engagement, and organizational norms of adjustment and attendance pressure.

Next, I outline the theories that summarize both how the included variables are positioned in the occupational psychology landscape as well as the working model used in this thesis, followed by a review of relevant empirical findings follows. Then, I formally state the hypotheses. After that, I present a methods section with explanations of the procedures of this study and information on how I analyzed the data to answer the hypotheses. Next, I disclose the findings of these analyses as

they pertain to the hypotheses. Finally, I put forward discussions and conclusions on insights, limitations, contributions, opportunities for future research, and visions of how I hope this study can benefit the world.

## **Theoretical foundation**

### **Presenteeism**

Many definitions of presenteeism have been proposed (for an overview, see Johns, 2010), but most studies from the European tradition have followed the example of Aronsson, Gustafsson, and Dallner (2000) who defined it as “the phenomenon of people, despite complaints and ill health that should prompt rest and absence from work, still turning up at their work” (p. 958). Similar to Aronsson and colleagues (2000), presenteeism is in this thesis defined as “attending work while ill” (Johns, 2010, p. 521). Johns (2010) concluded that this definition has scientific utility, parsimony, and discernible boundaries. In addition, he argued that it does not ascribe motives or consequences and has some rudimentary construct validity.

Johns (2012) demanded a scientific effort to understand the psychosocial determinants of the tendency to go to work while ill. There are two main motivating concerns here: First, the productivity loss that accompanies going to work ill versus being absent, and second, the welfare of workers (Johns, 2012). The former concern has been portrayed by some (e.g., Brief, 2000; Walsh, Weber, & Margolis, 2003) as an area of interest primarily for organizational researchers and management and, through this, supposedly serving big business. Johns (2012) argued otherwise, stating that organizational researchers have actually focused extensively on the well-being of workers and that it is medical scholars who have, for the most part, given attention to productivity rather than to health. I concur with Johns (2012), who wrote that the concerns for productivity and worker well-being are not mutually exclusive, thus framing both motives as valid targets of enquiry.

In research on presenteeism, the opinion that going to work ill is an inherently negative phenomenon is largely taken for granted. In support for such a notion, consider the question most frequently used to investigate presenteeism: “How often do you go to work despite feeling that you really should have taken sick leave due to your state of health” (Aronsson, Gustafsson, & Dallner, 2000, p. 504)? However, it is of paramount importance to distinguish between factors that promote attendance pressure, leading to detrimental effects on workers’ health, and positive factors that prompt a worker to choose to attend work because they perceive it as optimal for their health (Thun, Saksvik, Ose, Mehmetoglu, & Christensen, 2013). For instance, an organization can arrange for reasonable adjustments to create a climate where it is appropriate to attend work with minor health impairments, and at the same time uphold satisfactory productivity (Thun et al., 2013) as well as



maintain an environment that is positive or neutral for workers' mental and physical health (Biron & Saksvik, 2010).

Presenteeism is solely a dependent variable in this thesis

### **Precursors of Johns's dynamic model of absenteeism and presenteeism**

The basis of Johns's (2010) and other attendance dynamic models is Steers and Rhodes's (1978) conceptual model of major influences on employee attendance. After this model accounts for ability to attend work, the basic assumption is that a worker's motivation to attend work is the most fundamental influence on attendance. Furthermore, this motivation is largely determined by a mixture of, first, a worker's emotional responses to the job situation, and, second, various inner and outer pressures to show up.

Aronsson and Gustafsson (2005) created a model for research into sickness presenteeism. The model starts with an incidence of ill health, disease, and capacity loss, which, combined with demands for attendance, influence whether the worker decides to go to work or take sick leave. In addition, attendance demands can take on different forms, such as work-related demands or demands pertaining to personal circumstances. Aronsson and Gustafsson (2005) also mentioned a possible further distinction of presence factors when they pointed to Kristensen (1991), who differentiated between positive and negative presence factors. Examples of positive presence factors are "interesting and stimulating work, high job satisfaction, rewards for low absence rates, and good conscience," while examples of negative presence factors are "high risk of being dismissed" and "strict control of absence from work" (Kristensen, 1991, p. 965). The second part of Aronsson and Gustafsson's (2005) model outlines a connection between sickness presenteeism and absenteeism and future effects on health, be they negative or positive.

### **Johns's dynamic model of absenteeism and presenteeism**

Johns's (2010) model of presenteeism and absenteeism initially assumes that workers are in fully engaged attendance, which is then interrupted by a health event of an acute, episodic, or chronic nature. The nature of this health event and of the job may in itself place restrictions on whether the worker chooses to be present or absent, but after accounting for this, the model proposes that work context and personal factors influence the choice to be absent or present. Johns (2010) proposed that work context factors that influence this choice include, for example, job security, attendance- and absence policies, the organizational climate, adjustment latitude, and job demands. Personal factors that influence the choice, are, for example, positive work attitudes, work addiction, and favorable justice perceptions (Johns, 2010). Furthermore, the choice the worker makes, whether absence or presence, is viewed as a distinct event that influences the probability of the opposite behavior in the future. In addition, while presenteeism and absenteeism may have

immediate results, the focus of Johns's dynamic model is cumulative individual consequences, that follow the health event. In addition, the model emphasizes the cumulative effect of attributions regarding absenteeism and presenteeism, by both actors and observers. Finally, a chronic pattern of presenteeism or absenteeism behavior may later on result in a change of health status, attendance dynamics, and organizational membership.

For the purposes of this thesis Johns's model has been adapted into a model which accommodates interaction between work context factors (e.g., organizational norms) and personal factors (e.g., work engagement) on a worker's choice to go to work while ill or stay home.

### **Work engagement**

Transcending the traditional focus on negative psychological states, positive psychology focuses on positive psychological states and optimal human functioning, which has also had similar consequences for occupational psychology (Bakker & Schaufeli, 2008). This can be exemplified by Luthans (2002), who called for "the study of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (p. 698).

One important concept within positive psychology is work engagement, defined as a "positive work-related state of fulfillment that is characterized by vigor, dedication, and absorption" (Schaufeli, Bakker, & Salanova, 2006, p. 701). Vigor refers to "high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties" (Schaufeli, Bakker, & Salanova, 2006, p. 701). Dedication is defined as being "strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge" (Schaufeli et al., 2006, p. 701). Last, absorption is being "fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work" (Schaufeli et al., 2006, p. 701). It is, however, uncertain whether absorption is a core aspect of work engagement or an outcome of the continuums of identification and energy (Bakker et al., 2008).

One of the earlier approaches to engagement was presented by Kahn (1990, 1992), who emphasized that engagement is the dynamic and dialectic relationship between the work role's allowance or space for self-expression and the workers who employ different aspects of themselves (i.e., physical, emotional, mental, and cognitive aspects) in the work role. Thus, Kahn (1990) conceptualized engagement as the "harnessing of organization members' selves to their work roles: In engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances" (p. 694). Inspired by Kahn's work, Rothbard (2001) introduced a somewhat different viewpoint when she conceptualized engagement as a motivational construct

that included two dimensions: attention and absorption. The former dimension she characterized as “the cognitive availability and the amount of time one spends thinking about a role” (2001, p. 656), while the latter dimension she characterized as “the intensity of one’s focus on a role” (2001, p. 656).

In Bakker and colleagues' (2008) special treatment of work engagement, they stated that there is a consensus among most scholars that work engagement is composed of both an energy aspect and an identification aspect, although they also mentioned that the precise definition of work engagement has been and is still debated. One such debated aspect of work engagement is its relationship to burnout, which is the phenomenon that triggered much of the research on work engagement in the first place (Bakker et al., 2008). In one view, held by Maslach and Leiter (1997), the dimensions of work engagement are directly oppositional to the dimensions of burnout in the sense that they exist on one continuum and are dependent on each other (i.e., being low in work engagement dimension manifests as the opposite pattern on the equivalent burnout dimension). In contrast, Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) viewed work engagement as an independent, distinct concept that is negatively associated with burnout.

What, in essence, differentiates Kahn (1990, 1992) from those who view engagement as the positive antipode of burnout is that Kahn emphasizes the work *role* while the “antipodes” emphasize the worker’s *activity*, or the work itself (Bakker et al., 2008). Kahn’s view of work engagement as a role-concept has been criticized for being something different from work engagement (Bakker et al., 2008). The antipode view used by Bakker et al. (2008) is employed in this thesis as well because it is “fruitful” (p. 189), is a consistent construct, focuses on the experience of the work activity, is open to empirical research, and has practical application by being a properly operationalized psychological state that is both specific and well-defined. Meanwhile, a 2008 review of the various explorations of engagement found more or less a hodgepodge of different definitions, where all the reviewed work attempted to resolve the confusion by defining engagement as an umbrella term for several kinds of engagement that in turn give rise to diverse conceptualizations (Macey & Schneider, 2008). These attempts have not been productive as far as consensus on the meaning of engagement is concerned (Bakker et al., 2008).

In his review and research agenda, Johns (2010) wrote that “those with positive work attitudes ... would, on the margin, exhibit presenteeism” (p. 532) and that “although it remains an empirical question, it seems feasible that one might show up ill due to love of the job” (p. 521). This thesis will try to address this empirically through the work engagement construct. Work engagement can be classified as a personal factor because, although it is influenced by several work environment factors, it is a state of mind (Schaufeli & Bakker, 2004). It can also, due to its positive nature, be

regarded as a positive presence factor (Kristensen, 1991). Hence, as seen from the perspective of Johns's model (2010), it can increase the likelihood of an employee choosing presenteeism when ill.

This phenomenon is the second dependent variable of this treatise; however, in contrast to presenteeism, work engagement is both a dependent and an independent variable, as it assumes a mediatory role between organizational norms and presenteeism.

### **Job demands–resources model (JD–R)**

In the interplay between work context factors and personal factors, the JD-R model will serve as the theoretical foundation for the model of this thesis. The JD-R model encompasses most working conditions, no matter what specific demands and resources different jobs require (Bakker & Demerouti, 2007). Thus, the model assumes that all jobs have unique risk factors related to job stress. However, the model sorts all risk factors into two broad groups: job demands and job resources. The former, job demands, is defined as, “those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Bakker & Demerouti, 2007, p. 312).

However, it does not follow that job demands are negative for the individuals experiencing them. In Podsakoff, LePine, and LePine's meta-analysis (2007), they drew a distinction between hindrance stressors and challenging stressors. Workers generally regard as challenging stressors job demands that create challenges and possibilities for personal development and achievement, including quantitative and subjective workloads, a level of attention required by job or role demands, pressure to complete tasks, and time urgency. Hindrance stressors are generally regarded as job demands that present obstacles to personal growth and task accomplishment, including role conflict, role overload, situational constraints, organizational politics, hassles, role ambiguity, and resource inadequacies. On the one hand, Podsakoff et al. (2007) found that hindrance stressors were directly negatively associated with job satisfaction and organizational commitment and indirectly positively related to turnover intentions, turnover, and withdrawal behavior. On the other hand, they found that challenging stressors were directly positively associated with job satisfaction and organizational commitment and indirectly negatively related to turnover intentions, turnover, and withdrawal behavior. In the aftermath of the aforementioned meta-analysis, Van den Broeck, Cuyper, Witte, and Vansteenkiste (2010) stated that it is important to differentiate between different types of job demands, such as hindrance and challenging demands, as their research findings suggested that job demands aren't as homogeneous as previously described in the JD-R model. To elaborate, Van den Broeck and colleagues (2010) found that the job hindrances (i.e., emotional demands and negative work–home interference) were negatively associated with vigor while job

challenges (i.e., workload and cognitive demands) related positively to vigor.

The other group of factors in the JD-R model is job resources, which refers to “those physical, psychological, social, or organizational aspects of the job that are either/or: (1) Functional in achieving work goals. (2) Reduce job demands and the associated physiological and psychological costs. (3) Stimulate personal growth, learning, and development” (Bakker & Demerouti, 2007, p. 312). Thus, job resources are, in addition to being crucial themselves, essential for coping with the job demands a workplace might present.

Another central assumption of the JD-R model is dual processes, which points towards two distinct mechanisms of health impairment- and motivational processes (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). The health impairment process relates health issues to an excess of job demands via burnout, which depletes a worker’s resources. In contrast, the motivational process assumes that the motivational potential of job resources leads to high work engagement. In addition, the motivational process assumes that job resources result in different organizational outcomes *via* work engagement (Bakker & Demerouti, 2007). Schaufeli and Bakker (2004) have argued that the motivation process stems from intrinsic motivation through fulfillment of fundamental human desires (Deci & Ryan, 1985) and extrinsic motivation through the achievement of job goals. The assumption that job resources might buffer the effect of job strain brought to bear by job demands provides a more complete picture of the JD-R model (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003). Furthermore, job resources are proposed and found to impact work engagement to a greater degree when job demands are high (Bakker & Demerouti, 2007). In addition, the JD-R model describes a negative relationship between job demands and job resources (Schaufeli & Taris, 2014).

In the model of this thesis, the motivational process of the JD-R model is relevant in that work engagement assumes a mediatory role between job resources and different outcomes. I.e., job resources (e.g. organizational adjustment norms) lead to high work engagement, which then results in an organizational outcome (e.g., presenteeism).

### **Conservation of resources theory (COR)**

The relationship between job demands and work engagement in the JD-R model is described primarily through the aforementioned interaction effect of job demands and job resources on engagement and burnout. This proposition borrows from the conservation of resources theory (COR) (Hobfoll, 1989, 2002). COR states that humans desire to acquire, keep, and protect those things they perceive as valuable and that stress can be understood in terms of possible or concrete loss of resources. In addition, Hobfoll (1989, 2002) has argued that people who are less susceptible to resource demise also have larger aggregates of resources. To impair loss of resources people have

to use resources; thus, an increased likelihood of experienced resource loss mostly pertains to people who do not have access to larger aggregates of resources (i.e., loss spiral). Furthermore, Hobfoll and Shirom (2001) stated that an increased likelihood of resource gains occurs for people who seek out possibilities to bet resources with the intention of gaining additional resources. They argued that this mechanism, in addition, predicates itself on a greater amount of aggregate resources (gain spiral). Moreover, Hobfoll (2002) argued that a gain of resources in itself has only a moderate effect on increasing resource gains, and is more relevant in conditions of resource loss.

The theoretical assumption in the last sentence will be pertinent moving forward, as one of the hypotheses of this thesis relies on the interaction between job resources and job demands on work engagement.

### **Organizational norms**

Norms are beliefs about the way people should think and behave that are mostly taken for granted (Homans, 1992). In particular, organizational norms are assumptions about the way participants in an organization should think and behave (Hammer, Saksvik, Nytrø, Torvatn, & Bayazit, 2004). Organizational attendance pressure norms (OAPN) are in this thesis referred to as organizational norm variables that pressure workers into attending their job despite their health condition (Hammer et al., 2004; Saksvik, 1996). Organizational adjustment norms (OAN) are organizational norm variables that take into account illness and allow for adjustments so the worker can perform normal work tasks or alternative tasks without worsening their health, or even while improving (Biron & Saksvik, 2010).

There is a delicate balance between workplace factors that encourage workers to attend work but at the same time prevent negative consequences for their health (Biron & Saksvik, 2010). One way to maintain such a balance can be to allow for illness-related adjustments, which promotes a climate where it is appropriate to attend work with minor health issues and where, at the same time, workers can keep up with production (Thun, Saksvik, Ose, Mehmetoglu, & Christensen, 2013). In contrast, there might also be a perception of attendance pressure in an organization that does not provide adjustments to account for illness (Thun et al., 2013). For these reasons, it is imperative to distinguish between factors that stimulate attendance but are detrimental to the health of the workers, and positive factors that cause workers to want to attend their work because they perceive it as the optimal decision for their future health (Thun et al., 2013). OAPN are an example of the former factor while OAN are an example of the latter factor (Thun et al., 2013).

OAPN and OAN are included as predictors because these aspects of organizations are highly relevant concerning both global competition issues as well as policies regarding work environment. In Norway, for instance, there is the Agreement on an Inclusive Working Life (IW agreement),

which aims to develop workplace adjustments (Norwegian Labour and Welfare Administration, 2013).

OAPN function as a job demand and OAN as a job resource. OAN are a job resource because they are an organizational climate variable that reduces job demands and the associated physiological and psychological costs. OAPN are a job demand since they increase the physical and/or psychological efforts required of the worker and hence are related to certain physiological and/or psychological costs.

No studies have investigated the relationship between sickness presenteeism and OAN. However, an OAN is supposed to be a positive factor that causes workers to perceive that attending work is best for their health and thus to want to attend work (Thun et al., 2013). In terms of Johns's model, an OAN, then, is a work context factor which increases employees' likelihood of choosing presenteeism when ill. It is, in addition, possible to regard OAN as positive presence factors as per Kristensen (1991). That means the OAN factor can be categorized as a positive presence work context factor.

The relationship between OAPN and sickness presenteeism has also not been investigated before. However, research findings have suggested a negative relationship between sickness presenteeism and absence legitimacy (Johns, 2011), as well as a positive association between sickness presenteeism and censure pressure (Milch, 2011). Although absence legitimacy and censure pressure are not identical to OAPN, their associations with sickness presenteeism suggest that a norm that by definition pressures a worker to attend work despite illness can also increase the chance of presenteeism. In terms of Johns's model (2010), an OAPN, then, is a work context factor that increases workers' likelihood of attending work while ill. The OAPN can additionally be regarded as a negative presence factor as per Kristensen (1991). Hence, OAPN can be classified as a negative presence work context factor.

## **Empirical findings**

### **Presenteeism**

This section will look at what relationships occupational psychology scholars have empirically found presenteeism to have. Research that measures presenteeism as the rate of how frequently impaired health has caused a diminished ability to work will not be reviewed extensively here because productivity consequences are not a focal point of this thesis. The correlates will be structured around whether the variables are work context factors or personal factors, as laid out in Johns (2010). However, before that, I will explain how presenteeism relates to prevalence, occupations, and health factors.

**Prevalence of sickness presenteeism.** In a Swedish study of 3,801 workers from a great number of different occupations, it was found that about a one third of the respondents had performed presenteeism during the last 12 months (Aronsson et al., 2000). Five years later, another study reported that about half of its subjects had been sick and present at work (Aronsson & Gustafsson, 2005). About the same rate of sickness presenteeism as the latter study was found for Swedish police officers (Leineweber, Westerlund, Hagberg, Svedberg, Luukkala & Alexanderson, 2011). McKeivitt, Morgan, Dundas, and Holland (1997) reported that over 80 percent of general practitioners and hospital doctors had been at work while sick. In summary, ranging from 30 to 80%, of workers attend work while sick at some time during their careers.

**Occupations and presenteeism.** In line with the prevalence of sickness presenteeism among general practitioners and hospital doctors found by McKeivitt and colleagues (1997), Aronsson et al. (2000) found that care and welfare workers as well as employees in some educational institutions had a greater chance of being present while sick. One reason might be that part of these occupational groups' daily work involve people depending upon (Aronsson et al., 2000). Other than these occupations, no other sectors distinguished themselves (Aronsson et al., 2000).

**Health and sickness presenteeism.** Several studies have pointed to negative health-effects resulting from presenteeism, for example, judgment of poor health (Bergström et al., 2009; Gustafsson & Marklund, 2011) and risk of cardiovascular incidents (Kivimäki et al., 2005). This might be because attending work while ill can be perceived as a workplace stressor, thus potentially creating strain both physically and psychologically (Cooper, Dewe, & O'Driscoll, 2001). Aronsson and colleagues (2005) argued that attending work while sick might impair recuperation from illness and therefore limit the worker's ability to deal with the health issue.

**Presenteeism and absenteeism.** Closely related to the question of health and presenteeism is absenteeism. Lazarus and Folkman (1984) stated that coping with workplace stressors could incentivize workers to deal with it by taking short sick leaves. Furthermore, Hobfoll (1989) noted that sickness absenteeism might be used by an individual to recover physical or psychological resources. Thus, if attending work while sick hinders recuperation from illness, it increases the chance of absenteeism in the future (Gosselin, Lemyre, & Corneil, 2013; Gustafsson & Marklund, 2011; Hansen & Andersen, 2009). A recent study found additional support for the link between presenteeism and absenteeism as it showed that presenteeism is positively related to subsequent absenteeism (Deery, Walsh, & Zatzick, 2014).

**Personal factors.** Johns's dynamic model of sickness presenteeism and absenteeism includes personal factors that influence the choice between absence and presence in the face of



illness (2010). Work overcommitment has been found to be positively associated with presenteeism is work over commitment (Cicei, Mohorea, & Teodoru, 2013; Hansen & Andersen, 2008). Lundberg and Cooper (2010) wrote that the overcommitted strive to achieve or transcend ambitions to please, be of value to others, or compete. This might, in many circumstances, lead to an increased likelihood of choosing presenteeism over absenteeism (Hansen & Andersen, 2008).

A high health locus of control was predicted in Johns (2011) to be positively associated with presenteeism. The theory behind this was that those who feel in control of their own health are expected to manage their health behaviors in a way that allows them to go work despite illness and still perform adequately (Johns, 2011). The opposite turned out to be supported as the data suggested that those with a high health locus of control managed their illness by staying home (Johns, 2011).

Work involvement and job satisfaction have also been investigated in relation to sickness presenteeism (Claes, 2011). The theory was that both variables stimulate presenteeism because the work creates positive experiences within the worker, even when sick (Claes, 2011). Some results have suggested that is was the case. In the U.K., both job satisfaction and work involvement were found to be related to presenteeism, while in Sweden, only the former was (Claes, 2011). For unknown reasons, the same pattern was not found for respondents from Spain and Belgium.

**Work context factors.** As noted earlier, Johns's (2010) dynamic model of sickness presenteeism and absenteeism suggested that some features of the work context might influence the choice of attending work while sick. Replaceability, time pressure, work overload, control over pace of work, and support from peers and supervisors are the work context predictors presented here.

Replaceability has been shown to influence presenteeism (Aronsson et al., 2000; Aronsson & Gustafsson, 2005; Böckerman & Laukkanen, 2009; Caverley, Cunningham, & MacGregor, 2007; Johns, 2011; McKevitt et al., 1997). Replaceability refers to whether there is a replacement to do the employees' work if they take sick leave, and thus whether the work piles up, creating a large amount of work waiting for them when they return to work (Böckerman & Laukkanen, 2009). Low replaceability is to some degree associated with lean organizations and creates a disposition to attend work while sick (Aronsson et al., 2000). For the individual worker, there might be an indirect economic cost resulting from taking sick leave, which pressures the worker to attend work while sick since the work in any case has to be done when he returns to work, which means less profit compared to if he is present while sick (Böckerman & Laukkanen, 2009). In other words, a short-term economic cost–benefit analysis might create an inclination to attend work while sick due to low replaceability.

Work overload (Böckerman & Laukkanen, 2009; Caverley et al., 2007; Deery et al., 2014;

Demerouti, LeBlanc, Bakker, Schaufeli, & Hox, 2009) and time pressure (Aronsson & Gustafsson, 2005; Caverley et al., 2007; Claes, 2011; Hansen & Andersen, 2008) have been found to be positively associated with presenteeism. Demerouti and colleagues (2009) argued that their findings suggested that job demands in general cause more presenteeism. A reason for this may be that doing one's job is primarily defined as meeting one's job demands in a satisfactory manner. Thus, an employee in a position of heightened job demands might determine that she needs to go to work despite illness to fulfill those job demands if she is to keep up her performance at an appropriate level (Demerouti et al., 2009).

Control over work pace also influences presenteeism but in a rather counterintuitive fashion (Aronsson & Gustafsson, 2005; Leineweber et al., 2011). That is, one might expect that employees with a high degree of control over their work pace would exhibit sickness presenteeism to a greater degree since they have the ability to adapt their pace of work to match their decreased ability to work. However, the opposite seems to be supported in that those with lower levels of control over work pace attend work while sick to a greater degree (Aronsson & Gustafsson, 2005; Leineweber et al., 2011). One interpretation of this is that workers who view themselves as in control of their work pace also have a higher threshold for regarding themselves as performing presenteeism, which means they are less likely to report presenteeism (Aronsson & Gustafsson, 2005).

Research findings have suggested that sickness presenteeism is positively related to support from colleagues (Hansen & Andersen, 2008; Leineweber et al., 2011; Gosselin et al., 2013) and from supervisors (Leineweber et al., 2011). A suggested explanation for this relationship is that workers who have a higher degree of social support have more motivation to turn up at work when sick because of the interpersonal bond that social support creates at a workplace (Hansen & Andersen, 2008).

This sums it up for the empirical review of the presenteeism correlates. The next section shifts focus onto work engagement.

### **Work engagement in past research**

One of the reasons there is a focus on work engagement in occupational psychology is its link to performance; or in other words, that engaged workers execute their jobs better than non-engaged workers (Bakker, 2011). Bakker (2011) outlines four explanations for why this is: Workers who are engaged transmit this state to others in their proximate environment (Bakker & Xanthopoulou, 2009). Engaged workers create their own job and personal resources (Bakker, 2011). Engaged workers experience better health, which means less focus on their health and more focus on the work (Bakker, 2011). Last, engaged workers experience positive emotions that widen their thought–action repertoire, which in turn means they work on developing their personal resources all

the time (Fredrickson, 2001).

Predictors of work engagement are often referred to as either job resources or personal resources (Bakker, 2011). Personal resources are self-assessments of a positive nature, which are connected to resiliency and characterized by individuals' sense of capability to successfully manage and direct their surroundings (Hobfoll, Johnson, Ennis, & Jackson, 2003). Some common positively associated personal resource predictors of work engagement are self-esteem, self-efficacy, locus of control, the ability to perceive and manage emotions, the belief that different demands can be met with adequacy, and optimism (Albrecht, 2010; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a; 2009b). Positively associated job resource predictors of work engagement are social support from colleagues, performance and positive feedback, opportunities to be creative, reduced sickness absenteeism, skill variety, autonomy, and learning opportunities (Albrecht, 2010; Bakker, & Demerouti, 2008; Hakanen, Perhoniemi, & Toppinen-Tanner, 2008; Schaufeli, Bakker, & Van Rhenen, 2009).

There are also job performance indicators that work engagement predicts, such as in-role performance, creativity, organizational citizenship behavior (Bakker, 2011), extra-role performance (Bakker, Demerouti, & Verbeke, 2004), customer ratings of worker performance, customer loyalty (Salanova, Agut, & Peiró, 2005), and even objective financial returns (Xanthopoulou et al., 2009b).

Four studies suggest that job resources (e.g., social support) affect, for example, work engagement or positive emotional states to a greater degree in conditions of higher job demands (e.g. high role conflict) than in conditions of lower job demands (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Riolli & Savicki, 2003; Seers, McGee, Serey, & Graen, 1983).

**Work engagement and presenteeism.** These two variables have not been investigated enough to conclusively say how they relate to each other. However, a negative association between work engagement and mental presenteeism and no association between work engagement and physical presenteeism have been found (Garczynski, Waldrop, Rupprecht, & Grawitch, 2013). Furthermore, a negative relationship has been found between staff engagement and presenteeism (Admasachew & Dawson, 2011). As the former study measured presenteeism in terms of productivity and the latter in terms of pressure from colleagues and supervisors, they are not directly comparable to this thesis, which only measures how often workers attend work while sick. Therefore, the studies do not necessarily indicate what the relationship will be between work engagement and presenteeism in this thesis.

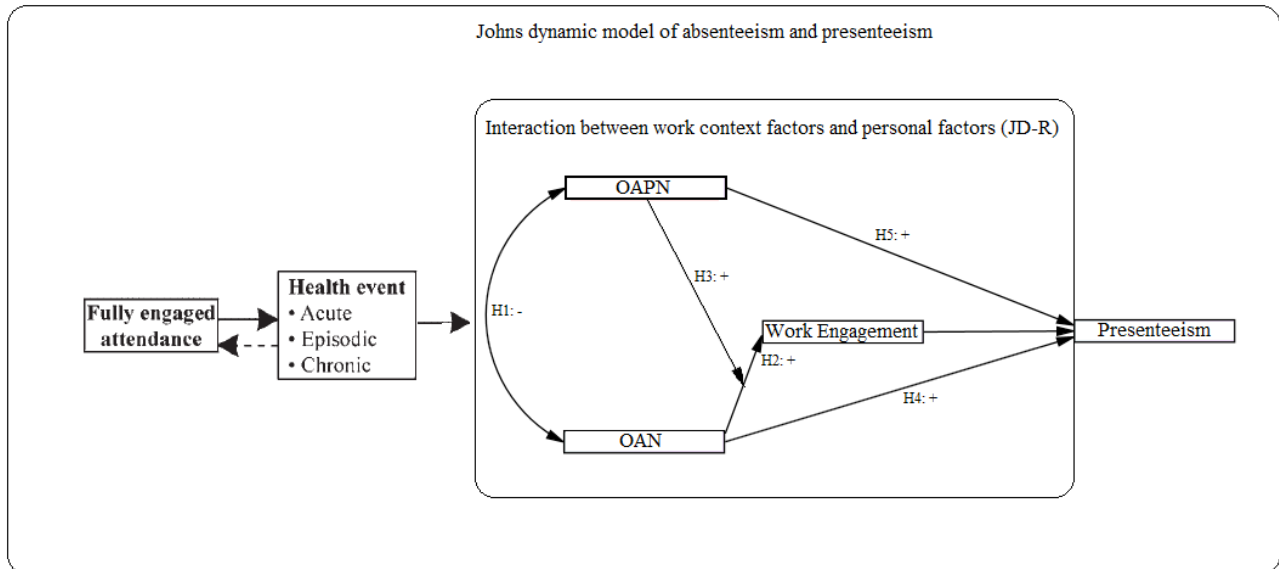
Organizational attendance pressure- and adjustment norms in past research

There has not been sufficient research on OAPN and OAN to confidently say how these variables are positioned occupational health psychology landscape. However, attendance behavior

has been shown to be related to group absence norms (Rentsch & Steel, 2003), and individual job stress experiences have been found to be positively related to attendance norms and work pressure norms (Rennesund & Saksvik, 2010). Recently, Thun et al. (2013) found that the perception of supervisors' attitudes by employee representatives affect both OAN and OAPN. One explanation may be that support from supervisors is often attributed to the organization as a whole by workers (Shanock & Eisenberger, 2006). Thun and colleagues (2013) also found a negative relationship between these two variables.

### **Hypotheses**

The working model that this thesis relies on borrows from Johns's (2010) model of absenteeism and presenteeism, the JD-R model, and the COR and can be summarized in the following way. The first assumption is fully engaged attendance that is interrupted by a health event. This health event prompts the worker to choose between presenteeism and absence. Contributing to this decision-making process is an interaction of work context factors and personal factors. The specific work context factors in this model are OAPN and OAN, while the personal factor is work engagement. OAN can be defined as a job resource and OAPB as a job demand, which brings forth the JD-R model. The JD-R model predicts that work engagement has a mediatory role between job resources and organizational outcomes as part of the motivational process. In this thesis' model, the organizational outcome is presenteeism. Furthermore, the COR theory predicts that resource gains in isolation have only a moderate effect on the mobilization of resources and are more relevant in conditions of resource loss. This means that when job demands are high, job resources affect work engagement to a greater degree. See Figure 1 for visual representation of the working model and the hypotheses. Below Figure 1, the hypotheses, which are supported by both theory and empirical indications already presented, are formally stated. The method of how the hypotheses were tested follows.



*Figure 1.* Working model and hypotheses. This figure illustrates the working model and the hypotheses. OAPN: Organizational Attendance Pressure Norms. OAN: Organizational Adjustment Norms. H: Hypotheses with corresponding numbers.

H1: Organizational attendance pressure norms are negatively related to organizational adjustment norms.

H2: High organizational adjustment norms are associated with high work engagement.

H3: Organizational adjustment norms influence work engagement in conditions of high organizational attendance pressure norms, meaning that the association between organizational adjustment norms and work engagement is strongest when the level of organizational attendance pressure norms are high.

H4: High organizational adjustment norms are related to high sickness presenteeism.

H5: High organizational attendance pressure norms are associated with high sickness presenteeism.

H6: High work engagement is expected to be related to high sickness presenteeism.

H7: Work engagement mediates the relationship between organizational adjustment norms and (high) sickness presenteeism.

## Methods

### Study design and descriptive statistics

The data for this study came from a cross-sectional online survey that measured various psychosocial factors of the workplace of the respondents and was part of a project entitled “Measuring the good work environment.” Bachelor students recruited 200 respondents at the start of 2013. The respondents were acquaintances of the students and were deliberately picked so that a wide range of ages and sectors, as well as both genders, were adequately represented in the sample.

The rest of the respondents were gathered in another batch by two master students using the same procedure at the end of 2013. The total sample size was 280 after 36 respondents were deleted due to missing data ( i.e., too many missing responses on the items used to test the hypotheses of this thesis). The aim was to obtain a representative sample of the Norwegian working population. However, this was not accomplished as there were substantial deviations between demographic metrics provided by Statistisk Sentralbyrå (2013) and this sample, as can be seen in Table 1. These statistics represent the data after deletion due to missing values as well as after imputation, as will be explained later. An almost equal proportion of public (55%) and private sector (45%) workers from a wide array of industries were recruited, which can be seen in Appendix A.

Table 1

*Descriptive Statistics.*

	Gender		Age				
	Male	Female	15-19	20-24	25-54	55-66	67-74
Sample	47.9	52.1	0.4	9.6	71.1	18.9	0
Statistisk Sentralbyrå (SSB, 2013)	53.0	47.0	8.5	9.0	55.0	18.8	8.8

*Note.* Numbers represent percentages.

The response rate was unobtainable because a large number of people collaborated to recruit the respondents and no statistics were kept about how many declined to participate. This survey has been reported to the Data Protection Official for Research, Norwegian Social Science Data Services A/S. Before answering the questionnaire, the respondents were informed that all answers would be treated confidentially and anonymized so they could not be traced back to the individual respondent, and that this would be done continuously throughout the research process. The respondents were also told that the project would be finished in 2017 and that the data would then be saved anonymously. They were informed that they would be asked about age, gender, occupation and so forth, and that it was voluntary to participate. They were told they could withdraw at any point without giving a reason for doing so. They had to explicitly consent to participate.

**Measures**

The questionnaire used in this study had 149 questions asking about psychosocial factors of the respondent's workplace (complete questionnaire can be found in Appendix D). The items used, for the purposes of this thesis, were on presenteeism, work engagement, OAN, OAPN, overall health, gender, ease of replacement, health locus of control, and absence legitimacy. All the

Cronbach's alphas in the following descriptions are of the constructs used in the final structural model.

**Presenteeism.** Presenteeism exhibited by workers was measured with the question “How many days did you go to work with illness and/or health impairments in the past 6 months?” This item was modeled on Johns's (2011) 6 month recall period presenteeism item, with “even though you were” replaced by “with” in the item. Due to the influence of scale anchors on behavioral frequency estimates (Schwarz, 1999), a fill-in-the-blank response was used instead of a fixed discontinuous frequency format. Much research has shown the validity of this type of item for presenteeism (Aronsson & Gustafsson, 2005; Aronsson et al., 2000; Böckerman & Laukkanen, 2010; Caverley et al., 2007; Demerouti et al., 2009; Hansen & Andersen, 2008; Munir et al., 2007; Sanderson, Tilse, Nicholson, Oldenburg, & Graves, 2007).

In the data screening process, the responses were categorized into five groups: “Never,” “Once,” “2-3 times,” “4-5 times,” and “more than 5 times,” as modeled by Claes (2011). According to Tabachnick and Fidell (1996), discrete variables may be used in multivariate analyses instead of continuous ones when there are several categories that have a quantitative quality, which was the case here. As will be shown, skewness was satisfactory, and the validity of such this categorization of presenteeism was supported in Claes (2011) as several correlations were found significant in the predicted direction, namely time pressure, perceived job insecurity, financial household contribution, age, job satisfaction, and general health.

**Work engagement.** Work engagement was gauged with the nine-item Norwegian version of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). The factorial validity of the Norwegian version of the UWES has been demonstrated in earlier research, and UWES-9 has been recommended over the UWES-17 because its fit is slightly better (Nerstad, Richardsen, & Martinussen, 2010). This construct consists of three subscales of three items each: absorption, dedication, and vigor. Responses were recorded on a 7-point scale ranging from 0 (“Never”) to 6 (“Always”). However, due to problems with discriminant validity, which will be described more in the confirmatory factor analysis (CFA) section, all nine items were defined as one latent variable representing work engagement (Cronbach's  $\alpha = .95$ ). Much research has shown the cross-national stability, reliability, and validity of the UWES (e.g., Schaufeli & Bakker, 2004; Schaufeli, Martinez, Marques-Pinto, Salanova, & Bakker, 2002; Schaufeli et al., 2002; Storm & Rothman, 2003). All the UWES-9 items were somewhat negatively skewed between  $-.66$  and  $-1.59$ . An overview of all the items are given in Appendix B, but an example is, “At my work, I feel bursting with energy.”

**Organizational adjustment norms and organizational attendance pressure norms.** In total, 19 different items designed to measure the organizational norms of adjustment and attendance

pressure were included in this study to measure the perception various attitudes in the organization that encourage presenteeism (Thun et al., 2013) as well as the perception of attendance pressure norms that encourage workers to go to work when ill (Saksvik, 1996). The perception of work experiences by individuals is crucial, and these items were created to conform to Hammer and colleagues' (2004) norm scale. Many of the items in the survey were identical to the ones used to measure OAPN and OAN in Thun et al. (2013). However, one item in their measure of OAN was removed and some new items were added as well. This means that the organizational norm variables used in Thun et al. (2013) and in this survey, which are meant to measure the same thing, do not include the same items. Exploratory factor analysis (EFA) and CFA were run to ensure the reliability and validity of these constructs. This will be explained in more detail later. Responses were recorded on a 5-point Likert scale, ranging from 1 ("Totally disagree") to 5 ("Totally agree").

The result of these factor analyses provided a two-item measure of OAPN and a three-item measure of OAN. The former had the following items: "Here, it is expected that one comes to work no matter how one feels" and "Employees who are absent are viewed as disloyal" (Cronbach's  $\alpha = .63$ ). The latter these items: "Here, people with problems get help and support to manage their job," "There is high tolerance here for those who struggle with their health," and "With us, work is seen as health promoting and positive, including for those with health impairments" (Cronbach's  $\alpha = .74$ ). An overview of the items is given in Appendix B.

**Control variables.** Control variables are included in this study to rule out alternative explanations for the findings, that is, to explain the relationship between the independent and dependent variables after the impact of the control on the dependent variable has been extracted, and to reduce error terms (Becker, 2005). In the hypotheses, that have presenteeism as the endogenous variable, age as a continuous variable and gender as a dummy variable were controlled for as they are two of the most prevalent demographic correlates for the attending variables (e.g., Côté & Haccoun, 1991; Hackett, 1990; Johns, 2011; Ng & Fedman, 2008). Furthermore, health locus of control, subjective health, ease of replacement and absence legitimacy also served as control variables as they are frequently included as correlates of presenteeism. More details about these choices are provided below to justify their inclusion, enable replicability, and provide more background for researchers who use the controls of this study as independent, dependent, mediator or moderator variables (Becker, 2005). It is, however, important to consider that many other variables that could have been controlled for (e.g., social support) were not because they were not addressed in the survey. This may cause a bias, but these four variables are, as mentioned, important correlates that cover many. Because they are latent, all control variables except age and gender were included when establishing the measurement model of the covariance-based structural equation



model (CB-SEM).

The control variables of health locus of control, ease of replacement, and absence legitimacy were removed as controls during the process of creating the final structural model because they created poor fit. These variables are still described in this thesis because they may be useful for future research and because they played a significant role in how the final structural model was created.

**Health locus of control (HLoC).** This personal resource variable represents the extent to which people perceive that they have control over their own health status (Wallston, Wallston, & Devellis, 1978). A large negative association ( $\beta = -.52$ ) between presenteeism days and HLoC was found by Johns (2011). He concluded that those with a high health locus of control managed their health by not attending work while sick.

Health locus of control was measured with a six-item Norwegian version of a scale created by Wallston and colleagues (1978). An overview of the items is given in Appendix B. A higher internal HLoC is represented by a higher score on a 5-point Likert scale ranging from 1 (“Totally disagree”) to 5 (“Totally agree”). The Cronbach's alpha was .74.

**Overall health.** Overall health is controlled for because the state of health have consequences for attendance dynamics (Darr & Johns, 2008); that is, those with worse health exhibit more presenteeism (Johns, 2011) and can therefore be a cause of concern for bias in hypotheses 4–7. Moreover, a negative significant association between overall health and what Johns (2011) called subjective presenteeism has been found ( $\beta = -.14$ ).

Overall health was measured with a Likert scale item ranging from 1 (“Very bad”) to 5 (“Very good”) that asked, “How would you describe your health, generally speaking?” The criterion validity of items like this has been convincingly demonstrated in literature concerning health (e.g., Idler & Benyamini, 1997; Jylha, 2009).

**Ease of replacement (EoR).** This work context variable, when looked at in light of presenteeism, can place constraints on absence when ill (Aronsson & Gustafsson, 2005). There is a positive association between ease of replacement and presenteeism days ( $\beta = .17$ ; Johns, 2011) as well as an increased chance of presenteeism when virtually all work, as opposed to none or only a small portion, is left undone (OR = 1.34; Aronsson & Gustafsson, 2005). For these reasons, it was included as a control variable for hypotheses 4–7, which had presenteeism as an endogenous variable. This was to rule out biasing elements coming from this work context factor.

Ease of replacement was measured with two items (see Appendix B) answered on a 5-point Likert scale ranging from 1 (“Totally disagree”) to 5 (“Totally agree”) (Cronbach's  $\alpha = .72$ ). One of the ease of replacement items had the scores reversed. An example item is “If I am absent from

work, someone else can fill in for me.”

**Absence legitimacy (AL).** This personal latent variable has been found to be negatively related to presenteeism days ( $\beta = -.48$ ; Johns, 2011). Furthermore, those with conservative work attitudes were found to be more likely to exhibit presenteeism (Hansen & Andersen, 2008). According to Johns (2011), if a person considers absence a legitimate option to going to work, that could justify being absent when ill. To prevent confounding bias in the results of hypotheses 4–7, AL was controlled for.

AL was measured with five items from Addae, Johns, and Boies (2009) (Cronbach’s  $\alpha = .81$ ), as three of the items were removed during the factor analyses. The items were answered on a 5-point Likert scale ranging from 1 (“Totally disagree”) to 5 (“Totally agree”). An overview of the items is given in Appendix B, but an example item is “Absence from work is a legitimate work behavior.”

### **Method for testing hypotheses**

To test the hypotheses of this thesis, CB-SEM in SPSS Amos version 21 was used. SEM was chosen so that overall model fit could be assessed (Savalei & Bentler, 2010). Assessment of overall model fit through SEM indicates whether the specified causal and non-causal relationships among variables adequately account for the observed covariances among the selected variables (Savalei & Bentler, 2010). In addition, SEM considers the reliability of the indicators by using factors to represent the constructs of the model instead of scales, which multiple regression uses (Savalei & Bentler, 2010). Preliminary data processing and EFA were done in SPSS version 21. All the hypotheses were tested while controlling for gender and overall health on presenteeism. The covariation hypothesis, H1, was tested through the extraction of Pearson's correlation coefficient obtained from the covariation between OAPN and OAN in the structural model. The hypotheses containing direct effects, H2 and H4–H6, were tested through the extraction of the standardized beta coefficients resulting from the paths drawn between the various independent and dependent variables in the structural model. The mediator hypothesis (H7) was tested through a bias-corrected resampling bootstrap procedure with 2,000 resamples in AMOS. Both full and partial mediation were investigated by analyzing the direct and indirect effects. The reason this procedure was chosen is because bootstrapping mitigates the loss of power due to small sample size when estimating the significance of indirect effects (Hair, Black, Babin, & Anderson, 2010). No bootstrapping was done for the other hypotheses. Critical ratios for the differences in regression weights between low and high OAPN were produced to test the categorical moderation hypothesis (Gaskin, 2012). *p* values from the critical ratios were then computed to determine whether the differences were significant.

### **Data screening**

A rundown of missing data procedures, in addition to univariate and multivariate assumptions that need to be fulfilled to run a valid CB-SEM analysis, follows. These assumptions were checked because all the tests used in this thesis are parametric (Field, 2009).

### **Univariate.**

**Missing data.** Out of the 312 respondents, 30 did not finish the questionnaire and therefore did not answer any of the work engagement items. As work engagement is an endogenous variable in this thesis they were all deleted listwise, leaving 282 respondents in total. CB-SEM does not handle missing values well (Enders & Bandalos, 2001), and because 13.5% of the remaining 282 respondents had one to five missing values – which meant that by deleting them listwise, a significant loss of statistical power would have ensued – data imputations were executed. Missing data in the ordinal-level Likert scale items (i.e., absence legitimacy, overall health, ease of replacement, work engagement, OAPN, OAN, and health locus of control) were replaced with the median of the specific item, as means are considered meaningless in this situation (Gaskin, 2013). Missing values for the continuous variable of age were replaced with the mean.

An exception to this decision was made for the endogenous variable, presenteeism: Two missing values were deleted listwise because it is a single-item measure, which means the results would be highly susceptible to bias resulting from data imputation. After these two cases were deleted, 280 respondents remained. Appendix B shows which variables had missing values as well as the median, mean, and standard deviation (SD) before and after data imputation.

**Outliers.** All the items except age and sickness presenteeism were on ordinal scales with seven or fewer intervals, meaning that extreme outliers do not appear here. For presenteeism, a box plot was examined to detect outliers, but none were found outside the boundaries given by the question asked. One respondent had 180 days of presenteeism, but the recall period was 6 months. One respondent was 16 years old, but there are many who start their working careers at this age.

**Normality.** As all the variables were screened for normality, the organizational norm item “With us, absence through (medical) self-certification is seen as extra holiday” was eliminated due to breaching the critical value of 2.1 for skewness as argued by West, Finch, and Curran (1995). The rest were between 2.1 and  $-2.1$  for skewness and between 7.1 and  $-7.1$  for kurtosis, so an assumption of univariate normality could be made for the rest of the variables (West et al., 1995).

**Multivariate assumptions.** The multivariate assumptions were tested with the composites created from the factor scores of the final measurement model, outlined later.

**Linearity.** Curve estimation regression was used to test for linearity for all the direct effects of the structural model. All relationships were significantly linear, except between the control variables AL and HLoC and sickness presenteeism. Since CB-SEM assumes linearity, this will be

considered a limiting factor in the study moving forward as far as those two factors are concerned.

**Multicollinearity.** Linear regression was used to test for multicollinearity between the exogenous variables OAPN and OAN. The variable inflation factor (VIF) was 1.00, meaning that the variables are not multicollinear (O'Brien, 2007).

**Homoscedasticity.** Scatter plots of zPred and zResid for all the variables of the resulting factors were investigated and indicated homoscedasticity (Field, 2009).

## Results

### Exploratory factor analysis (EFA)

An exploratory factor analysis (EFA) was run on 44 items which were theoretically supposed to represent absence legitimacy (AL), ease of replacement (EoR), health locus of control (HLoC), work engagement (WE; vigor: VI, absorption: AB, dedication: DE), OAPN, and OAN. The reason that the already validated constructs were included in the EFA, and not only OAPN and OAN, was to assess the measurement model without any constraints. The chosen method of extraction was Maximum Likelihood so the same method of extraction was used in both the EFA and the CFA. An oblique rotation method was chosen because it can take correlated factors into consideration and furthermore the type promax as it is appropriate for larger samples (Field, 2009). The goal was to prepare the dataset for the CFA and CB-SEM by checking whether the observed variable loadings clustered together as predicted, if the variables had appropriate levels of correlation, and to start the process of investigating the reliability and validity of the latent constructs. All of these aspects will be considered over the next paragraphs. The extraction criterion for the factors was chosen to be an eigenvalue 1 or greater, as recommended by Kaiser (1960).

**Initial EFA.** Initially, the following statistics were good, according to Field (2009): Kaiser–Meyer–Olkin (KMO) (.81), Bartlett's test of sphericity was significant ( $df = 946$ ). The pattern matrix showed a somewhat theoretically expected structure. However, according to standards set by Fields (2009), there were significant problems with items having low communalities ( $< .3$ ), low correlations ( $< .3$ ), too many nonredundant residuals ( $> .05$ ), and a pattern matrix that did not show a satisfactory structure, meaning more factors than predicted, cross-loadings, and too low loadings ( $< .3$ ). An overview of the items included in the initial EFA is given in Appendix B. They are not included here due to space constraints. Appendix B also provides complete question texts for the abbreviations used here. The following items were removed during the EFA due to low communalities, cross-loadings, low correlations, nonredundant residuals, and a dissatisfactory structure of the pattern matrix, meaning that items did not load where predicted: AL 6–8; OAN 1–3, 6; and OAPN 3–6, 8–12. Many of these items also had somewhat problematic absolute kurtosis

values over 1 and up to 5.41. What follows are details of the end result of the EFA.

**Resulting EFA.** Hereafter, the resulting EFA will be evaluated against adequacy, reliability, and validity.

**Adequacy.** The KMO measure had a value of .85, which means the sampling adequacy was great (Hutcheson & Sofroniou, 1999). Bartlett's test of sphericity ( $\chi^2(378) = 3,986.27, p < .001$ ) signaled that correlations between the items were large enough for maximum likelihood method of extraction (Field, 2009). According to Kass and Tinsley (1979; as cited in Field, 2009), five to ten participants per variable is sufficient, which is within the boundaries of this study's 280 respondents for 44 (initial) variables. Furthermore, 280 respondents is almost 300, the number that several psychometricians have recommended as a comfortable size for factor analysis (Comrey & Lee, 1992; Tabachnick & Fidell, 2007). The reproduced matrix had 6% nonredundant residuals with absolute values greater than .05, which is adequate (Field, 2009).

The communalities of the items after rotation were greater than .5 for the most part, which indicates that 280 is a large enough sample size (MacCallum, Widaman, Zhang, & Hong, 1999). However, two items had communalities well below .5 ( $< .3$ ), namely OAPN 7 (.11) and HLoC (.27), which means that a sample of 500 might be more appropriate for these items (MacCallum et al., 1999).

**Reliability.** Cronbach's alphas of the factors are reported in Table 2, but briefly, all factors are over .7, which indicates good reliability (Field, 2009). One factor (OAPN) had an alpha level of .53 in its three-item solution, which Kline (1999) has argued can be expected because of the multidimensionality of the measured constructs.

**Validity.** Hair and colleagues (2010) argued that sufficient convergent validity is achieved if all loadings are over .35 for a sample size of 300. All the factor loadings except one item, OAPN 7 (.30), were far over the threshold, with .47 as the lowest.

Discriminant validity for the factors was also established as no correlations were over .7 in absolute value (Hair et al., 2010) and there were no cross-loadings of concern. However, Factor 7, which had an eigenvalue of 1.01, was cross-loaded to by three work engagement items (see Table 2). Moving into the CFA, this factor was omitted. The total variance explained by the seven extracted factors was 56.14%, and the eigenvalue of the first factor not retained was .88. The structure matrix, as per Henson and Roberts's (2005) recommendation, can be found in Appendix C.

Table 2

Summary of EFA.

Item	Communalities after extraction	Rotated factor loadings pattern matrix						
		WE	AL	HLoC	OAN	EoR	OAPN	F7
AB 2	.78	.92						
AB 1	.82	.88						
DE 3	.72	.85						
AB 3	.66	.81						
DE 1	.78	.80						.34
DE 2	.71	.78						
VI 3	.70	.77						
VI 2	.82	.72						.48
VI 1	.72	.65						.47
AL 5	.63		.78					
AL 2	.60		.77					
AL 4	.54		.73					
AL 3	.48		.68					
AL 1	.39		.53					
HLoC 6	.68			.81				
HLoC 5	.62			.78				
HLoC 4	.39			.62				
HLoC 2	.35			.54				
HLoC 3	.33			.49				
HLoC 1	.27			.46				
OAN 5	.65				.82			
OAN 4	.43				.63			
OAN 7	.44				.58			
EoR 2	.57					.77		
EoR 1	.61					.74		
OAPN 2	.53						.73	
OAPN 1	.38						.57	
OAPN 7	.11						.30	
Initial Eigenvalues		6.95	3.45	2.63	1.92	1.69	1.25	1.01
% of variance		23.69	10.46	7.61	4.41	5.13	2.23	2.62

$\alpha$	.94	.81	.79	.74	.72	.53
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*Note.* WE: work engagement, AB: absorption, VI: vigor, DE: dedication, AL: absence legitimacy, HLoC: health locus of control, EoR: ease of replacement, OAN: organizational adjustment norms, and OAPN: organizational attendance pressure norms. Loadings below .3 in absolute value were suppressed to facilitate interpretation.

### Confirmatory factor analysis (CFA)

**Model fit.** OAPN 7 was removed because of its poor loading (.30), despite this resulting in a two-item solution, which often leads to unstable results (Anderson & Gerbing, 1984). Modification indices were investigated to see whether improvements upon the model could be made. Thus, the error terms of AL 1 and AL 2 covaried as well as the error terms of VI 1 and VI 2, DE 1 and VI 1, DE 1 and VI 2, and finally, AB 3 and AB 2. All error terms that covaried were indicators of the same factor. The covariance of the error terms of AL 1 and AL 2 makes theoretical sense; AL 1 asks about the legitimacy of absence while AL 2 asks about whether leaders should show understanding for absence, and behavior and attitudes of supervisors are often attributed to the organization as a whole by workers (Shanock & Eisenberger, 2006). The covariance of VI 1 and VI 2 makes theoretical sense because they both ask about the degree to which the worker feels energetic at work. DE 1 and VI 1 both ask the degree to which the worker feels positive about their work, and the covariance of DE 1 and VI 2 makes sense for the same reason. AB 3 and AB 2 both ask about whether the worker gets absorbed in the work.

Table 3 shows the goodness of fit for the measurement model. While the chi-square test was significant, which may indicate poor fit, chi-square is chiefly a reasonable measure for models with smaller sample sizes than that in this study (Bearden, Sharma, & Teel, 1982). Moreover, the minimum discrepancy divided by the degrees of freedom ( $cmin/df$ ) is indicative of an acceptable fit between the hypothetical model and the sample data when the value is between 1 and 3 (Carmines & McIver, 1981), which is the case here. The root mean square error of approximation (RMSEA) is, according to Browne and Cudeck (1993), indicative of a close fit of the model compared with the degrees of freedom when it is about or below .05, which was the case here ( $RMSEA = .05$ ). The comparative fit index (CFI) was .95, which now is recognized as an indication of good fit (Hu & Bentler, 1999).

Table 3

*Goodness of Fit for the Measurement Model.*

Metric	Observed value
$\chi^2$ (df)	484.79 (284)
cmin/df	1.73
<i>p</i>	Sig.
CFI	.95
RMSEA	.05
PCLOSE	<i>ns</i>

**Validity and reliability.** Discriminant validity was established through the comparison of the square root AVE and the inter-factor correlations, while reliability was calculated through the composite reliability (CR) scores. Convergent validity of the factors was checked through the AVE, of which a threshold value of .5 indicates convergent validity (Hair et al., 2010). OAN and WE had .5 or above on the AVE, which renders them good in that regard. Both AL and OAPN were close to .5 (.47) while HLoC had .39 AVE. This is somewhat problematic as it indicates that the factors AL, OAPN, and HLoC do not have sufficient convergent validity. In the case of AL and HLoC, they both had high composite reliability scores (Hair et al., 2010), .81 and .79 respectively, as well as discriminant validity as the square roots of the AVEs were greater than the inter-factor correlations (Hair et al., 2010). This means they could still be considered good in spite of not being very strong internally. OAPN, on the other hand, also had a somewhat low CR (.63), which means it is not very strong in terms of either convergent validity or reliability. OAPN is, however, clearly a distinct construct within the measurement model, as seen from the square root AVE compared with the inter-factor correlations. This means that while OAPN is somewhat weak in reliability as well as in convergent validity, it has discriminant validity. A summary of the validity and reliability of the latent constructs can be found in Table 4.



Table 4

*Validity and Reliability of Factors.*

	CR	AVE	1	2	3	4	5
1. OAN	.75	.50	<b>.71</b>				
2. WE	.94	.65	.42	<b>.81</b>			
3. AL	.81	.47	.08	-.07	<b>.69</b>		
4. HLoC	.79	.39	.01	.18	-.13	<b>.63</b>	
5. OAPN	.63	.47	-.41	-.21	-.10	.18	<b>.68</b>

*Note.* Square root AVE is bolded and the inter-factor correlations are below.

**Common method bias.** Harman's single-factor test, through principal axis factoring with extracted factors constrained to one, was applied to investigate common method bias in the measurement model. If the extracted model explains more than 50% of the variance, common method bias can be assumed (Chang, Witteloostuijn, & Eden, 2010). Total variance explained was almost half of that, with only 26.15% of the variance explained, which means common method bias was not assumed to be present, and no changes were made to adjust for it.

**Invariance tests.** Configural and metric invariance tests were executed since one of the hypotheses relied on moderating the structural model with two categorical variables, namely OAPN low and high. This determines whether the items in the survey meant the same things to different groups of participants (Cheung & Rensvold, 2002). The unconstrained measurement models, with groups loaded one by one, showed good fit ( $cmin/df = 1.49$ ;  $CFI = .95$ ) which indicates that the model is configurally invariant (Cheung & Rensvold, 2002). OAPN high and low were also metrically invariant because the chi-square difference tests were found to be not significant ( $p > .05$ ) in at least one item per construct when constraining the models equally (MacKenzie et al., 2011).

### Structural model

**Data imputations.** Composite variables were created through AMOS for the factors of the measurement model and used for the path model. Hypothesis 3 was tested using the median of the composite score of the factor OAPN to categorize those below the median as belonging to the group with low OAPN and those above the median as belonging to the group with high OAPN.

**Final structural model.** All the control variables except gender and overall health were removed as they created a model with poor fit (e.g.,  $\chi(df) = 27.6(8)$ ;  $cmin/df = 3.45$ ;  $p < .05$ ;  $CFI = .62$ ;  $RMSEA = .07$ ;  $PCLOSE = p < .05$ ). Age, HLoC, and AL also had standardized regression

coefficients of very low value (less than .03 in absolute value) on sickness presenteeism. Gender also had a low regression coefficient, but it was retained for the final model because it created a better fit.

Table 5 demonstrates the adequacy of the fit of the final model according to standards mentioned in the model fit section of the CFA. While traditionally a CFI value of .90 could still be considered indicative of good fit, a value below .95 is now considered too low (Hu & Bentler, 1999). This is a limiting factor for the results, but the rest of the included indicators suggest that the fit is good.

Table 5

*Goodness of Fit for the Structural Model.*

Metric	Observed value
$\chi^2$ (df)	20.24 (8)
cmin/df	2.53
<i>p</i>	Sig.
CFI	.90
RMSEA	.05
PCLOSE	<i>ns</i>

### Hypotheses

Hypothesis 1, which stated that OAPN are negatively associated with OAN, found strong support ( $r = -.53, p < .001$ ) in the structural model. Hypothesis 2, which predicted that high OAN are positively related to high work engagement, found strong support as well ( $\beta = .49, p < .001$ ). Hypothesis 5 also found support, as high OAPN were found to be positively related to high presenteeism ( $\beta = .20, p < .01$ ). The two other direct effect hypotheses (4 and 6) did not find support. No relationships were found between OAN and presenteeism, or between work engagement and presenteeism. No support was found for a mediator role for work engagement between OAN and presenteeism as predicted in hypothesis 7. That the positive relationship between OAN and work engagement is stronger for high norms than for low norms found support as the differences of the critical ratios for the two groups received a *z* score of 2.15 ( $p < .05$ ). Hypothesis 3, in other words, was supported in this structural model. The control variable of gender did not have significant relationship with sickness presenteeism, but overall health did ( $\beta = -.20, p < .001$ ).

Means and standard deviations can be found in Table 5, while Table 6 contains the standardized regression coefficients as well as the total explained variance in the endogenous

variables. Figure 2 shows the final structural model with standardized regression coefficients on the regression lines and the correlation coefficient on the double-headed arrow covariance line between OAN and OAPN.

Table 6

*Means and Standard Deviations.*

	Mean	Standard Deviation
OAN	3.52	1.07
OAPN	1.98	1.08
Presenteeism days	6.46	16.73
Overall health	4.26	.73
WE	5.58	1.43
WE for low OAPN	5.68	1.09
WE for high OAPN	5.32	1.31

*Note.* Low and high OAPN are the groups of respondents that had lower and higher than median OAPN values. Each OAPN group had 140 respondents.

Table 6

*Structural Model with Standardized Path Coefficients ( $\beta$ ).*

	Direct effect on WE	Direct effect on presenteeism	Indirect effect on presenteeism	Effect of OAN on WE
OAPN		.20**		
OAN	.49***	-.03		
WE		-.03		
Gender		-.01		
Overall health		-.20***		
OAN via WE			-.03	
Low OAPN (intercept)				.36*** (3.62)
High OAPN (intercept)				.56*** (2.50)
$R^2$	.24	.09		

*Note.* \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

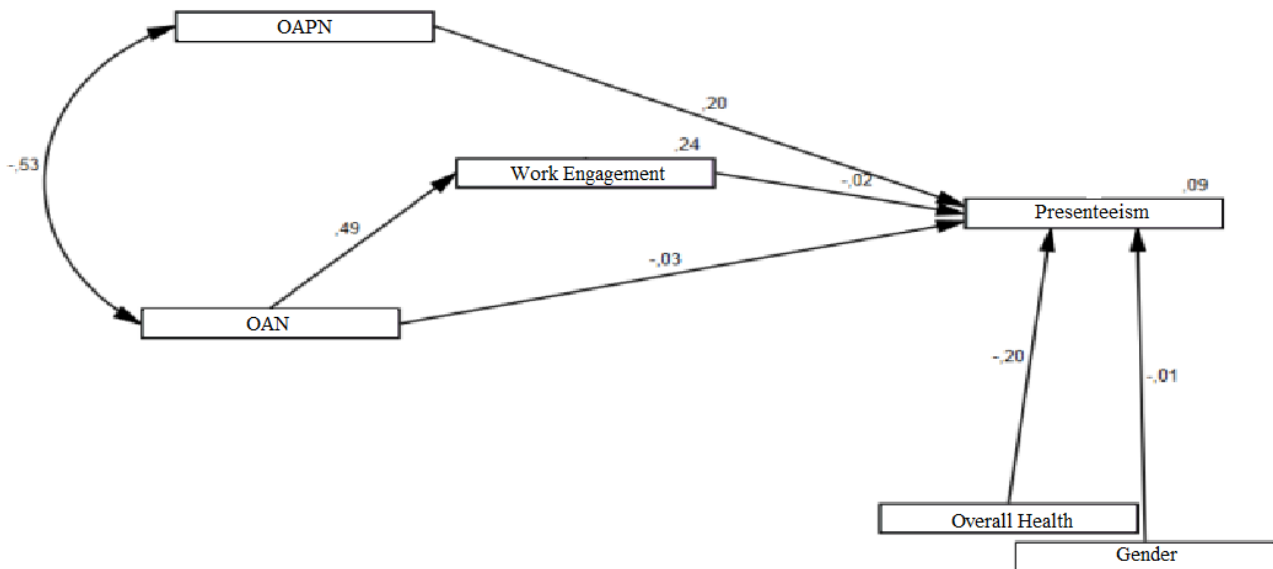


Figure 2. Final structural model with coefficients and explained variance.

### Discussion

This thesis asked what the relationships are between presenteeism, work engagement, and organizational norms of attendance pressure and adjustment. The statistical analyses of the answers from 280 Norwegian workers provided some indications. The hypothesized negative relationships between OAPN and OAN, as well as between OAPN and presenteeism, found support. The hypothesized positive relationship between OAN and presenteeism did not, as the relationship was found to be nonsignificant.

The relationship between job resources (i.e., organizational adjustment norms) and job demands (i.e., organizational attendance pressure norms), as described by the JD-R model (Bakker & Demerouti, 2007), did not have the hypothesized effect on the worker's decision to exhibit presenteeism as described by Johns's (2010) model. More specifically, the results suggest that the motivational process is not relevant in explaining presenteeism. Additionally, the overall fit of the final structural model was poor, as indicated by the low CFI and the significant chi-square, which further supports such a notion.

Moreover, the results indicate that those respondents who experienced low OAPN exhibited a weaker relationship between OAN and work engagement. This result is supported by earlier research, which has found such a relationship between various job resources and job demands on work engagement (e.g., Bakker et al., 2007). In other words, job resources affect work engagement to a greater degree when job demands are high (Bakker & Demerouti, 2007). This relationship has theoretical support from COR in that gains of resources are more relevant in conditions of resource loss (Hobfoll, 2002).

The rest of this discussion will be centered on methodological, theoretical, and practical limitations and implications pertaining to these results, specifically regarding the motivational process and the boosting effect of OAPN on the relationship between OAN and work engagement. To finish off, future implications and conclusions of the thesis will be outlined.

### **Methodological limitations**

Methodological limitations as they pertain to all the results are presented first. Then, limitations of the results regarding the boosting effect of OAPN on the relationship between OAN and work engagement will be introduced. Finally, limitations of the results of the motivational process hypothesis will be put forth.

To begin with, the external validity of the results is somewhat questionable. External validity refers to whether the relationships found in the research can be generalized beyond the data obtained from the questionnaire (Kam, Wilking, & Zechmeister, 2007). The results might be skewed by the fact that the questionnaire response rate is unknown. This is because there is no way of knowing whether certain groups in the workforce decline participation to a greater degree (Baruch, 1999). In addition, the convenient nature of how the respondents were recruited sheds some doubt on the generalizability of the results (Kam et al., 2007). Furthermore, although a wide variety of branches and ages were represented, a representative sample of the Norwegian work force was not obtained. Another potential problem is the method of dealing with missing values, which was to replace them with the median or the mean of the responses given by the rest of the participants. This is because both SEM and regression research have shown that mean imputation leads to a bias in the estimated parameters (Brown, 1994; Wothke, 2000). While presenteeism in the end had two control variables (overall health and gender), work engagement did not have any. For this reason, the relationships in which work engagement is an endogenous variable might turn out to be weaker or stronger if unknown third variables are taken into account (Becker, 2005). However, to my knowledge, no studies that investigate the motivational process control for third variables on work engagement (e.g., Salanova et al., 2008; Schaufeli & Bakker, 2004). Moreover, due to the cross-sectional design of the data material, no causation can be inferred.

Several methodological limitations pertain to the multigroup result, or the boosting effect of OAPN on the relationship between OAN and work engagement. This concern is mostly relevant for the validity and reliability of the latent variable of OAPN. During the EFA, the sample size was determined to be too small for a reliable assessment of OAPN 7 as the communality of the item was .11, which is well below the .5 threshold for a sample size of 300 (MacCallum et al., 1999). MacCallum and colleagues argue that a sample size of 500 is more appropriate for items with communalities that low. Moreover, OAPN 7 was removed during the CFA, which resulted in a two-

item solution. A two-item solution often leads to unreliable results (Anderson & Gerbing, 1984), but identification of the latent variable can still be deemed reliable if there is a nonzero correlation with another construct (Savalei & Bentler, 2010). This was the case here, as OAPN were found to be associated with both presenteeism and OAN. Other signs of the lack of reliability and validity can be found by looking at various indicators. Both Cronbach's alpha and the CR for the two-item solution were 7 percentage points below the threshold for reliability. However, Kline (1999) argued that this is to be expected due to the multidimensionality of psychological constructs. The OAPN variable also lacked convergent validity. This means that the construct did not show strong internal validity. However, it clearly showed discriminant validity. To summarize, it is appropriate to question whether this form of measuring OAPN provides the necessary reliability and internal validity.

The boosting effect of OAPN on the relationship between OAN and work engagement was tested using a little-known multigroup method. However, this does not mean that the results obtained are untrustworthy; the procedure is psychometrically sound for the following reasons (Gaskin, 2012). Multigroup moderation splits the dataset in two categories. In this instance, one category was for respondents with scores in the bottom 50% of OAPN, and the second category was for the top 50%. Afterwards, each set of data was tested for the final structural model. This procedure determines whether the hypothesized relationships in a model will be distinct depending on the value of the moderator. Normally, this is tested through investigating the chi-square differences, but this method uses the  $z$  scores of the critical ratios instead to determine whether they were significantly different for the two groups. While this might be considered a limiting factor in the interpretation of this result, the fact that the a priori hypothesis found support mitigates the impact of such an argument.

### **Theoretical implications**

The lack of positively supported hypotheses concerning associations between OAN, work engagement, and presenteeism makes this treatise important as it is the first study that suggests that the motivational process of the JD-R model does not explain the phenomenon of presenteeism, either through the direct effects inherent in the JD-R model of work engagement and job resources on presenteeism or through the mediatory role of work engagement between job resources and presenteeism. Two additional findings support this notion: The overall fit of the model was poor, and the explained variance of presenteeism was low (9%). These findings suggest that the motivational process does not affect workers' choice to stay home or go to work in the face of illness, as per Johns's model (2010). However, several arguments can be made to stave off

definitive conclusions on this matter.

First, there are the methodological limitations already mentioned. Second, there is the question of who comprises the data material used in this thesis. As mentioned in the introduction, Bakker and colleagues (2008) argued that the work environments of today's organizations expect a high standard of initiative, proactivity, quality, and personal responsibility for workers' own development *in general*, but a more nuanced perspective may be warranted. It might be that in construction or in industry, for instance, these attitudes are not expected. In fact, they might be frowned upon. This could mean that the motivational process is relevant to the choice between absence and presenteeism only in sectors with certain characteristics, for example, in the university sector constituted by knowledge workers. In addition, the results that suggest a positive association between OAN and work engagement may have theoretical implications for the field of positive psychology in general, specifically concerning the question of reciprocity in the expectations that the *organizations* have about the attitudes of workers. That is, OAN turn the spotlight on *workers'* expectations for organizations because these norms are something that supervisors and the organization collectively must take responsibility for.

The boosting effect of OAPN on the positive association between OAN and work engagement might have at least three theoretical considerations. First, this interaction effect suggest that it is appropriate to regard OAN as a job resource, and OAPN as a job demand because they behave as the JD-R model predicted job resources and demands would. Second, consider Podsakoff and colleagues' (2007) distinction between hindrance stressors and challenging stressors. That is, a high degree of OAPN in isolation can be regarded by the workers as a job demand that hinders personal growth and task accomplishment. However, when these norms are accompanied by OAN, they might be perceived as a challenging stressor instead, leading to increased work engagement. Third, it might also be that the gain spiral of COR explains this phenomenon. The gain spiral describes how persons with greater amounts of resources have an increased likelihood of gaining resources as they are more prone to bet their resources (Hobfoll & Shirom, 2001). In terms of this thesis, the COR theory describes that workers employed in an organization with a greater degree of OAN have an increased likelihood of gaining additional resources as they are more prone to bet resources. This gain of resources in itself has a moderate effect but is more relevant when resources are lost because of a high degree of OAPN.

Both theoretical considerations of this boosting effect are important to discuss in light of the means and intercepts of work engagement for the respondents who reported having low versus high levels of OAPN. Those belonging to the former reported a work engagement mean of 5.68, while those belonging to the latter reported 5.32. This indicates that despite a booster effect, those

perceiving higher amounts of OAPN reported, on average, a 6.8% lower level of work engagement than those experiencing lower amounts of OAPN. Moreover, the intercept of the effect of OAN on work engagement was 3.62 for the workers in the category of low OAPN but 2.50 for the workers in the high category. These estimates indicate that while the boosting effect might be real, the overall level of work engagement seems to be lower for those in the category of high OAPN.

The wording of an item is very important for how respondents interpret and respond to it (Noelle-Neumann, 1970). As mentioned in the introduction, presenteeism is typically presented as inherently negative through the way it is measured. Therefore, it begs the question to ask whether presenteeism is negative, positive, or neutral; how it is often measured already defines it as something negative. This thesis does not intend to transform presenteeism into something inherently positive due to influence from positive psychology. Instead, it aims to look at presenteeism as an initially neutral act. This means that whatever adjective is used for it will be generated from the data, and not from a preconceived notion inherent in the measurement method. In addition, it is possible that workers choose presenteeism because they perceive it as the best option for their health (Thun et al., 2013).

Research that has measured presenteeism as a rate of how frequently impaired health has caused a diminished ability to work was not of focus in this thesis for the following reasons. This way of measuring excludes people who have gone to work ill but do not think that it has had consequences for their productivity. In research that examines presenteeism from the viewpoint of positive psychology, this does not make sense as positive psychology has a stated mission of looking at optimal human functioning (Bakker & Demerouti, 2007). Through this form of measuring presenteeism, workers who function well with their health impairment (i.e., they don't have productivity loss even when they go to work with minor health issues), and for this reason are of great interest from the perspective of positive psychology, would, in effect, be excluded from analysis. It is therefore reasonable to conclude that research that measures presenteeism in a way that excludes workers with optimal functioning from investigation does not make a good contribution in a tradition that has an explicit goal of examining workers with optimal functioning.

The same argument can be made concerning research that has measured presenteeism as a frequency of something that really should have been avoided due to the worker's state of health (e.g., Aronsson et al., 2000). Thus, optimally functioning humans who go to work while ill, as they judge it to be the right choice with regard to their health, would, as a result, be excluded from investigation when measured in this way. However, research that has measured presenteeism in the manner of the latter is included – and to a large extent, at that – in this thesis for several reasons. First, there have not been many empirical studies of presenteeism measured in the neutral manner



of, for instance, the variable “Presenteeism days” in Johns (2011). But then why, one might object, has presenteeism research that measures how often health problems have resulted in reduced productivity been excluded, but not presenteeism studies that measure the frequency of attending work while ill to the detriment of the worker’s health? This objection brings up the second reason of their inclusion: This thesis is positioned in the European tradition of occupational health psychology, where the emphasis is on health. Be it the optimal aspects of health, like in positive psychology, or the more sub-optimal aspects of health, like in the traditional European research on presenteeism, health is nonetheless one of the central topics against which the other phenomena of interest are often juxtaposed. Conclusively, the traditional European way of investigating presenteeism is deemed appropriate for inclusion, but not so much the productivity research on presenteeism.

### **Practical Implications**

Many practitioners with roles that concern occupational health psychology may conclude, based on this thesis, that OAPN is a good thing because it boosts the effect of job resources on work engagement. Therefore, policies, climates, and attitudes that promote OAPN are justified because it leads to work engagement when combined with resources. I believe these conclusions are false for several reasons. First, this thesis also suggests a positive relationship between presenteeism and OAPN. While presenteeism is measured differently in this study, there are many studies that indicate that presenteeism in the long run is detrimental to the health of workers (Bergström et al., 2009; Gustafsson & Marklund, 2011; Kivimäki et al., 2005) and leads to sick leave (Gosselin, Lemyre, & Corneil, 2013; Gustafsson & Marklund, 2011; Hansen & Andersen, 2009). Therefore policies, climates, and attitudes that promote organizational attendance pressure can result in poor health and sick leave down the line. Second, which job resources receive a boosting effect from OAPN may not be coincidental. In other words, the same effect might not exist for other job resources (e.g., income, social support). In addition, both variables were related in that they measured at a work-climate level and can be seen as opposites in some regards. An example is the strong negative association between perceiving both OAPN and OAN at the same time by the same respondent.

Third, what constitutes being good depends on what standards this conclusion is founded upon. However, even if work engagement is the standard, this finding does still not necessarily equate OAPN as being something good for the following reason: The data suggest that those who perceive low OAPN seem to have a lower degree of work engagement than those who perceive high OAPN.

Fourth, interpreting the effect of OAN on work engagement might be limited because of the

lack of control variables on work engagement. As has been noted in the theory, support given by supervisors is often attributed to the organization as a whole (Shanock & Eisenberg, 2006). What this means is that it might not really be OAN that explain 24% of the variance in work engagement. Maybe social support and/or attitudes from supervisors explains much of the variance that OAN here explains. As previously noted, one study has suggested that the perception of supervisors' attitudes by worker representatives influences OAN (Thun et al., 2013).

I see no practical implications of the results pertaining the motivational process. However, since OAN explained 24% of the variance in work engagement, the argument can be made that creating a workplace with a high degree of OAN will affect work engagement positively. This result may have implications for practitioners of occupational health psychology, specifically concerning the question of reciprocity. Most prevalent are arguments about the expectations that *organizations* have about the attitudes of the workers (e.g., Bakker et al., 2008). That is, OAN draw focus to what is expected from the organizations by the *workers* because these norms are something that supervisors and the organization collectively must take responsibility for.

### **Future research**

An intriguing contribution of this study is that it provides future researchers with a novel way of examining presenteeism by combining it with positive psychology. Even though the data did not reflect the predictions, this is one of many ways a researcher can investigate presenteeism using the framework of the JD-R model, which here served as a model to investigate the interactions between personal factors and work context factors. On another note, the boosting effect of OAPN on the relationship between OAN and work engagement fills an empirically void area of positive psychology research. In other words, now there are empirically founded indications that did not exist before, albeit theoretically.

It is important that future research that uses the framework of this thesis be conscious of how presenteeism is measured. An interesting study would be to again look at the relationship between work engagement and presenteeism but where presenteeism is measured in several different ways. A suggestion would be to ask one question in the manner of Aronsson, Gustafson, and Dallner (2000): "In the previous 12 months, have you gone to work despite feeling that you really should have taken sick leave due to your state of health?" Another question would be asked in a neutral way, as this thesis does: "How many days did you go to work with illness and/or health impairments in the past 6 months?" A third question would be asked with a positive spin: "How many days did you go to work with illness in the past 6 months because you perceived it as the best option for your health?" Finally, there should be at least three different Likert items measuring aspects of presenteeism to create a latent variable to be used in SEM. Moreover, future research that

investigates the psychosocial environment of jobs where presenteeism is more likely to be perceived as the best option for health may find that the motivational process of the JD-R model does explain presenteeism (e.g., knowledge workers at a university).

A future study with a longitudinal design could answer several important questions. For instance, one could investigate the relationship between OAPN and presenteeism to see whether the norms cause presenteeism, which then causes impaired health and/or absenteeism. A finding like this would be in line with several longitudinal studies that have linked presenteeism with both ill health (Bergström et al., 2009; Gustafsson & Marklund, 2011; Kivimäki et al., 2005) and absenteeism (Deery, Walsh, & Zatzick, 2014; Gosselin, Lemyre, & Corneil, 2013; Gustafsson & Marklund, 2011; Hansen & Andersen, 2009).

### **Conclusion**

This thesis investigated the relationship between work engagement, presenteeism, and OAPN and OAN. The results suggest that work engagement and the motivational process of the JD-R model are not associated with presenteeism, while OAPN boost the positive relationship between OAN and work engagement. Both of these suggestions come with important caveats. One of the aims of this thesis was to align research on presenteeism with positive psychology, and ultimately to look at the phenomenon of presenteeism without a preconceived notion of it being innately negative. This way of looking at presenteeism may contribute both counterintuitive and nuanced data and interpretations to the field of occupational health psychology. To achieve this goal I suggest that future researchers explore various forms of measuring presenteeism (e.g., how many days in the last 6 months did you attend work while sick, considering it the best option for your health?) while collecting data from jobs that might be more prone to behavior measured in this way (e.g., knowledge workers in universities). After the validity and reliability of such measures have been established, longitudinal research that looks into the causal relationships between OAPN, OAN, work engagement, and presenteeism may be worthwhile.

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## Appendix A

*Overview of Cases and Proportions Working at Different Industries.*

Types of industries	Frequency	Percent (%)
Mining/energy production	7	2.5
Industry	22	7.9
Transport and communication	13	4.6
Financial services/insurance	16	5.7
Public administration	22	7.9
Construction	27	9.6
Retail	31	11.1
Hotel and restaurant	10	3.6
Education and research	40	14.3
Health and welfare sector	73	26.1
Primary industries	11	3.9
Missing values	8	2.9

## Appendix B

*Missing Values, Mean, Median, and Standard Deviation (SD) before and after Imputation.*

Variable	Missing values	Mean	Median	SD	Mean after	Median after	SD after
Age	1	39.66	38	13.02	39.61	38	13.01
Overall health: How would you describe your health, generally speaking?	1	4.26	4	.73	4.26	4	.73
EoR 1: If I am absent from work, someone else can fill in for me.	1	2.99	3	1.34	2.99	3	1.34
EoR 2: If I am absent from work, the work just piles up until I get back (reversed scores).	0	2.63	2	.73	-	-	-
AL 1: When employees are absent from work, they usually have a valid reason.	0	4.12	4	.97	-	-	-
AL 2: Leaders should show understanding when employees are not at work.	0	4.44	5	.79	-	-	-
AL 3: Putting in place sanctions for those (employees) who are not at work is not a good policy for good leadership.	1	4.38	5	1.01	4.38	5	1.01
AL 4: There is nothing wrong with leaders accepting that some employees are not at work.	0	4.03	4	1.16	-	-	-
AL 5: It is unjust to punish those (employees) who missed work.	2	4.5	5	.93	4.5	5	.92
AL 6: (Sickness) absence is something that simply can't be avoided.	1	4.12	5	1.12	4.12	5	1.12
AL 7: (Sickness) absence can be beneficial for the holistic function of the organization.	3	2.48	2	1.26	2.48	2	1.26
AL 8: (Sickness) absence is a legitimate act by employees.	2	4.06	4	1.05	4.06	4	1.05
OAPN 1: Here, it is expected that one comes to work no matter how one feels.	0	2.19	2	1.16	-	-	-
OAPN 2: Employees who are absent are seen as disloyal.	1	1.76	1	.99	1.76	1	.99
OAPN 3: With us, we are reluctant to get substitutes for shorter absences.	1	3.37	4	1.59	3.37	4	1.58
OAPN 4: Here, everyone has to come to	1	1.81	1	1.16	1.8	1	1.16

work every day or our workplace is in danger.

OAPN 5: With us, absence through (medical) self-certification is seen as extra vacation.	1	1.43	1	.91	1.43	1	.91
OAPN 6: Voluntary unpaid overtime is completely normal here.	1	2.52	2	1.49	2.52	2	1.49
OAPN 7: Employees who come late and leave early are frowned upon here.	0	2.95	3	1.23	-	-	-
OAPN 8: At this workplace, periods with low rates of absence are celebrated.	0	1.64	1	1.07	-	-	-
OAPN 9: People here are so conscientious that it compromises their health.	3	2.79	3	1.14	2.80	3	1.13
OAPN 10: If anyone is gone without reason, they will hear about it.	4	2.83	3	1.35	2.83	3	1.34
OAPN 11: Here, we do not go home until the job is done.	1	3.41	3	1.14	3.41	3	1.14
OAPN 12: Use of paid overtime is widespread in this enterprise.	1	2.57	2	1.39	2.57	2	1.39
OAN 1: At my workplace, it is possible to arrange private errands during working hours.	1	3.35	4	1.35	3.36	4	1.35
OAN 2: Here, it is fine to come to work even if your health is not optimal.	0	3.80	4	1.02	-	-	-
OAN 3: We easily find alternative tasks for those who need less strain.	0	2.98	3	1.12	-	-	-
OAN 4: It is high under the ceiling here for those who struggle with their health.	0	3.48	4	1.09	-	-	-
OAN 5: Here, people with health problems get help and support to manage their job.	1	3.64	4	1.04	3.64	4	1.04
OAN 6: With us, work is seen as something health promoting and positive, including for those with health problems.	0	3.53	3.5	1.04	-	-	-
OAN 7: At my workplace, we are good at following up with those on sick leave.	2	3.43	3	1.1	3.43	3	1.09
HLoC 1: If I get sick, it is my own actions that determine how fast I become well again.	0	3.59	4	.97	-	-	-
HLoC 2: I have control over my own	2	3.6	4	.93	3.6	4	.93



health.

HLoC 3: I can blame myself when I am sick.	0	2.37	2	1.06	-	-	-
HLoC 4: It is mainly what I do that influences my health.	1	3.24	3	1	3.24	3	.99
HLoC 5: If I take care of myself, I can avoid getting sick.	0	3.69	4	.93	-	-	-
HLoC 6: If I make the right choices, I can maintain a good state of health.	0	4.00	4	.80	-	-	-
VI 1: At my work, I feel bursting with energy.	0	5.87	6	1.14	-	-	-
VI 2: At my job, I feel strong and vigorous.	1	5.83	6	1.19	5.83	6	1.19
VI 3: When I get up in the morning, I feel like going to work.	2	5.38	6	1.62	5.39	6	1.61
DE 1: I am enthusiastic about my work.	1	5.99	6	1.22	5.99	6	1.21
DE 2: My job inspires me.	2	5.55	6	1.59	5.55	6	1.55
DE 3: I am proud of the work that I do.	1	6.01	6	1.29	6.01	6	1.29
AB 1: I feel happy when I am working intensely.	0	5.56	6	1.50	-	-	-
AB 2: I am immersed in my work.	2	5.26	6	1.64	5.26	6	1.63
AB 3: I get carried away when I am working.	3	4.75	5	1.72	4.76	5	1.71

*Note.* EoR: ease of replacement, AL: absence legitimacy, OAPN: organizational attendance pressure norms, OAN: organizational adjustment norms, HLoC: health locus of control, VI: vigor, AB: absorption, DE: dedication. Numbers after variables represent their order in the survey and are a way of recognizing items when referred to in their abbreviated form.

## Appendix C

*EFA Structure Matrix.*

Item	Rotated factor loadings structure matrix							F7
	WE	AL	HLoC	OAN	EoR	OAPN		
AB 1	.90			.36				
AB 2	.85							
DE 3	.84			.32				
DE 2	.83			.37				
VI 3	.82			.39				
DE 1	.81						.43	
AB 3	.78							
VI 2	.77						.57	
VI 1	.71						.55	
AL 5		.78						
AL 2		.77						
AL 4		.73						
AL 3		.66						
AL 1		.56				-.31		
HLoC 6			.81					
HLoC 5			.77					
HLoC 4			.61					
HLoC 2			.57					
HLoC 3			.48					
HLoC 1			.47					
OAN 5	.31			.80				
OAN 4				.65		-.31		
OAN 7	.32			.65		-.34		
EoR 2					.77			
EoR 1					.74			
OAPN 2						.72		
OAPN 1						.60		
OAPN 7						.31		

*Note.* EoR: ease of replacement, AL: absence legitimacy, OAPN: organizational attendance pressure norms, OAN: organizational adjustment norms, HLoC: health locus of control, VI: vigor, AB:

absorption, DE: dedication. Numbers after variables represent their order in the survey and are a way of recognizing items when referred to in their abbreviated form. Loadings below .3 in absolute value were suppressed for interpretability.

## Appendix D

## Måling av det gode arbeidsmiljø

Page 1

**Informasjon**

Detta er informasjon og en forespørsel om å delta i en spørreundersøkelse i forbindelse med prosjektet 'Måling av det gode arbeidsmiljø'. Spørreskjemaet er en kartlegging av psykososiale faktorer ved din arbeidssituasjon. Formålet med denne studien er å få innsikt i hvordan du opplever din arbeidshverdag med fokus på arbeidsmiljø og helse.

Alle svar behandles konfidensielt og anonymiseres slik at svarene ikke kan tilbakeføres til den enkelte respondent. Dette vil bli gjort fortløpende i forskningsprosessen. Prosjektet avsluttes i 2017 og datasettet vil da lagres anonymt.

Det kommer til å bli spurt om opplysninger som fødselsår, kjønn, yrke etc. Det er frivillig å delta og du kan trekke deg så lenge studien pågår uten å oppgi grunn. NTNU ved Ingrid Steen Rostad og Sylvi Thun er ansvarlig for denne undersøkelsen. Datamaterialet vil bli brukt i forbindelse med prosjektansvarliges doktorgradsprosjekt og i bachelorfordypningen.

Dersom du har lyst å delta i spørreundersøkelsen må du godkjenne samtykkeerklæringen.

Hvis det er noe du lurer på kan du kontakte oss på e-post [ingrid.s.rostad@svt.ntnu.no](mailto:ingrid.s.rostad@svt.ntnu.no) og [sylvi.thun@svt.ntnu.no](mailto:sylvi.thun@svt.ntnu.no). Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S.

Med vennlig hilsen Ingrid Steen Rostad og Sylvi Thun og bachelorstudentene ved Psykologisk institutt.

## Måling av det gode arbeidsmiljø

Page 2

**Samtykkeerklæring**

- Jeg har mottatt informasjon om studien og ønsker å delta i spørreundersøkelsen
  - Ja
  - Nei

## Måling av det gode arbeidsmiljø

Page 3

**Bakgrunnsinformasjon**

Vi begynner med noen spørsmål om deg og din bakgrunn. Husk å sette bare ett kryss på hvert spørsmål dersom ikke annet er oppgitt.

- Hva heter studenten som rekrutterte deg?

- Kjønn
  - Kvinne
  - Mann

- Fødselsår

- Hvilket ansettelsesforhold har du?

Fast  
 Midlertidig eller tidsbegrenset  
 Vikariat eller ekstrahjelp  
 Ansatt i vikarbyrå  
 Vet ikke  
 Annet, hva

6. Hvilken sektor jobber du i?  
 Offentlig sektor  
 Privat sektor

7. Hvilken bransje arbeider du i?  
 Bergverk/energiproduksjon  
 Industri  
 Transport og kommunikasjon  
 Finansiell tjenesteyting / forsikring  
 Offentlig forvaltning  
 Bygg og anlegg  
 Varehandel  
 Hotell og restaurant  
 Undervisning og forskning  
 Helse- og omsorgssektoren  
 Primærnæringene

8. Hva jobber du som?

9. Har du lederansvar?  
 Ja  
 Nei

### Måling av det gode arbeidsmiljø

**Page 4**

#### Helse og fravær

10. Helse  
 Her kommer et spørsmål om hvordan du oppfatter din helse.
- |   | Svært dårlig          | Dårlig                | Verken eller          | God                   | Svært god             |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Hvordan vil du generelt sett beskrive helsen din? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
11. Sykefravær  
 Har det hendt at du har vært borte fra jobben på grunn av sykdom i løpet av de siste 6 månedene?  
 Ja  
 Nei
12. Hvis ja på spørsmålet over: Hvor lang var den lengste perioden med fravær?  
 Under 4 dager  
 Fra fire til 16 dager  
 Mer enn 16 dager (fikk sykepenger fra NAV)
13. Hvor mange dager med sykefravær har du hatt i løpet av de siste 30 dagene? (Skriv 0 hvis du ikke har hatt sykefravær i denne perioden)
14. Hvor mange ganger har du vært borte fra jobben (på grunn av sykdom) i løpet av de siste to årene? (Skriv 0 hvis du ikke har vært borte fra jobb med sykdom og plager i denne perioden)

15. Utsagnene under omhandler det å være borte fra jobb. Hvor uenig eller enig er du i hvert av disse utsagnene?

	Helt uenig	Delvis uenig	Både/og	Delvis enig	Helt enig
Om jeg er borte fra jobb kan noen andre steppe inn for meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Om jeg er borte fra jobb vil arbeidet samle seg opp og jeg må ta det igjen når jeg kommer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Når noen ansatte er borte fra jobb har de som regel en god grunn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ledere bør vise forståelse når noen ansatte er borte fra jobb	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Å innføre sanksjoner for de (ansatte) som er borte fra jobb er ingen praksis for god ledelse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er ingenting galt ved at ledelsen aksepterer at noen (ansatte) er borte fra jobb	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er urettferdig å straffe de (ansatte) som har vært borte fra jobb	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(Syke)fravær er rett og slett noe som ikke kan unngås	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(Syke)fravær kan være fordelaktig for organisasjonens helhetlige funksjon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(Syke)fravær er en legitim handling av ansatte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Måling av det gode arbeidsmiljø

Page 5

### Forholdene på din arbeidsplass

16. Normer på arbeidsplassen  
Nå følger noen utsagn som handler om hva som er vanlige oppfatninger blant ansatte i din bedrift. Hvor uenig eller enig er du i hvert av disse utsagnene?

	Helt uenig	Delvis uenig	Både/og	Delvis enig	Helt enig
Her forventes det at man kommer på jobb uansett hvordan man føler seg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ansatte som er fraværende blir sett på som illojale	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hos oss henter vi nødvendig inn vikarer ved kortere fravær	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
På min arbeidsplass er det mulig å ordne private ærend i arbeidstiden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Her må alle komme på jobb hver dag ellers er arbeidsplassen vår truet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hos oss blir fravær med egenmelding sett på som ekstrasferene	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frivillig ulønnet overtidsarbeid er helt normalt her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ansatte som kommer sent og går tidlig blir uglesett her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Her er det greit å komme på jobb selv om formen ikke er på topp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
På denne arbeidsplassen feires perioder med lavt eller intet fravær	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vi finner lett alternativt arbeid til de som trenger mindre belastning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er stor takhøyde her for de som sliter med helsa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Folk her er så samvittighetsfulle at det går på helsa løs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvis noen er borte uten grunn får de høre det	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Her får folk med helseproblemer hjelp og støtte til å klare jobben	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hos oss blir arbeid sett på som helsefremmende og positivt, også for de med helseproblemer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Her går vi ikke hjem før jobben er gjort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er mye bruk av betalt overtid i virksomheten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
På arbeidsplassen min er vi gode på innfølgende av svkmeldte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Måling av det gode arbeidsmiljø

Page 6

## Forholdene på din arbeidsplass

17. Har du gått på arbeid på tross av sykdom eller helseplager?

- Ja  
 Nei

18. Hvor mange dager har du vært på jobb ved sykdom og/eller helseplager i løpet av de siste 30 dagene? (skriv 0 hvis du ikke har vært på jobb med sykdom og helseplager i denne perioden)

19. Hvor mange dager har du vært på jobb med sykdom og/eller helseplager i løpet av de siste 6 måneder? (skriv 0 hvis du ikke har vært på jobb med sykdom og plager i denne perioden)

20. Sykenærvær

	Helt uenig	Delvis uenig	Både/og	Delvis enig	Helt enig	Ikke aktuelt
Jeg har fortsatt å jobbe i situasjoner hvor jeg burde ha vært sykefraværende fordi jeg følte at jeg måtte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har fortsatt å jobbe i situasjoner hvor jeg burde ha vært sykefraværende fordi jeg ønsket det	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. Utsagnene nedenfor omhandler det å gå på jobb selv om man er syk. Oppgi i hvilken grad du personlig er enig eller uenig i følgende påstander.

	Helt uenig	Delvis uenig	Både/og	Delvis enig	Helt enig	Ikke aktuelt
Jeg går på jobb selv om formen ikke er på topp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg kommer på jobb uansett hvordan jeg føler meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg kan lett få alternative arbeidsoppgaver om jeg trenger mindre belastning en periode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg kan selv tilpasse mine arbeidsoppgaver ved behov	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er vanskelig å være i arbeid når jeg er syk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg opplever at det er positivt for helsa mi at jeg kan komme på jobb med helseplager/sykdom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har opplevd at tilpassing av arbeidet har ført til at jeg har kunnet fortsette arbeidet på tross av sykdom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har erfart at ledelsen strekker seg langt for å tilpasse arbeidet om jeg har stått i fare for å bli sykmeldt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har spurt etter tilpasset arbeid, men ikke fått det	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
På grunn av at jeg får arbeidet tilpasset føler jeg meg forpliktet til å gå på jobb selv om jeg burde vært hjemme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det går ut over mine inntekter om jeg er sykefraværende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har blitt tilbudt tilpasset arbeid, men takket nei	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er vanskelig å tilpasse mine arbeidsoppgaver	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg opplever at det er negativt for helsa mi at jeg kan komme på jobb med helseplager/sykdom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Med hvilke helseplager er det aktuelt for deg å gå på jobb?

22. Med hvilke helseplager er det vanskelig for deg å gå på jobb?

\_\_\_\_\_

23. Neste spørsmål handler om produktivitet og sykenærvær. Det er viktig å påpeke at vi er interessert i det som gjelder for deg og at det ikke finnes noen universell sammenheng mellom sykdom og produktivitetstap.

	Helt uenig	Uenig	Både/og	Enig	Helt enig
Jeg får gjort like mye på jobb med helseplager/sykdom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg får gjort mindre på jobb med helseplager/sykdom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg får gjort mer på jobb med helseplager/sykdom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Måling av det gode arbeidsmiljø

Page 7

#### Forholdene på din arbeidsplass

24. Har du fått tilrettelagt arbeidshverdagen din ved sykdom og/eller helseplager?

- Ja  
 Nei

25. Hvis Ja over. Hva gjorde tilretteleggingen med helsa di? Jeg opplevde...

- en forverring i helsa  
 en forbedring i helsa  
 ingen forandring i helsa

26. Tilrettelegging

	Helt uenig	Uenig	Både/Og	Enig	Helt enig
Har du muligheten til å tilrettelegge din egen arbeidshverdag?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Måling av det gode arbeidsmiljø

Page 8

#### Forholdene på din arbeidsplass

27. Noen ganger går en på arbeid selv om en er syk eller føler seg uvel, og det kan være ulike grunner til dette. Vi ber deg først tenke igjennom om du noen gang har gått på jobben når du har vært uvel eller syk. Dersom du har det, kryss av for det svaralternativet som passer deg.

Jeg går på jobb selv om jeg kjenner meg dårlig, fordi ...

	Helt uenig	Delvis uenig	Vet ikke	Delvis enig	Helt enig
Det er vanskelig å ordne med vikar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har viktige oppgaver på jobben	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg er oppdratt slik	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det finnes ingen andre som kan gjøre jobben min	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg vil ikke overbelaste kollegene	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er så mye å gjøre på jobben	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg føler ansvar for jobben	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg får dårlig samvittighet hvis jeg blir hjemme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
En bør gå på jobb hvis en ikke er ordentlig syk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg vil ikke bli beskvidt for å skulke av	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





## 30. Spørsmålene nedenfor omhandler din arbeidssituasjon. Kryss av for det som passer deg best.

	Meget sjelden eller aldri	Nokså sjelden	Av og til	Nokså ofte	Meget ofte eller alltid
Er arbeidsbelastningen din ujevn slik at arbeidet hopper seg opp?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Må du arbeide overtid?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er det nødvendig å arbeide i et høyt tempo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Har du for mye å gjøre?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krever arbeidet ditt fysisk utholdenhet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krever arbeidet ditt raske avgjørelser?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er arbeidsoppgavene dine for vanskelig for deg?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krever arbeidet ditt maksimal oppmerksomhet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krever arbeidet ditt bevegelser med høy presisjon?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forekommer avbrytelser som forstyrrer arbeidet ditt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krever ditt arbeid kompliserte avgjørelser?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er arbeidet ditt ensformig?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Må du gjenta den samme arbeidsoperasjonen med få minutters mellomrom?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utfører du arbeidsoppgaver som du trenger mer opplæring for å gjøre?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er dine spesialkunnskaper og ferdigheter nyttige i arbeidet ditt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er arbeidet ditt utfordrende på en positiv måte?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ser du på arbeidet ditt som meningsfylt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krever jobben din at du lærer deg nye kunnskaper og nye ferdigheter?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er det mulig å ha sosial kontakt med kolleger mens du arbeider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvis det finnes flere forskjellige måter å utføre arbeidet ditt på, kan du selv velge hvilken framgangsmåte du skal bruke?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du påvirke mengden arbeid som blir tildelt deg?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du selv bestemme ditt arbeidstempo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du selv bestemme når du skal ta pauser?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du selv bestemme lengden på pausene dine?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du selv bestemme arbeidstiden din (fleksitid)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du påvirke avgjørelser om hvilke personer som du skal samarbeide med?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du selv bestemme når du skal ha kontakt med klienter?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du påvirke beslutninger som er viktig for ditt arbeid?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 31. Mestring av arbeidet

	Meget sjelden eller aldri	Nokså sjelden	Av og til	Nokså ofte	Meget ofte eller alltid
Er du fornøyd med kvaliteten på arbeidet som du utfører?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er du fornøyd med mengden arbeid som du får gjort?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er du fornøyd med din evne til å løse problemer som dukker opp i arbeidet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er du fornøyd med din evne til å ha et godt forhold til dine arbeidskolleger?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Får du informasjon om kvaliteten på arbeidet som du utfører?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kan du selv umiddelbart avgjøre om du har gjort godt eller dårlig arbeid?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 32. Hvordan er klimaet i din arbeidsenhet?

Svært lite eller

... ..

... ..

... ..

	ikke i det hele tatt	Nokså lite	Noe	Nokså meget	Svært meget
Konkurransorientert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oppmuntrende og støttende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mistroisk og mistenksomt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avslappet og behagelig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stivbeint og regelstyrt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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**Forholdene på din arbeidsplass**

33. Er du medlem av en fast arbeidsgruppe?

- Ja  
 Nei

34. Hvis du svarte ja på spørsmålet over, vær vennlig å besvar følgende spørsmål

	Svært lite eller ikke i det hele tatt	Nokså lite	Noe	Nokså meget	Svært meget
Setter du pris på å være medlem av en arbeidsgruppe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35. Hvis du svarte ja på spørsmål 33, vær vennlig å svar på følgende spørsmål

	Meget sjelden eller aldri	Nokså sjelden	Av og til	Nokså meget	Meget ofte eller alltid
Utføres arbeidet i gruppen på en fleksibel måte?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er gruppen din dyktig til å løse problemer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har din arbeidsgruppe møter?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

36. Jobber du mest alene eller i team?

- Alene  
 Team  
 Likt fordelt

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37. Takk for at du deltok på spørreundersøkelsen.

Har du noen kommentarer eller spørsmål bruk kommentarfeltet nedenfor.