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Digital Mindsets, Job Satisfaction and the Role of Intolerance of Uncertainty: A Conditional Approach

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Abstract

The purpose of this study was to examine the relationship between digital mindset and job satisfaction. The study further propose a model that explores the potential mediating influence intolerance of uncertainty, as well as the moderating effects of gender, and level of autonomy, may have on the relationship between digital mindset and intolerance of uncertainty, and intolerance of uncertainty and job satisfaction, respectively. In order to explore the relationships, we applied data collected from a two-staged survey. A sample of 120 employees in a Norwegian retail company was obtained. Through a conditional process approach, the results from the data collection showed that the relationship between digital mindset and job satisfaction was non-significant. The results also showed that the mediating effect of intolerance of uncertainty on the relationship between digital mindset and job satisfaction was non-significant. Moreover, the results measuring the moderating effect of gender on digital mindset and intolerance of uncertainty was not significant, nor was the moderating effect of autonomy on job satisfaction and intolerance of uncertainty. Thus, none of the hypothesised relationship was supported in the present study. Further, results, limitations, and directions for future research are discussed.

Keywords: Digital Mindsets, Job Satisfaction and Intolerance of Uncertainty

1.0 Introduction

The world is becoming more and more digitized with technology infiltrating businesses. This is changing the fundamental nature of work in terms of digital solutions being implemented as part of employees' existing work tasks or even replacing them altogether (Tomonen & Vuori, 2018). These solutions are initiated as means to optimize and increase effectiveness, making organizations more profitable and innovative in a competitive market (Colbert, Yee, & George, 2016). Achieving this is dependent on the employees' acceptance and usage of such technological change initiatives taking place (Davis, Bagozzi, & Warshaw, 1989; Kane, 2017; Choi, 2011).

More specifically, employees' beliefs about technological change, their "digital mindsets," are likely to influence their engagement in, or resistance to, their organization's technological change initiatives (Solberg, Traavik, & Wong, 2020; Maurer, 1997). Employees who believe in the malleability of their traits are, according to Dweck (2006), known to have a growth mindset. These individuals are able to gain confidence by mastering challenges and new tasks. In turn, making them more positive to the digital change initiatives as they, according to Solberg with colleagues (2020, p. 1), perceive it as an opportunity for professional growth, in turn, increasing their job satisfaction. On the other hand, Maurer (1997) state that individuals with fixed mindset are more resistant to change and find digitalization of their workplace to encroach on their ability to do their work, leaving a high proportion of change initiatives unsuccessful according to Nutria and Beer (2000). Therefore, technological change may come at the costly expense of employee's job satisfaction if their mindset makes them resistant to such change. Employees' mindset may be the very key when dealing with technological change initiatives in organizations.

Job satisfaction of the employees play a central part of organizational success, as employees are, in many ways, regarded as the most valuable resource in any organization (GABČANOVÁ, 2011; Lumley, Coetzee, Tladinyane, & Ferreira, 2011). Hence the emergence of the statement, "*Happy employees are productive employees*" (Saari & Judge 2004 cited in Lumley et al., 2011, p. 102). According to Spector (1997, as cited in Lumley et al., 2011), job satisfaction is a result of people's attitudes towards their jobs and various aspects of their job. Thus, employees with high job satisfaction hold generally positive attitudes towards their job and will be more productive, not leave, and have a higher overall life satisfaction

(Robbins 1993 as cited in Lumley et al., 2011; Morrison, 2008; Spector 2008). Lumley with colleagues (2011) emphasize *nature of work* to be a contributing factor to job satisfaction. This means that employees prefer work that is mentally challenging in the sense that they can use their skills and abilities. Accordingly, if an employee's job or work tasks were to be changed or altered by the implementation of new technology (e.g. digital tool), there might arise a mismatch or poor fit between what the employee originally sought out in the particular job and the outcome of what the job, with the technological implementations, now will provide to the individual. Hence, low job satisfaction could be a possible implication if technology and the digitalization of the workplace continue to evolve faster than the ability of employees' to adapt.

Various research support that organizational change generate uncertainty (Nelson et al., 1995; Pollard, 2001; Rafferty and Griffin, 2006; Terry et al., 1996 as cited in Cullen, Edwards, Casper, & Gue, 2014, p. 270). Hence, the idea that intolerance of uncertainty might mediate the relationship between digital mindset and job satisfaction. This is based on the logic that organizational change, in terms of advanced technology for the employees to adapt to and employ as part of their work, may generate uncertainty if they do not have the right mindset to tackle the change happening. How well employees deal with uncertainty that may follow digital tools being implemented as part of work may be explained by what digital mindset they have.

It can be crucial for organizations and employers alike to know what kind of mindset to endorse. Both in terms of recruiting and developing their employees' skills when dealing with digital change or implementations to prevent turnover intentions due to low job satisfaction. In sum, which of the two digital mindsets employees have or employ when confronted with technological change initiatives, may act as a crucial predicament concerning their experienced job satisfaction. To our knowledge, no other study explores the role of growth digital mindset in predicting job satisfaction.

The present study aims to contribute to the *digital mindset* literature, by looking at how growth digital mindset will influence employees' job satisfaction, and whether intolerance of uncertainty mediates this relationship. Based on this, we have chosen to immerse ourselves in the following research question:

To what extent is digital mindset related to job satisfaction? Exploring the roles of intolerance of uncertainty, autonomy, and gender.

These terminologies; digital mindset, job satisfaction, intolerance of uncertainty, will be defined and explained further in the literature review in the following chapter.

We believe that our research can contribute to the literature based on the effect digital mindset may have on employees' job satisfaction. More specifically how intolerance of uncertainty may have a mediating effect on this relationship in terms of the greater growth digital mindset an individual has, the lower intolerance of uncertainty, which will lead to increased job satisfaction. It can be of great importance to study the concept of digital mindset in relation to job satisfaction, because mindset explain how individuals deal with, and adapt to, challenges and new tasks (Dweck, 1999; Dweck, 2006). When digital change is introduced the main objective of the organization is to get the employees onboard with the initiative (e.g. digital mindset) and hopefully find it as a productive contribution to their present work (e.g. job satisfaction), if not, it could prevent the organization from meeting their overall goal. What drives job satisfaction in this case would be the feeling of successfully adopting the new digital change initiative and experiencing it as being a meaningful part of work.

A second contribution of this paper is to build a bridge between the two theoretical concepts, digital mindset and job satisfaction. Making a connection between digital mindset and job satisfaction may be of great importance to better understand and highlight the positive effects employers get from embracing a growth mindset as part of the work environment; maintaining the employees' job satisfaction, motivated employees, and ultimately organizational success.

Third, traditional work environments are changing and will look increasingly different due to the influx of new technology. In carrying out this research, we hope our findings can provide greater insight as how to help employees make this transition in a good way. This is important for both employees' job satisfaction and organizational survival. Accordingly, the intention with this thesis is to give employees greater insight as to how their mindset regarding technological ability may influence their well-being at work. This is of importance because it may help employees become more mindful of the ways that they view technological ability and the effect it might have on their job satisfaction.

2.0 Literature Review

2.1 Digital Mindset

The existing literature and research on digital mindset is limited. Nevertheless, Solberg, Traavik, and Wong (2020, p. 17) have published an article on digital mindsets, which they define as “*employees’ individually held, general beliefs regarding personal and situational resources in the context of technological change*”. Digital mindsets have also been somewhat studied in relation to teachers and their application of technological tools in schools (Tour, 2015). Tour (2015) defines digital mindsets as individuals’ “*assumptions about affordances of digital technologies*”, which can also be expressed as individuals’ perceptions of how digital technology can be applied and utilized in various situations. Research has shown that the digital mindsets of individuals influence how digital technologies are applied both inside and outside classrooms (Tour, 2015).

With digital mindsets, we refer to the definitions of mindsets and implicit theories with respect to digital technology. Therefore, we apply the following understanding of digital mindsets: an individual’s belief about the malleability of understanding and applying digital technology, or digital tools. We further distinguish between growth digital mindset and fixed digital mindset. Growth digital mindset can be explained as the belief an individual hold that technological abilities are something that can be developed and learned. In contrast, fixed digital mindset refer to the assumption that technological abilities are stable and not possible to develop. The history of mindsets will be elaborated in the following section.

2.2 The Emergence of Mindsets

Mindsets, also known as implicit theories in literature, refer to the beliefs held by individuals regarding the malleability of their traits (Dweck & Leggett, 1988; Dweck, 1999; King, 2017; Macnamara & Rupani, 2017). In other words, the mindsets of people influence their perceptions about own capabilities, and whether or not they are fixed or alterable. Dweck and Leggett (1988) contributed in understanding the mechanism of mindsets when they found two patterns of how individuals may approach obstacles or challenges: the helpless pattern and the mastery-oriented pattern. The helpless pattern is an aversion towards obstacles such that when faced with failure the individuals perceive themselves as less intelligent.

The contrasting pattern is the mastery-oriented pattern in which individuals are attracted by challenging assignments and respond to failure by not being defeated, but rather striving towards mastery of the task (Dweck & Leggett, 1988; Dweck, 1999, p. 6).

The pattern of which individuals hold when facing a challenge or failure is related to their goals, either performance or learning goals (Dweck & Leggett, 1988). Dweck (1999, p. 15) defines performance goals as a preference for being perceived as intelligent rather than incompetent, both by themselves and others. In contrast, learning goals are based on a motivation to increase one's intelligence (Dweck, 1999, p. 15). Research gives strong indications that performance and learning goals are explicitly related to helpless and mastery-oriented patterns, such that performance goals lead to helpless responses, and learning goals lead to mastery-oriented responses when faced with obstacles and failures (Elliot & Dweck, 1988 as cited in Dweck, 1999, p. 16; Dweck & Leggett, 1988).

To understand why individuals hold different goals and response patterns despite being in the same situation, Dweck and Leggett (1988) emphasise the role of mindsets. They suggest a model that explains mindsets as something that lead individuals to chase either performance goals or learning goals (Dweck & Leggett, 1988). Several studies have found that there is a relationship between goal orientations and mindsets (Dweck & Leggett, 1988; Dweck, 1999). The two directions of mindsets; namely growth and fixed mindset, will be further explained in the next paragraph.

2.2.1 Growth versus Fixed Mindset

There are two forms of mindset: the growth mindset and the fixed mindset. Individuals holding growth mindsets, believe that traits are alterable and can be further developed through effort and learning, whereas with fixed mindset individuals assume that personal traits are unalterable, stable, and consistent (Dweck, Chiu, & Hong, 1995; King, 2017). According to King (2017), the beliefs about the malleability of personal traits are not as much "either or" as it varies along the continuum with growth mindset in one end and fixed mindset on the other.

Challenging tasks are perceived by those with fixed mindsets as a threat to their self-esteem as they are more inclined to attribute failure to low ability/intelligence (Dweck, 1999, p. 3; Dweck, Chiu, & Hong, 1995). Thus, individuals with a fixed mindset seek situations or assignments that will yield

success with minimum effort (Dweck, 1999, p. 3). In contrast, those with growth mindsets tackle challenging tasks and failures in a different manner, as they do not blame their intelligence, but rather view the outcomes in relation to their efforts in such situations (Dweck, Chiu, & Hong, 1995). Also, people with growth mindsets perceive failure as a hint to challenge themselves in new areas, rather than a sign of low intelligence, which could be the reason why it has been found that growth mindset individuals are more motivated to master difficult assignments (Dweck, 1999, p. 39; King, 2017). While fixed mindset individuals are attracted to performance goals, growth mindset individuals are drawn toward learning goals, which in turn determine their response when facing difficulties or failures (Dweck, Chiu, & Hong, 1995). The perhaps most prominent difference between holding a fixed mindset and a growth mindset is that while the opportunity of learning and growth in challenges raise the self-esteem in those with growth mindset, challenges has the opposite effect on those with fixed mindset as they experience a decrease in their self-esteem in the same situations (Tabernero & Wood, 1999).

2.3 Job Satisfaction

Job satisfaction can now be perceived as a well-established concept in empirical research. According to Locke (1969) there was a significant increase in studies investigating job attitudes after the publications of Hoppock, and Roethlisberger and Dickson on this field in the 1930's. There are numerous definitions explaining job satisfaction in the existing academic literature. Locke (1969, p. 316) defines job satisfaction as "*the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values.*". However, in more recent research, job satisfaction is often referred to in a more general manner emphasizing employees' emotions towards their job and whether or not they like it (Lopes, Lagoa, Calapez, & Chester, 2014; Weiss, 2002 as cited in Federici, 2013; Hirschfeld, 2000 as cited in Rothmann, 2008). In this research study, we will apply the understanding of job satisfaction as the general satisfaction of the job experienced by the employee (Rothmann, 2008). Some factors have been highlighted as possible influencers of job satisfaction, such as personality, work environment, social effects, and general life satisfaction (Ouedraogo & Leclerc, 2013).

The extent of research performed on examining job satisfaction suggests great interest in the concept. According to Henne & Locke (1985) the consequences

of job dissatisfaction could hinder the organization in achieving their objectives. Research performed by Ouedraogo and Leclerc (2013) show support in a relationship between job satisfaction and job performance. Thus, it is reasonable to suggest that organizations with high levels of job satisfaction among the employees may perform better than organizations in which the employees are dissatisfied with their work. Additionally, Cijan, Jenič, Lamovšek and Stemberger (2019) found that digitalization increase job satisfaction and highlights that job satisfaction is essential for organizational success because of the relationship between job satisfaction, turnover, and life satisfaction. Although Henne and Locke (1985) state that psychologists within human relations in particular perceive the overall goal of companies to be job satisfaction, there seem to be reasons why high levels of job satisfaction of employees should be the goal of all organizations.

2.4 Intolerance of Uncertainty

The concept intolerance of uncertainty is applied in the academic literature as a measure of the degree of uncertainty that individuals are inclined to handle. Specifically, intolerance of uncertainty is defined by Buhr and Dugas (2009, as cited in Keefer et al., 2017) as *“a tendency to react negatively on an emotional, behavioural, and cognitive level to uncertain situations and events”*. Individuals that do not tolerate uncertainty struggle more than others in various situations because uncertainties will appear in the everyday life (Buhr & Dugas, 2009). Those that have a high level of intolerance of uncertainty would be more comfortable with predictability (Keefer et al., 2017) and would, therefore, aim to reduce or remove uncertainty (Buhr & Dugas, 2009).

The research on intolerance of uncertainty has mainly focused on its relationship to negative emotions and states such as worry, depression, and anxiety. Recent research has found support for an existing relationship between intolerance of uncertainty and worry (Dugas, Laugesen & Bokowski, 2012; Buhr & Dugas, 2002). Additionally, intolerance of uncertainty has been found to strongly relate to anxiety in young individuals as well (Osmanağaoğlu, Creswell, & Dodd, 2018). Thus, high level of intolerance of uncertainty appear to decrease the wellbeing of people, and it seemingly affects individuals in a negative manner.

Little research has been conducted on intolerance of uncertainty in the field of business and organisations, but rather it is studied in clinical research as a factor relating to mental health. However, Duncan (1972, p. 325) integrates

intolerance of uncertainty into the organisational context by stating that “*Some individuals may have a very high tolerance for ambiguity and uncertainty so they may perceive situations as less uncertain than others with lower tolerances.*”.

3.0 Theoretical Framework and Hypotheses

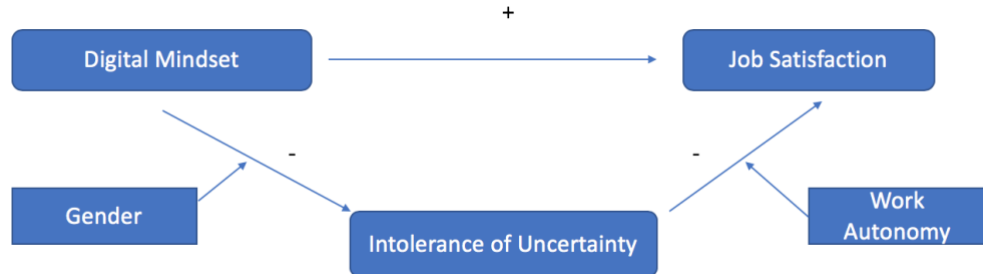


Figure 1. Research model.

3.1 Digital Mindset and Job Satisfaction

The technological context must be taken into account when predicting a relationship between digital mindset and job satisfaction. Cijan et al. (2019) investigated the ways in which digitalization has changed the workplace, specifically with respect to job satisfaction, work/life balance and work autonomy among employees. They found digitalization of the workplace to increase job satisfaction among employees. This finding is highly relevant as technology and digital tools are broadly implemented in today's organisations (Solberg et al., 2020). As new digital tools are swiftly developed and applied in organisations, we argue that those holding a growth digital mindset will be better at utilizing and learning new digital tools than employees with fixed digital mindsets, which will cause higher levels of job satisfaction.

There are currently little, if any, empirical research that have investigated the role of digital mindset on job satisfaction directly. However, the literature contains several indicators that such a relationship may exist. As mentioned, people holding a fixed mindset are more inclined to pursue performance goals, and experience a decrease in self-esteem when facing challenges, whereas individuals with growth mindsets are more prone to pursue learning goals and experience an increase when challenges arise (Dweck & Leggett, 1988). As a consequence, people with fixed mindsets will encounter negative emotions facing challenging situations, whereas growth mindset individuals are inclined to experience positive emotions in the same situations (Robins & Pals, 2002). Robins & Pals (2002) found increased

probability of individuals with fixed mindset to be upset about their academic performance and experience distress and shame, and contrastingly individuals with growth mindset was found to associate their academic performance to more positive emotions such as determinedness, enthusiasm, excitement, inspiration, and strength. We believe that these findings indicate that it is likely that growth digital mindset employees will report higher levels of job satisfaction, as they will be inclined to face technological challenges with positive emotions.

Dweck (1999, p. 46) has also emphasized that a connection exist between entity theorists and negative emotions, specifically she found that only the thought of failure itself was enough for entity theorists to develop negative effects such as *“harsh self-judgments, extreme negative feelings, and a desire to escape rather than persist”*. Further, previous research has found that entity theory predicts *“higher levels of depression and distress”* (Zhao et al., 1998 as cited in Dweck, 1999, p. 144). Thus, fixed mindset is seemingly linked to negative emotions, whereas growth mindset appears to be related to positive emotions. It is therefore expected that those carrying fixed digital mindsets will experience negative emotions when facing challenges with digital tools, which in turn is likely to lower the level of job satisfaction.

Although the academic literature on digital mindset is limited, research exists on the relationship between self-efficacy and job satisfaction, as well as the effect digitalization has on job satisfaction. Additionally, Vandewalle, Nerstad and Dysvik (2019) reviewed literature on goal orientation and found that learning goal orientation are positively related to wellbeing, while performance-avoid goal orientation was found to relate to negative outcomes, specifically anxiety and decreased interest. As mentioned previously, performance goal orientation is associated with holding fixed mindsets, whereas growth mindsets are related to learning goal orientation. Thus, growth digital mindsets are likely to positively relate to job satisfaction.

Federici (2013) found in his study on self-efficacy of principals, that there is a positive relationship between self-efficacy and job satisfaction, and he argues that it is reasonable to believe that people who have faith in their capability to do a job will experience a higher level of job satisfaction, than individuals that does not possess this degree of self-efficacy. Skaalvik and Skaalvik (2014) also performed a study on self-efficacy and job satisfaction and found support in the predicting effect of self-efficacy on job satisfaction. Despite differences between mindset and self-

efficacy, the concepts are alike in the way they both describe the belief an individual has in his or her ability of performing a task. Therefore, the previous research connecting self-efficacy to job satisfaction suggest that a relationship between digital mindset and job satisfaction could exist as well.

All taken together, we assume that employees with growth digital mindset will experience higher levels of job satisfaction than employees with fixed digital mindset, as those with growth digital mindset would probably experience more positive emotions facing challenges with digital tools. The first hypothesis of this study is presented below:

H1: Digital mindset will be related to job satisfaction, such that growth digital mindset will be positively related to job satisfaction.

3.2 The Mediating Role of Intolerance of Uncertainty on the Relationship between Digital Mindset and Job Satisfaction

We further predict intolerance of uncertainty to have a mediating effect on the relationship between digital mindset and job satisfaction. Individuals holding a growth digital mindset will experience low intolerance of uncertainty because believing in one's own ability to adapt to the technological environment, and to learn new digital tools, is not consistent with not being able to tolerate uncertainty. As it is change that triggers uncertainty, those that have faith in their ability to learn new digital tools will be more likely to report low intolerance of uncertainty as they are better equipped to handle technological changes that may arise. On the opposite side of the scale, those reporting fixed digital mindset will be more likely to have higher intolerance of uncertainty because they perceive themselves to be poorly prepared to handle technological changes that will require learning new digital skills. Further, the individuals high on intolerance of uncertainty will be prone to experience lower levels of job satisfaction than those low on intolerance of uncertainty, because they are not able to manage uncertainty which typically arise along with change. In this regard, referring to the digital changes implemented in today's organizations. As organisations generally are dependent on making changes from time to time, uncertainty will arise in the workplace, and those not able to manage the uncertainty will more likely have decreased levels of job satisfaction. Additionally, intolerance of uncertainty is associated with worry, anxiety and depression, which give support to the assumption that high levels of intolerance of

uncertainty will decrease job satisfaction. We will further present literature that enhance the suggested mediating role of intolerance of uncertainty on the relationship between digital mindset and job satisfaction.

The empirical research performed on the intolerance of uncertainty concept as a personality trait, does not include any studies linking intolerance of uncertainty to digital mindsets or job satisfaction directly. However, research on employees' perceived uncertainty at work and job satisfaction does exist. Ferris (1977) performed a study on accountants examining the effect of perceived uncertainty on job satisfaction. He found a negative relationship between perceived uncertainty and job satisfaction, such that higher level of perceived uncertainty led to lower levels of job satisfaction. In order to grasp the issue of intolerance of uncertainty, it should be viewed in relation to change because change generates uncertainty (Nelson et al., 1995; Pollard, 2001; Rafferty and Griffin, 2006; Terry et al., 1996 as cited in Cullen et al., 2014). Similar to other personality traits, the way in which individuals perceive and react to uncertainty varies. As stated by Ferris (1977, p. 23) it is not necessarily the environment that is uncertain, but rather "*the individual's perceptions of the environment are uncertain*". Therefore, it is important to consider the individual difference in perceptions of the environment regarding the concept of uncertainty. Cullen et al. (2014) agrees with the notion that uncertainty arise in differing levels among employees in an organization when facing change, dependent on what the employees perceive as their reality. Due to the rapid increase in technological development, the present organizations are often making changes in order to keep up with the technological environment. Hence, organizations are creating uncertain working environments. For those obtaining low tolerance of uncertainty, the changes in the workplace will cause a decrease in their job satisfaction.

Tinaztepe (2012) suggests that individuals' perceptions of uncertainty negatively influence well-being due to the fear of not being able to predict what the future holds and refers to previous research identifying that uncertainty is found to be a powerful stressor. Further, it is stated that the stress resulting from uncertainty may affect individuals in a negative manner, such as a decrease in their well-being (Tinaztepe, 2012). Bordia et al., (2004, p. 350 as cited in Tinaztepe, 2012) claims that in the situation of change at work, a lowering of uncertainty as well as heightened control over the situation are essential for job satisfaction. The research conducted by Tinaztepe (2012) found that job related affective well-being was

explained by the perceived uncertainty of the employees. Finally, Tinaztepe (2012) agrees in the way in which individuals react to uncertainty varies greatly, thus facing uncertainty may for some people lead to positive emotions whereas others may react with negative emotions when experiencing uncertainty.

Based on the research and literature presented on these topics, we believe that intolerance of uncertainty will have a mediating effect on the relationship between digital mindset and job satisfaction, such that growth digital mindset will cause low intolerance of uncertainty, which in turn will lead to higher levels of job satisfaction. The hypothesis predicting a mediating effect on the direct relationship between digital mindset and job satisfaction is presented as:

H2: Intolerance to uncertainty will mediate the positive relationship between growth digital mindset and job satisfaction.

3.3 The Moderating Effect of Age on the Relationship between Digital Mindset and Job Satisfaction

Including age as a moderator variable in our study is motivated by the fact that the current generations naturally differ in their relation to digital tools. For example, today's younger generations have, in a higher degree than the older generations of today, grown up utilizing digital tools. The research in the area of age in relation to digital mindsets is limited. However, Krueger, Stone, and Lukaszewski (2018) state that older generations may lack possibilities in applying their skills at work due to the digital situations, which will affect their satisfaction at work. They also found elements that could affect the way in which older individuals employ the Internet as a digital tool, which include absence of technological abilities, negative perceptions on computers, and the absence of interest for applying Internet, to mention some (Krueger et al., 2018). Considering the digital divide in generations, we argue that older individuals may be more challenged in applying digital technology. This is grounded in factors such as lacking the competence and interest in the digital tools, or negative attitudes towards technology, and furthermore, that it will lead to decreased job satisfaction for older individuals. Thus, we present the study's third hypothesis:

H3: Age will have a moderating effect on the positive relationship between digital mindset and job satisfaction, such that the relationship will increase in strength when age is high.

Note: Hypothesis 3 including age as a moderator was excluded from the model in the data analysis, and age was instead added as a control variable. The main reason for this is that the PROCESS tool does not allow models including three or more moderators.

3.4 The Moderating Effect of Gender on the Relationship between Digital Mindset and Intolerance of Uncertainty

As digital mindset is a relatively new concept it has not been studied with respect to differences among genders. However, in the literature on mindsets the effect of gender has been discussed and studied. Dweck (1999, pp. 53-54) writes about “the bright girls” which refers to the notion that the ones with the most impressive successes, namely “bright girls”, also are more likely to have a fixed mindset, thus are more vulnerable to respond by helplessness in situations with obstacles or failure. The assumption that gender has an effect on whether an individual holds a growth versus a fixed mindset is also investigated by Macnamara & Rupani (2017) who initially argue that girls and females are more prone to have fixed mindsets than boys and males. Dweck and Simmons (2014, as cited in Macnamara & Rupani, 2017) claim that the reason of this pattern is that boys are given more process praise during their childhood, which creates an attraction towards challenges, thus laying the basis for a growth mindset. In contrast, it is stated that, especially, bright girls are inclined to develop a fixed mindset as they are more often given praise for their intelligence, rather than process praise (Macnamara & Rupani, 2017).

Although several researchers in the academic literature assume that girls, rather than boys, are more likely to hold fixed mindsets, Macnamara & Rupani also present results that yields contrasting indications (2017). They state that the assumptions about females’ and girls’ increased likelihood of holding fixed mindsets, including the “bright girls effect”, are lacking support in evidence. In their study, Macnamara and Rupani (2017) found that there was no support in that women, in a higher degree than men, hold fixed mindsets. Neither did the study give support to the assumption that males have a higher likelihood of holding growth mindsets than women.

Huffman, Whetten and Huffman (2013) found support in their study that masculinity in addition to gender predicts the level of technological self-efficacy. Additionally, there are results in empirical research that shows that men are prone to approach technology with a lower degree of anxiety than women (Coffin & MacIntyre, 1999 and Cooper, 2006 as cited in Huffman et al., 2013). Another indicator that men and females differ in their approach and perception of technology, is provided by Cooper (2006, as cited in Huffman et al., 2013) arguing that the digital divide between men and women regarding self-efficacy on computers is a global phenomenon. Based on the research presented on the effect gender has shown both in regard to mindset as well as self-efficacy towards technology, we propose that gender is likely to influence digital mindsets.

Differences between genders are also assessed for intolerance of uncertainty. Barahmand (2008) performed the first study investigating the difference between gender in intolerance of uncertainty, and the results found that adolescent boys show higher levels of intolerance of uncertainty, whereas adolescent girls were prone to have more positive beliefs regarding worry.

Taken together, the literature includes research claiming males are more likely to hold growth mindsets and females to hold fixed mindset; males experience less anxiety than females approaching technology; and adolescent boys reports higher intolerance of uncertainty than adolescent girls. Thus, we propose gender to affect the relationship between digital mindset and intolerance of uncertainty in such a manner that for males the negative relationship between digital mindset and intolerance of uncertainty would decrease in strength. Contrastingly, the negative relationship between digital mindset and intolerance of uncertainty would increase in strength for women. The following hypothesis is presented for gender as a moderator:

H4: Gender will have a moderating effect on the negative relationship between digital mindset and intolerance of uncertainty, such that the negative relationship will be stronger for women than men.

3.5 The Moderating Effect of Autonomy on the Relationship between Intolerance of Uncertainty and Job Satisfaction

Autonomy is referred to as “*the extent to which a job allows freedom, independence, and discretion to schedule work, make decisions, and choose among*

methods to perform tasks” (Dysvik and Kuvaas, 2011 and Humphrey et al., 2007 as cited in Federici, 2013, p. 75). The contribution of autonomy in increasing job satisfaction is broadly endorsed in the academic literature. In Hackman and Oldham (1976, as cited in Humphrey, Nahrgang, & Morgeson, 2007) proposed autonomy as one of five factors that would increase job satisfaction, which was empirically confirmed by Humphrey et al. (2007) who found autonomy to predict job satisfaction. Also, research conducted by Lopes et al. (2014) show decreased job satisfaction as a result of lower levels of autonomy and higher levels of job pressure. As presented, previous research has conclusively proved autonomy to be a predictor of job satisfaction, such as high levels of autonomy will lead to high levels of job satisfaction.

The degree of intolerance of uncertainty is likely to affect job satisfaction as many organisational environments does change from time to time. The reasoning behind the hypothesised effect of autonomy as a moderator is that if individuals are able to decide the way in which they can conduct their work in uncertain situations, that may lower the strength of the negative relationship between intolerance of uncertainty and job satisfaction. And contrastingly, low levels of autonomy may strengthen the negative relationship between intolerance of uncertainty and job satisfaction. Control seems to be significant in situations of change, and thus situations characterised by uncertainty.

On the basis of previous research described above, we propose the following hypothesis:

H5: Autonomy will moderate the negative relationship between intolerance of uncertainty and job satisfaction, such that the negative relationship will be stronger when autonomy is low than when it is high.

4.0 Method

The theoretical ground for the research approach was presented above. Based on this, the following chapter includes a description of the research design and methodology applied to acquire the results in this thesis. Reliability and validity, as well as ethical considerations will also be discussed.

4.1 Sample

In this study, our choice of sample organization is represented by one of the largest organisations within the retail business in Norway, which specializes in consumer electronics and digital solutions.

The main criterion set when deciding on a sample organization for our research study was a presence of digitalization in the organization. This presence must take the form of digitalization being a part of the employees' work tasks (e.g. digitized work tools) and overall interaction in terms of digitalization of the organization system. These criteria were set in line with the purpose of exploring the adopted digital mindset of each individual employee related to their job satisfaction. Thus, we believe that the sample organization would act as a good representative sample for us to collect enough data to make useful comparisons from.

A total of 2623 employees from the chosen company were invited to join, whereas 120 (4,6%) responded on the given survey. A gift card (500 NOK) was included as an incentive to stimulate the response rate. Out of the 120 respondents, there are 92 (76,7%) men and 28 (23,3%) women. The respondents' age ranges from the intervals 16-25 years and up to 56 + years. Furthermore, 6 (5%) of the respondents have completed secondary school, 64 (53,3%) have completed high school, 38 (31,7%) have a bachelor's degree, and 11 (9,2%) have a master's degree.

As we cannot assume that the organisational traits of our sample are identical with the traits of other organisations, the results will not likely be generalizable in a broader population than the population of the sample employees. The employees in the population can be divided into two groups based on whether they are employed in Franchise stores or subsidiary stores. In order for our sample to be a probability sample it would demand an equal opportunity for all individuals in the population to participate in the study (Bryman & Bell, 2015, p. 187). However, we chose to exclude those employed in franchise stores from our study due to reasons both of availability and some organisational differences. The franchise stores are not required to apply all of the same digital systems and tools that are required in the subsidiary stores. This creates a gap between the two groups of employees, which is the reason of our decision to exclude franchise employees. Thus, our sample is not likely to be a probability sample, but rather a non-probability sample (Bryman & Bell, 2015, p. 187).

4.2 Research Design

To acquire a decent understanding of how our research question and formulated hypotheses above are related, we find it appropriate to apply a quantitative research design to better quantify attitudes, opinions and behaviours. A quantitative research approach is typically associated with a deductive strategy of deducing hypotheses and testing theories (Bryman & Bell, 2015). Utilizing quantitative research following a deductive strategy will allow us to explain causal relationships between concepts and variables. Still, we consider the difficulty or challenge to measure job satisfaction just by asking people. Additionally, as people might try to portray themselves in a better light or state, the response can be misleading (e.g. social desirability bias), choosing a quantitative method allows us to employ questionnaires to make more generalized research findings to a certain extent (Wilson, 2014, p. 13).

However, as our thesis does not hold ground concerning evidence of previous research showing any direct link between digital mindset and job satisfaction, our strategy cannot be considered as one that is purely deductive but rather as a semi-inductive strategy. Specifically, it means that there will be a presence of an inductive strategy of collecting data to build theory (Bryman & Bell, 2015). Hence, more general conclusion could be drawn to the extent to which intolerance of uncertainty indeed has a mediating effect on the degree of job satisfaction based on what kind of digital mindset the sample employees possesses (growth vs. fixed mindset).

Our choice to include a mediator advance our model to a multivariate framework for testing our outlined hypotheses (see Figure 1) (MacKinnon, 2008). Additionally, this can improve statistical inference and allow for examination of causal relationships among our included variables, however, it also adds considerable complexity to our data (Cole & Maxwell, 2003). Our research design share close associations to the two-wave panel design which is understood as tracking the same sample at different points in time (i.e. two waves) (Johnson, 2005). Thereby, distinguishing itself from cross-lagged data design where the same survey is given to different samples over time. Traditionally, the two-wave panel design measures both the predictor (Digital Mindset) and the outcome (Job Satisfaction) at both time periods, whereas we chose to separate them in two different questionnaires (Cole & Maxwell, 2003; Johnson, 2005; Anderson & Kida, 1982).

The purpose of using the same sample in two waves, with two questionnaires measuring for each variable (predictor and outcome), is to take a more indirect questioning approach to reduce the occurrence of social desirability bias and demand characteristics in the data that is collected (Fisher, 1993). Social desirability bias is characterized by the type of response bias where respondents answer questions in a manner that will be viewed more favourably by others (e.g. over-report good behaviour) (Krumpal, 2013). Demand characteristics is when participants alter their response behaviour to fit the research setting (Orne, Whitehouse & Kazdin, 2000).

We also included control variables in our model to be able to control for sociodemographic differences that may influence the results. These control variables (division, education, age, and leader responsibility) are not expected to change during the measurement interval and are consequently measured at only one point in time (Anderson & Kida, 1982, p. 404). We also included technological self-efficacy as a control variable in our model as a way to show that digital mindsets contribute to job satisfaction beyond the fact that people just feel confident in their technological skills. Thus, we can control for if any effect of digital mindset on job satisfaction is caused by technological self-efficacy.

4.3 Procedures

The associated technique to accompany our quantitative research design is an electronic questionnaire using an online survey software, Qualtrics, to collect data. The two questionnaires cover the variables of the outlined research model: digital mindset (predictor), job satisfaction (outcome), intolerance of uncertainty (mediator), gender, autonomy (moderators), as well as the control variables. The Norwegian Centre for Research Data (NSD) was contacted before starting data collection, to ensure that we follow ethical guidelines, and adhere to participant anonymity. An information letter including both the aim of the study and link to the survey was sent out in advance to all 2623 employees. To minimize the presence of response distortion, we have highlighted confidentially in the invitation and the introduction text where we emphasize that all responses would remain anonymous (Chan, 2009). Information letter is attached (see Appendix A).

Our survey consists of two separate questionnaires, which was distributed in two waves i.e. at different points in time (two weeks apart). At time 1, employees in the sample organization were approached and invited to complete a survey late

February 2020. Out of the 2623 invited we received a total of N=269 responses. The purpose of the first questionnaire was to measure autonomy, intolerance of uncertainty, technological self-efficacy and digital mindset.

For questionnaire time 2, all the participants who completed the survey the first time (N=269 employees), were invited to do a final survey measuring for (job satisfaction). A total of 162 participants completed at time 2. We did expect a certain degree of drop-out rate from time 1 to time 2, despite our attempt to encourage continuous response for both questionnaires in form of incentives like the gift card and reminders per email. The moderate response rate of 4,6% may be seen in relation to the chosen design. Namely, the way the design could hinder a high response rate because of the required commitment and motivation from the employees to respond to both questionnaires in order for the data to be of value. Contextual factors may also have played a role in the low response rate. Specifically, the first questionnaire was sent out right before the outburst of the virus Covid-19, causing devastating effects in the business market as well as interruptions for employees' work and private lives. We believe that this may have contributed to the decreased response rate or low commitment that we see at time 2; as the sample of employees found themselves challenged by other priorities.

Some adjustments were made to improve the response rate from time 1 to time 2. The duration time for completing the survey was changed from one to two weeks. Moreover, we sent out more reminders during time 2 to stimulate the response rate. A progress bar was added in both questionnaires to ensure predictability for the participants.

4.4 Measures (questionnaire)

A 7-point Likert-scale ranging from 1 = "Strongly disagree" to 7 = "Strongly agree" was used to ensure valuable and reliable responses. The chosen measures were adopted from previous research to ensure that they have already been validated. Following Kahneman and Egan's (2011) assumption that participants should answer in their mother tongue to prevent misunderstandings that could decrease the reliability of the results, the electronic survey was administered in Norwegian. However, as translation may harm the quality of the items, we included our supervisor in the translation process to secure validity (Berkanovic, 1980).

The following paragraphs will focus on the measures used in the research study.

4.4.1 Independent Variable: Digital Mindset

Digital mindset was assessed using a continuous scale consisting of six statements developed by Solberg and colleagues (2020) at time 1. Half of the items represent fixed mindset (reversed) whereas the other half represent growth mindset. Together these items produce a single score, where higher scores indicate higher growth mindset. Two examples of statements indicating a fixed mindset: “*A person’s level of technological savviness is something basic about them, and there isn’t much that can be done to change it*” and “*Not much can be done to change how well a person will keep pace with technological change*”. Two examples of statements indicating a growth mindset: “*Even a person with only basic technological skills can improve considerably if they work hard enough*” and “*No matter who a person is, they can significantly improve their level of technological competence*”.

4.4.2 Dependent Variable: Job Satisfaction

Job satisfaction was measured at time 2 by three items, developed by Cammann, Fichman, Jenkins and Klesh (1979). The scale was used to establish to what degree employees are satisfied with their current workplace. Higher scores indicate higher job satisfaction. Examples of statements were: “*All in all I am satisfied with my job*” and “*In general, I like working here*”.

4.4.3 Mediator: Intolerance of uncertainty

Intolerance of uncertainty was assessed using the English version of the originally French Intolerance of Uncertainty Scale (IUS) developed by Freeston and colleagues (1994) found in Carleton, Norton and Asmundson (2007). The IUS consists of 27 items which assess reactions to uncertainty, ambiguous situations, and the future. Questionnaire time 1 include 12 of these items which we translated from English into Norwegian ourselves. Together these items produce a single score, where a higher score indicates people are less tolerant to uncertainty. Examples of items include “*Uncertainty keeps me from living a full life*” and “*When I am uncertain, I can’t function very well*”.

4.4.4 Moderator: Work Autonomy

Autonomy was assessed at time 1 by three out of the nine items developed by Morgeson and Humphrey (2006) retrieved from Kuvaas (2009). Together these three items produce a single score, where higher scores indicate higher autonomy. It contained items such as “*The job allows me to decide on the order in which things are done on the job*” and “*The job allows me to plan how I do my work*”.

4.4.5 Moderators: Gender

Gender was measured in questionnaire time 1 as a dichotomous variable coded such that 1= male, and 2= female.

4.4.6 Control Variables: Technological self-efficacy

Technological self-efficacy was measured at time 1 by six items adopted from an existing measure of creative self-efficacy from Tierney and Farmer (2002), to reflect a technological context. Together these items produce a single score where higher scores indicate higher technological self-efficacy. Example items include, “*I have confidence in my ability to master new technology implemented at work*” and “*I believe in my ability to use new technology implemented at work*”.

5.0 Data Analysis

In the process of exploring, describing and analysing the data collected in the questionnaires, the statistics program IBM SPSS Statistics version 26 was utilized. Additionally, we applied the AMOS software for conducting confirmatory factor analysis, as well as PROCESS macro by Hayes (2018) for executing mediation analysis and conditional process analysis. Firstly, we performed a confirmatory factor analysis in order to ensure sufficient factor loadings on all items of the variables. The confirmatory factor analysis provides information regarding how well the items of a variable measures that phenomenon (Brown, 2015). Examining the factor loading of each item gives an indication of how well it measures the phenomenon it intends to measure. According to Brown (2015, p. 27) there are no universal rules of thumb regarding what a sufficient factor loading should be, but he highlights that “*factor loadings greater than or equal to .30 or .40 are often interpreted as salient*”. Nunnally (1978 as cited in Sass, 2010) confirms that factor loadings of .30 or .40 would be acceptable in most cases. Therefore, items with factor loadings lower than .40 was excluded from the

measures (see appendix E). The five items scoring lower than .40 were all items constructed to measure intolerance of uncertainty.

Having removed the items with poor factor loadings, we tested all factors for reliability applying Cronbach's alpha. Kline (1999 as cited in Field, 2018, p. 823) highlights that the general rule of thumb for a reliable measure is Cronbach's alpha above either .70 or .80, although it has been argued that even lower values may also be sufficient in some cases. Every variable included in the data analysis had high reliabilities with Cronbach's alphas greater than .70, intolerance of uncertainty as the lowest = .763 and technological self-efficacy as the highest = .941 (see Table 1).

In order to avoid inaccurate results when conducting a linear regression analysis, we performed tests checking for violations of the assumptions. The assumptions include linearity, normality of the residual distribution, homoscedasticity of variance, and independence of error terms (Hayes, 2018, pp. 70-73). In order to test for the regression assumptions, we observed the residual scatter plot, P-P plot, and outcome of Durbin-Watson test.. The P-P plot showed that the residuals are somewhat skewed, therefore we cannot claim the assumption of normality (see Appendix C). However, Hayes (2018, p. 70) argues that the assumption of normality is "*one of the least important in linear regression analysis*". Additionally, we applied a scatterplot to check for the assumption of homoscedasticity, and the shape displayed in the plot suggested heteroscedasticity (see Appendix D). The consequence of heteroscedasticity could be inaccurate results in significance tests as well as in confidence intervals, which is why it is important to detect it in the early stages of data analysis (Hayes & Cai, 2007). If the Durbin-Watson value is between 1,5-2,5 we can trust that there is independence of residuals (Ho, 2013, p. 296). The Durbin-Watson test reports 1.987, which is between 1,5-2,5, and there is therefore no evidence of non-independence of error terms.

Further, we tested for multicollinearity by examining the variance inflation factor (VIF). Multicollinearity is defined by Thompson, Kim, Aloe & Becker (2017, p. 82) as "*high levels of interdependence among predictors in a regression model*". The threshold for detecting multicollinearity has been determined to be VIF greater than 10 (Ho, 2013, p. 297). All independent variables reported VIF values lower than 2, thus multicollinearity is not a concern in this case.

The PROCESS software developed by Andrew F. Hayes is recommended for analysing models that consists of both moderation and mediation – referred to as conditional process models (Hayes, 2018, p. 395). Additionally, the PROCESS tool does not assume normally distributed data as it applies bootstrapping. Bootstrapping is a robust mechanism that extracts random samples from the data set and imitates the sampling process (Field, 2018, p. 266). The variables digital mindset, job satisfaction, autonomy, and technological self-efficacy show to be somewhat skewed to the right, whereas IU is somewhat skewed to the left. As bootstrapping corrects for this type of non-normality in the data, it is no reason for concern. Another strength of Hayes’ PROCESS tool is that it provides mechanisms in regression analysis which does not require heteroscedastic samples, called “heteroscedasticity-consistent covariance estimators” (Hayes, 2018, p. 71). Considering the nature of the research model, combining moderation with mediation, and the violations of homoscedasticity and normality, the most suitable method for conducting the analysis was through using the PROCESS tool in SPSS. In order to account for heteroscedasticity, we included the HC3 version of heteroscedasticity consistent covariance matrix, which is reported to be the preferred option when the sample is under 250 (Long & Ervin, 2000).

Mediation analysis and conditional process analyses was conducted in SPSS program including the PROCESS tool in order to test our four hypotheses. The direct effect of digital mindset on job satisfaction, Hypothesis 1, as well as the indirect of this relationship through intolerance of uncertainty as a mediator, Hypothesis 2, were both tested in the mediation analysis. The moderating effect of gender on the relationship between digital mindset and intolerance of uncertainty, Hypothesis 4, and the moderating effect of autonomy on the relationship between intolerance of uncertainty and job satisfaction, Hypothesis 5, were tested in the conditional process analysis.

Instead of applying p-values as indicators of statistical significance, we mainly applied an alternative approach, namely 95% confidence intervals (Hayes, 2018, p. 61). The indirect effects of the research model were tested based on 5000 bootstrap samples and 95% confidence intervals, and the relationships are interpreted as significant if the 95% confidence intervals did not include zero (Desrosiers, Vine, Curtiss, & Klemanski, 2014).

6.0 Results

6.1 Confirmatory Factor Analysis

Initially, confirmatory factor analysis was used to test the items included in order to measure each factor. The results of the confirmatory analysis reported poor factor loadings ($< .40$) in five of the 12 items purported to measure intolerance of uncertainty, thus these items were removed (see appendix E). The remaining items had sufficient fits with the factor in which they measured and were therefore retained throughout the analyses. All factors were subsequently tested for reliability and reported acceptable Cronbach’s alpha values according to the applied rule of thumb, $\alpha > .70$ (Field, 2018, p. 823).

6.2 Descriptive Statistics

Table 1 presents the means (M), standard deviations (SD), and correlations for all variables included in the research model (job satisfaction, digital mindset, intolerance of uncertainty, gender, and autonomy), as well as the control variables (age, work division, education, leader responsibility, and technological self-efficacy). When testing the data together some respondents were missing data on some of the measures, and because PROCESS applies listwise-deletion for missing cases the final sample N is 114 instead of 120.

Table 1: Descriptive statistics and correlations

<i>Variable</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1 Job satisfaction	6,	1,08	(.852)									
2 Age	2,73	1,07	.05									
3 Work division	3,12	1,4	.20*	.27**								
4 Education	2,45	.73	-.06	-.07	-.05							
5 Leader resp.	1,54	.50	.00	-.12	-.09	-.12						
6 Tech. S-E	6,25	.83	.19*	.28**	-.03	.22*	.03	(.941)				
7 Digital mindset	5,38	.88	.17	.09	-.10	.09	-.02	.30**	(.769)			
8 Uncertainty	2,51	.89	-.26**	.02	-.11	-.15	-.04	-.29**	-.36**	(.763)		
9 Gender	1,23	.42	.08	-.07	.01	-.02	.11	.01	.04	.14		

	6,02	1,04	.59**	.03	.13	.01	.19*	.11	.07	-.36**	-.07	(.875)
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Note. N=114. Cronbach's alpha values are reported in the parentheses. * $p < .05$; ** $p < .01$.

6.3 Testing of Hypotheses

Hypotheses 1 and 2 were tested by a mediation analysis, whereas hypotheses 4 and 5 were tested through the conditional process analysis. Both analyses were performed using PROCESS which included bootstrap method, and HC3 – a heteroscedasticity-consistent standard error and covariance matrix estimator, as recommended (Long & Ervin, 2000; Hayes & Cai, 2007). As mentioned, Hypothesis 3 including age as a moderator was excluded from the model in the initial stage of the data analysis. The regression results of the mediator analysis as well as the conditional process analysis is provided in Table 2.

Table 2. Regression results.

Model	<i>B</i>	<i>SE</i> (HC3)	Lower 95% <i>CI</i>	Upper 95% <i>CI</i>	<i>R</i> ²
Mediator model: Intolerance of uncertainty					
Constant	6.18	1.02	4.15	8.21	.2
Digital mindset	-.30*	.1	-.5	-.09	
Age	-.01	.1	-.2	.18	
Work division	-.11*	.06	-.22	.	
Education	-.15	.11	-.37	.07	
Leader responsibility	-.12	.16	-.44	.21	
Technological self-efficacy	-.18	.16	-.49	.13	
Mediator model: Job satisfaction					
Constant	4.37	1.65	1.09	7.65	.14
Digital mindset	.11	.11	-.11	.33	
Intolerance of uncertainty	-.2	.14	-.48	.08	
Age	.04	.1	-.15	.23	
Work division	.15*	.07	.03	.28	
Education	-.17	.13	-.43	.09	
Leader responsibility	.02	.21	-.39	.43	
Technological self-efficacy	.21	.19	-.16	.59	
Conditional Process Model: Intolerance of uncertainty					
Constant	2.55	1.94	-1.3	6.4	.27
Digital mindset	.29	.31	-.34	.91	
Gender	3.01	1.55	-.06	6.08	
Age	.01	.09	-.16	.18	
Work division	-.13*	.06	-.24	-.02	
Education	-.11	.12	-.35	.13	
Leader responsibility	-.17	.16	-.49	.15	
Technological self-efficacy	-.18	.14	-.46	.11	

Digital mindset x Gender	-.49	.28	-1.04	.06	
Conditional Process Model: Job satisfaction					.42
Constant	2.06	3.27	-4.42	8.54	
Digital mindset	.17	.1	-.02	.36	
Intolerance of uncertainty	-.74	.96	-2.64	1.17	
Autonomy	.2	.43	-.66	1.06	
Age	.02	.1	-.17	.21	
Work division	.13*	.05	.02	.23	
Education	-.06	.11	-.28	.15	
Leader responsibility	.34*	.17	.	.68	
Technological self-efficacy	.13	.19	-.25	.51	
Intolerance of uncertainty x Autonomy	.14	.15	-.17	.44	

$n = 114$. * $p < .05$. All coefficients are reported in an unstandardized form.

Hypothesis 1 suggested a positive relationship between digital mindset and job satisfaction. The mediation analysis included job satisfaction as the dependent variable, digital mindset as the independent variable, intolerance of uncertainty as the mediator variable, and age, work division, education, technological self-efficacy, and leader responsibility as control variables. The results of the mediation analysis showed a positive direct relationship for digital mindset on job satisfaction, but it was not statistically significant ($b = .11$, CI [-.11, .33]). Thus, Hypothesis 1 was not supported.

Further, Hypothesis 2 claims that intolerance of uncertainty will mediate the positive relationship between digital mindset and job satisfaction. Results indicate that although higher levels of growth digital mindset were related to lower intolerance of uncertainty ($a = -.30$, 95% CI [-.50, -.09]), the indirect effect on job satisfaction through intolerance of uncertainty was not significant ($ab = .06$, bootstrap CI [-.01, .15]). Because this indirect effect was not statistically significant, there is no evidence of mediation, leaving Hypothesis 2 unsupported.

The moderator hypotheses were tested by the conditional process analysis. Hypothesis 4 predicts gender as a moderator on the relationship between digital mindset and intolerance of uncertainty. The interaction effect is displayed in Figure 2. However, the interaction effect is not statistically significant ($b = -.50$, CI [-1.03, .06]), and Hypothesis 4 is therefore not supported. Yet, the interaction effect is significant at $p = .08$, therefore we present the interaction plot to visualise the interaction by gender (Figure 2) to show the general trend in the results. The negative relationship between digital mindset and intolerance of uncertainty, which suggest that growth digital mindset will cause low intolerance of uncertainty, was

found to be stronger for females than for males. Because of lack of significance, this result needs to be interpreted with caution and used to guide future research.

The 5th and final Hypothesis states that autonomy will have a moderating effect on the relationship between intolerance of uncertainty and job satisfaction. Figure 3 shows the moderating effect of autonomy from intolerance of uncertainty on job satisfaction, for the 16th, 50th, and 84th percentiles which indicate low, average and high values on autonomy, as recommended by Hayes (2018). The results do not show support for Hypothesis 5 either, as the interaction effect is not statistically significant ($b = .14$, CI $[-.17, .44]$).

Figure 2: Interaction effect of Gender from Digital Mindset on IU.

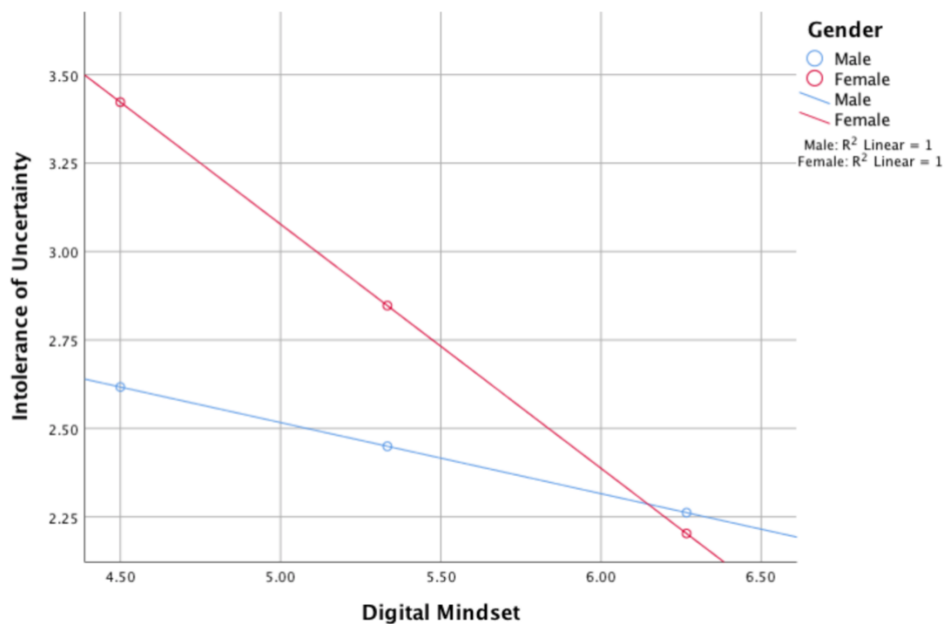
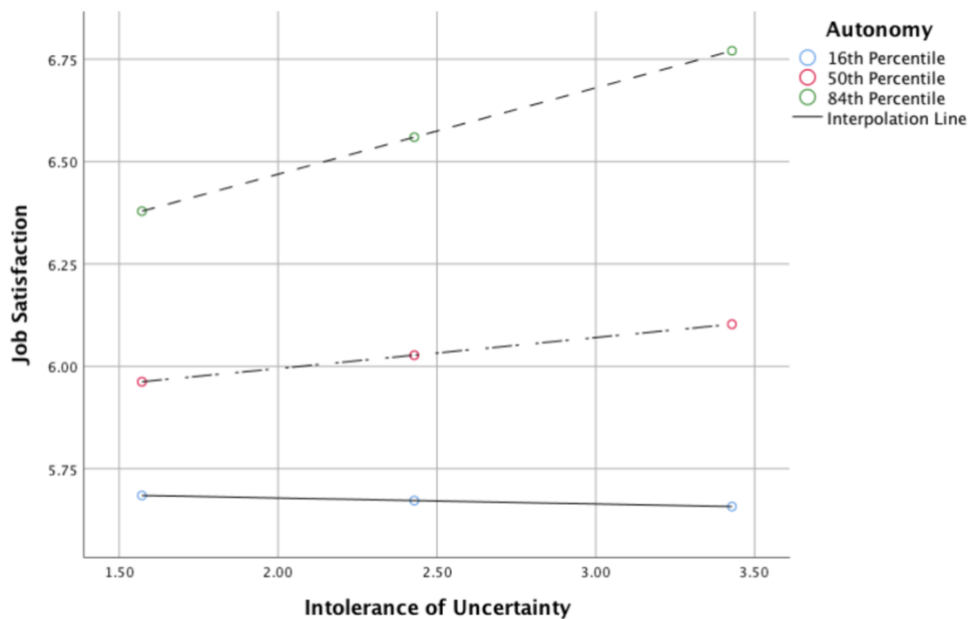


Figure 3: Interaction effect of Autonomy from IU on Job Satisfaction.



The control variable “work division” was significantly related to both the mediator (intolerance of uncertainty) and the outcome variable (job satisfaction) throughout all stages of the analysis, suggesting that there may be some different patterns of results dependent on the department in which the respondents work. Further test of the different patterns could be done through multilevel analysis, but the scope of the present study was to find out whether the job satisfaction an average employee was affected by digital mindset, regardless of their department of work.

7.0 Discussion

The purpose of this research study was to investigate the relationship between digital mindsets and job satisfaction, and the potential of this relationship being mediated by intolerance of uncertainty. Additionally, the study included hypotheses for exploring the possible moderating effect of gender on the relationship between digital mindset and intolerance of uncertainty, as well as autonomy as a moderator on the relationship between intolerance of uncertainty and job satisfaction. As presented in the results, none of the relationships predicted in the hypotheses were statistically significant. That is, however, not equivalent to stating that the non-findings are not of importance (Lederman & Lederman, 2016; Mehler, Edelsbrunner, & Matic, 2019). The lack of statistical significance implies that the relationships found has a higher chance of existing because of random effects, than what is normally accepted in research. Moreover, Mehler et al. (2019, p.1) argue that *“non-findings can bear important insights about the validity of theories and hypotheses”*. In the following part the results will be discussed and placed into the context of existing literature, theory, and practice.

7.1 General Discussion

The first hypothesis tested for in the research model was the direct relationship between digital mindset and job satisfaction. We expected that individuals holding a fixed digital mindset would report lower levels of job satisfaction, and contrastingly that individual with growth mindsets toward technology would show higher levels of job satisfaction. Due to the rapidly expanding nature of technology, it appeared to be an appropriate assumption that employees who are not open to learning new technology would experience lower job satisfaction than employees who believes in their own ability to adapt to new digital tools. As the digital mindset appears to be a relatively new concept in the

academic literature, it has not yet gained much focus in empirical research. Thus, the study aimed to explore, rather than confirm, the suggested relationships. Nonetheless, existing literature did provide some directions pointing towards the possibility that such a relationship may be found. Specifically, research performed on mindsets reports negative emotions associated to fixed mindsets, and positive emotions related to growth mindsets, especially in challenging situations (Robins & Pals, 2002; Dweck, 1999). However, none of the findings directly piece together both mindsets with digital tools, and job satisfaction.

Surprisingly, we did not find support for this relationship in the results. An explanation could be individual differences among employees. Namely, the sources of job satisfaction could differ among employees, and what is related to job satisfaction for some, may not have any effect on others' levels of job satisfaction. Predictors of job satisfaction may also depend on the nature of the work or position. Some positions may require the ability to acquire new knowledge and to adapt to changes in the environment, whereas other positions are more stable with routine tasks. Naturally, digital mindset may not relate to job satisfaction in positions that does not demand acquiring new technological knowledge and abilities. Similarly, some of the departments may be more dependent on the ability to adapt to new technology than others, in order to perform successfully. Although we did not test for differences between the departments, division was included as a control variable which proved to be significant. For example, if one or more of the departments does not often implement new digital tools, it would not make sense that the degree of those employees' digital mindset would affect their job satisfaction.

The extent to which an individual is suitable for a certain position can be referred to as person-job fit. Research show that person-job fit is a predictor of job satisfaction such that poor person-job fit will lower job satisfaction, and high person-job fit will increase job satisfaction (Hardin & Donaldson, 2014; Peng & Mao, 2015; Warr & Inceoglu, 2012). Person-job fit may contribute in explaining the lack of significance in the relationship between digital mindsets and job satisfaction. Employees holding fixed digital mindsets may not be inclined to accept a job that does not fit, such as positions in which new digital tools must often be implemented in order to perform the tasks. Therefore, if the person-job fit is good among the employees answering the questionnaire, that may be a reason why no significant effect was found, thus making the role of digital mindset insignificant in regard to job satisfaction. The person-job fit is only one of several omitting

variables that could explain why there was no significant relationships in the present study.

Further, the hypothesised mediated effect of intolerance of uncertainty on the relationship between digital mindset and job satisfaction was not significant, despite previous research findings claiming uncertainty to be a strong stressor (Tinaztepe, 2012). Additionally, previous research found that high levels of perceived uncertainty decrease job satisfaction (Ferris, 1977). It is interesting that this effect could not be detected in the results, as we assumed that having low tolerance of uncertainty would imply facing changes at work would affect job satisfaction negatively. Still, it may be that the sample organization is largely consistent and does not implement that many large changes that would influence most employees. In that case, it is logical that having a low or high intolerance of uncertainty would not affect job satisfaction of employees.

Even though the indirect relationship between digital mindset and job satisfaction through intolerance of uncertainty was not significant, we did detect a significant effect on the relationship between digital mindset and intolerance of uncertainty. This effect indicate that higher levels of growth digital mindset are associated with lower levels of intolerance of uncertainty. Thus, digital mindset does appear to relate to intolerance of uncertainty, which is interesting despite even though this relationship alone was not hypothesised in the present study.

As emphasised by Ferris (1977) what is perceived as uncertainty varies amongst individuals. Both differences in organizational structure and traits, positions, and individuals' perceptions of what is interpreted as uncertain contexts, could thus contribute in understanding why no mediating effect on intolerance of uncertainty on the relationship between digital mindset and job satisfaction was detected. Organizations differ in their dependence on technological development, positions differ in regard to the frequency of changing (digital) tools and approaches for problem solving, and lastly individuals vary in regard to both how they perceive uncertainty as well as to what degree they tolerate it. For example, misfit between an employee and its' environment is a source of stress (Warr & Inceoglu, 2012).

Person-environment fit may well influence the job satisfaction of the employees, which could be the case with the respondents concerning the sample organization. As no relationship was found indicating an association between intolerance of uncertainty and job satisfaction, we suggest that the fit between the respondents and the organization (environment), and the fit between respondents

and their jobs, could potentially be an explanation of the findings. The logic is that intolerance of uncertainty would not have an effect on job satisfaction when: (a) the environment is not perceived as uncertain, and (b) the individual's level of intolerance of uncertainty has no influence the performance of job tasks.

The two moderators included in the final research model, gender and autonomy, was predicted to moderate the relationship between digital mindset and intolerance of uncertainty, and intolerance of uncertainty and job satisfaction, respectively. The hypothesised moderating effect of gender on the relationship between digital mindset and intolerance of uncertainty was suggested to be a negative one by decreasing in strength for males and increasing in strength for females. No significant effect of this was found in the results, indicating that no statements can be made that the role of gender either weaken or strengthen the association between digital mindset and intolerance of uncertainty. Due to the empirical research which finds gender to play a part in regard to both intolerance of uncertainty (Barahmand, 2008), mindsets (Dweck, 1999; Macnamara & Rupani, 2017) and approaches to technology (Huffman et al., 2013), the lack of support for the hypothesis was not expected. Still, the research connecting females to be more prone to fixed mindsets, is criticised for its lack in empirical strength (Macnamara & Rupani, 2017). The results did display a divide between female and male respondents in regard to their responses on digital mindset and intolerance of uncertainty, namely the relationship was stronger for women than for men, as hypothesised. The lack of significance, however, requires a more robust design and a larger sample size to test the effect of gender in this relationship properly.

Autonomy was predicted to moderate the relationship between intolerance of uncertainty and job satisfaction such that a high degree of autonomy would weaken the negative relationship between intolerance of uncertainty and job satisfaction. Nor was this hypothesis supported in the present study, despite previous studies which have found autonomy to be a predictor of job satisfaction (Humphrey et al., 2007; Lopes et al., 2014). As mentioned, Bordia et al., (2004, p. 350 as cited in Tinaztepe, 2012) suggests that it is critical to reduce uncertainty and increase control for maintaining job satisfaction in changing environments. Autonomy may contribute in increasing control, as individuals would experience more freedom in how to best manage the situation. Since autonomy contributes to job satisfaction, we can assume that most individuals, therefore, appreciates the ability to have control as to how to perform their tasks. Nonetheless, our findings

suggest that autonomy does neither decrease or increase the strength of the relationship between intolerance of uncertainty and job satisfaction.

Several of the measured variables reported very high means (6 and above on Likert scale from 1-7): job satisfaction, autonomy, and technological self-efficacy. According to Cramer and Howitt (2004, as cited in Šimkovic and Träuble, 2019) ceiling effect arise when variable scores are near the highest possible score and may be problematic as this effect could prevent the discovery of a relationship between this variable and an added variable. Namely, if the variable scores are near the upper limit, it may not be able to increase further, even if a new variable is included in the model which would otherwise increase the levels of the former variable. As the outcome variable of this study, job satisfaction, had a very high mean score the ceiling effect may contribute in explaining why the hypothesised relationships were not supported. Autonomy also reported very high mean scores. The low levels of variance in autonomy may have hindered any possible moderating effects on the relationship between intolerance of uncertainty and job satisfaction.

Although this study could not find support for any of the hypotheses included in the research model, one cannot deny the possibility that none of the hypothesised relationships exist. For example, the sample of the present study may not have been large enough to be able to detect medium or smaller effects – if such effects actually exist in the organization. Additionally, as elaborated above, the lack of significant results on the research model could be due to individual differences, person-job and person-environment fit, or ceiling effects. In social sciences, a challenge in performing quantitative research that aims to generalise findings, is having to take into account individual differences – the reality of some is not the reality of others and may therefore be hard to generalise (Bryman & Bell, 2015).

7.2 Theoretical and Practical Implications

Despite not finding support for the hypotheses included in our research model, it may still contribute to theory and practice through provoking interest, as well as increased focus on the area of research. This study investigated digital mindsets in relation to job satisfaction in a large, Norwegian retail company. Heightened development and application of digital tools in business has rapidly increased over the last decades, which generated interest in exploring employees' attitudes to digitalisation and association on job outcomes (Cijan et al., 2019). We believe that the technological era in which we live imply the area of research to be

highly relevant. Additionally, the technological environment has produced a digital divide which adds to the relevance and interest in the topic (Loges & Jung, 2001; Krueger et al., 2018; Huffman et al., 2013).

Not much was known beforehand regarding digital mindsets, whereas job satisfaction and its predictors have been broadly studied. As the concept of digital mindset is quite new in the academic literature, there is much knowledge to be discovered on this topic. We initiated the research on digital mindsets in relation to job satisfaction, through collecting data from a sample organisation in two separate questionnaires sent out at two points in time. No findings reported statistical significance, leaving all four tested hypotheses unsupported. We propose that the lack of significance in the hypothesised relationships could imply one out of three things: (1) none of the hypothesised relationships in the research model exists, or (2) none of the hypothesised relationship exists in this particular organisation, or (3) (some of) the hypothesised relationships do exist in the organisation, but the sample derived from the organization is not sufficient or large enough to represent the entire population. Reporting non-findings have value in that others are given the opportunity to replicate the results which may yield acceptance that no such relationship exists, if more studies report non-findings.

Predictors of job satisfaction have been extensively investigated in theory, because job dissatisfaction can have detrimental effects on organisations, such as turnover, absence and performance (Schleicher, Hansen & Fox, 2010 as cited in Hofmans, De Gieter, & Pepermans, 2012). It is very interesting to take into account areas in the workplace that have changed over the last decades, such as technology and digital tools, and the consequences of implementing them. We have started the exploration of the effect digital mindsets may have on job satisfaction in this study and hope to witness several studies expanding the academic literature on digital mindsets in particular. As we live in an era in which the technological progress is moving fast forward, there should be increased focus on exploring employees' approach and ability to handle the swift evolutions. More knowledge on the subject could enhance organizations and management teams to make improvements in their approach for implementing digital tools/new technology.

8.0 Limitations and Future Research

Reflecting back on the process, several weaknesses arise as to what we could have done differently to improve the study design.

Firstly, looking back at our research question this study controlled for several variables, without finding any significant relationship in any of our proposed hypotheses. However, one cannot rule out the possibility of alternative variables offering different explanations (Shadish, Cook, & Campbell, 2001). Our results indicated that intolerance of uncertainty having a mediating effect on the proposed relationship between digital mindset and job satisfaction was non-significant. Thus, for future research it could be of interest to see if the previously discussed concept of person-job fit could be a potential mediator to the relationship between digital mindset and job satisfaction.

A second limitation to consider is related method bias. In our survey, one of the conditions that may cause method bias is related to what MacKenzie and Podsakoff (2012) explains as common scale attributes which may emerge if the survey is dominated by the same scale types. In hindsight, we see that both of our questionnaires contained mostly the same scale types, which may encourage respondents to be less thorough in item comprehension and judgement. Consequently, switching up the response formats for the different questions would be advised for future research.

Third, replacing our interval scale when measuring age with a text box allowing for manual input for the respondents actual age, we still believe that hypothesis three concerning age could be a potential moderator, as previous research has indicated that young people are more inclined to be affected by their surroundings (Ruder, 2008). For future research, receiving data for each respondent's actual age, instead of a range (e.g. 26-35 years), could generate more specific predictions and maybe support Ruder's indication concerning younger generations greater adaptivity to the digital era compared to the older generation.

A fourth limitation to consider is our moderate sample size of 114, which according to Bryman and Bell (2015), may reduce our chances of detecting a true effect in our data. The bigger the sample size the larger is the probability that the sample is representable for the population. Thus, a larger sample size (e.g. 300) would allow for more diverse and representable sample and therefore be desirable for future research. Moreover, since our sample organization was of the larger size (approx. 3000 employees), it would be interesting to distribute the survey to smaller organizations where the employees may be more inclined to resort any issues themselves, instead of, for instance using an IT-department which several large organizations offer. The following logic behind this is that smaller organization

may not have IT-departments to assist but will instead need to take care of their digital issues and tools themselves. Further, looking back at our choice of sample, for future research it could be beneficial to use other samples such as IT specific organizations— where the understanding and adaptation of digital tools is essential for survival. A logical prediction is that in these organizations having a fixed digital mindset as well as high intolerance of uncertainty may very well affect job satisfaction negatively.

A fifth area that may have had a limiting effect on our study is our choice of conducting a version of a two-wave panel study design including two different questionnaires to be distributed in two waves. Our intention was to strengthen our study by measuring our sample over two points in time, with two different questionnaires containing each of our independent (digital mindset) and dependent variable (job satisfaction) to prevent biased estimates (Rosenman, Tennekoon, & Hill, 2011) e.g. social desirability response from our respondents. However, we suspect that the required commitment from the respondents to answer two different questionnaires at two different time points may serve as a contributing factor concerning our decreased response rate in questionnaire time 2. For future research we recommend that the research study could be conducted using a different design, e.g. a mixed method research design or an experimental design. Employing an experimental design would include two groups, the experimental group, and the control group (Bryman & Bell, 2015). Since it is difficult to infer causality, introducing a change to the experimental group (e.g. implementation of a fictive digital tool) and not the control group would help highlight the relationship between cause and effect, which for this research study would be the effect digital mindset has on job satisfaction.

9.0 Conclusion

This study can contribute to the digital mindset literature by exploring the relationship between digital mindset and job satisfaction. This study is of importance in the field of organizational research as it investigates individual employee outcomes that are crucial for organizations in terms of their success.

Our main finding indicates that based on our sample, there is no direct relationship between digital mindset and job satisfaction, nor does intolerance of uncertainty mediate this relationship, and that gender and autonomy do not

moderate the relationships between digital mindset and intolerance of uncertainty, and intolerance of uncertainty and job satisfaction, respectively.

We hope this study will serve as a starting point in building the bridge between digital mindset and its relation to job satisfaction. There were no significant findings in our proposed hypotheses, therefore, no definite answer to conclude our research question. This does not mean that growth digital mindset is not implicated in how employees deal with new technology. This research study explored only one outcome variable, which is influenced by many other factors and therefore the concept does not necessarily need to be discredited but results need to be interpreted with caution and further research is required.

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11.0 Appendices

Appendix A – Information Letter for Participants

Vil du delta i forskningsprosjektet ”Motivasjon og Velvære i organisasjon X”

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å kartlegge motivasjon og velvære som Handelshøyskolen BI gjennomfører i samarbeid med organisasjon X. I dette skrevet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med dette forskningsprosjektet er å kartlegge betydningen av ansattes holdninger og arbeidssituasjon for medarbeideres motivasjon, arbeids glede og velvære. Vi ønsker i denne sammenheng blant annet å belyse hvordan ulike holdninger påvirker medarbeidere og tilrettelegger for arbeids glede og velvære. Vi vil også belyse hvilken betydning arbeidssituasjonen spiller.

Hvem er ansvarlig for forskningsprosjektet?

Katarzyna Adamska, stipendiat på Handelshøyskolen BI er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Du mottar invitasjon om å delta i forskningsprosjektet fordi du jobber i organisasjon X i egen eid avdeling/butikk.

Prosjektansvarlig har fått dine kontaktopplysninger fra organisasjon X og har gitt prosjektansvarlig tillatelse til å sende deg undersøkelsen.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du fyller ut et to-delt elektronisk spørreskjema. Du har nå mottatt første del som vil ta deg ca. 10 minutter å besvare. Andre del vil du motta om ca. 2-3 uker og vil ta deg ca. 10 minutter å besvare. Spørreskjemaet inneholder spørsmål om digitalt tankesett, trivsel/velvære, arbeidssituasjon, holdninger og oppfatninger om ledelsen i selskapet. Alle svarene skal bli analysert på gruppenivå og det skal bli umulig å koble svarene til individuelle ledere. Dine svar fra spørreskjemaet blir registrert elektronisk.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykke tilbake uten å oppgi noen grunn. Alle opplysninger om deg vil da bli anonymisert. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- Dine svar i undersøkelsen vil i datainnsamlingsperioden kunne knyttes opp mot din e-post adresse. E-post adresser vil bli slettet umiddelbart etter at datainnsamlingen er avsluttet og datamaterialet vil bli anonymisert, senest innen 31.01.2021.
- Prosjektansvarlig, Handelshøyskolen BI vil være delaktige i bearbeidelse av datamaterialet. Din deltakelse vil ikke kunne identifiseres/gjenkjennes når artikler på bakgrunn av forskningsprosjektet publiseres.

- Alle opplysninger vil bli oppbevart strengt fortrolig i hele prosjektperioden ved at dataene krypteres. I tillegg vil alle e-postadresser i prosjektperioden lagres atskilt fra svarene som gis i undersøkelsen.
- Qualtrics vil bli brukt som databehandler til gjennomføring av spørreundersøkelsen. Bortsett fra alle undersøkelsens svar, vil Qualtrics også lagre IP-adresser og deres kobling med individuelle e-postadresser. Denne informasjonen slettes ved prosjektslutt (senest 31.01.2021).

Din deltakelse vil ikke kunne identifiseres/gjenkjennes når artikler / forskningsprosjektet publiseres.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Prosjektet skal etter planen avsluttes 31.01.2021. Ved prosjektslutt blir alle personopplysninger slettet. Opplysningene fra undersøkelsen vil bli behandlet konfidensielt av undernevnte prosjektgruppe, som er underlagt taushetsplikt. **Det presiseres at det ikke vil bli gitt noen rapporter til ansatte ved organisasjon X på individnivå.**

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg,
- å få rettet personopplysninger om deg,
- få slettet personopplysninger om deg,
- få utlevert en kopi av dine personopplysninger (dataportabilitet), og
- å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Handelshøgskolen BI har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- *Handelshøgskolen BI* ved Student 1, Student 2 eller Prosjektansvarlig.
- Vårt personvernombud: X på e-post
- NSD – Norsk senter for forskningsdata AS, på epost (personverntjenester@nsd.no) eller telefon: 55 58 21 17.

Med vennlig hilsen

Prosjektansvarlig

Appendix B – Questionnaire items

Kjønn

Kvinne (1)

Mann (2)

Arbeidsområde

Hvilken av de følgende kategoriene hører ditt arbeidsområde inn under?

Anonymised (1)

Anonymised (2)

Anonymised (3)

Hovedkontor (4)

Anonymised (5)

Hvis annet (6)

Utdannelse

Hvilken høyeste formell utdanning har du?

Ungdomsskole (1)

Videregående (2)

Bachelorgrad (eller fullført grunnfag og mellomfag) (3)

Mastergrad (eller hovedfag) (4)

Doktorgrad (5)

Lederansvar

Har du lederansvar, herunder personalansvar i din stilling?

Ja (2)

Nei (1)

Digital tankesett 7-punkts Likert, svært uenig/svært enig

De neste 6 påstandene skal hjelpe deg til å beskrive din arbeidssituasjon. For hver påstand skal du ta stilling til hvor enig eller uenig du er.

1. Teknologiske evner er noe grunnleggende ved en person, og det er ikke mye som kan gjøres for å forandre det.

-
2. Hvorvidt en person vil være rask og kompetent til å bruke ny teknologi, henger tett sammen med hva slags type person de er. Dette er ikke noe som kan endres i stor grad.
 3. Uansett hva slags person man er, kan man forbedre selv de mest grunnleggende teknologiske ferdighetene med innsats. [reverse scored]
 4. Det er i liten grad mulig å påvirke om en person vil holde tritt med endringer i organisasjonens teknologiske løsninger. Alle er en viss type person, og noen vil håndtere disse endringene bedre enn andre.
 5. Selv om en person noen ganger kan lære nye ting, kan du egentlig ikke endre en persons grunnleggende evne til å tilpasse seg ny teknologi.
 6. Alle har evnen til å lære og mestre ny teknologi som organisasjonen tar i bruk. [reverse scored]

Autonomi 7-punkts Likert, svært uenig/svært enig

5-eller 7-punkts Likert, svært uenig/svært enig

1. Jobben gir meg gode muligheter til å ta personlige initiativ eller vurderinger om hvordan jeg skal utføre arbeidet
2. Jobben tillater meg å ta egne beslutninger
3. Jeg har stor frihet når det gjelder hvordan jeg skal løse de oppgavene jeg har

Intolerance of uncertainty 7-punkts Likert, svært uenig/svært enig

Angi i hvilken grad du er enig i påstandene ved å velge ett av alternativene per spørsmål nedenfor.

1. Uforutsette hendelser gjør meg veldig opprørt.
2. Det frustrerer meg å ikke ha all informasjonen jeg trenger.
3. En bør alltid se framover for å unngå overraskelser.
4. En liten, uforutsett hendelse kan ødelegge alt, til tross for best mulig planlegging.
5. Jeg ønsker alltid å vite hva fremtiden vil bringe.
6. Jeg kan ikke fordra å bli overrasket.
7. Jeg bør være i stand til å planlegge alt i forkant.
8. Usikkerhet hindrer meg fra å leve et fullverdig liv.
9. Når det er tid for å handle, blir jeg lammet av usikkerhet.
10. Jeg fungerer ikke veldig godt når jeg er usikker.
11. Den minste tvil kan hindre meg fra handling.
12. Jeg må komme meg vekk fra alle usikre situasjoner.

Technological self-efficacy 7-punkts Likert, svært uenig/svært enig

Angi i hvilken grad du er enig i påstandene ved å velge ett av alternativene per spørsmål nedenfor.

Jeg er trygg på min evne til å mestre ny teknologi som blir implementert i jobben min.

Jeg tror på min evne til å effektivt bruke nye teknologiske verktøy som blir implementert på jobben.

Jeg føler meg sikker på at jeg har den nødvendige kompetansen til å ta i bruk ny teknologi på en tilfredsstillende måte.

Jeg er trygg på at jeg kan lære å bruke det aller meste av ny teknologi som blir innført på jobben.

Jeg tror at jeg kan mestre det aller meste av ny type teknologi som jeg setter i gang med.

Uansett hva slags type ny teknologi som blir introdusert i jobben er jeg sikker på at jeg vil kunne mestre det.

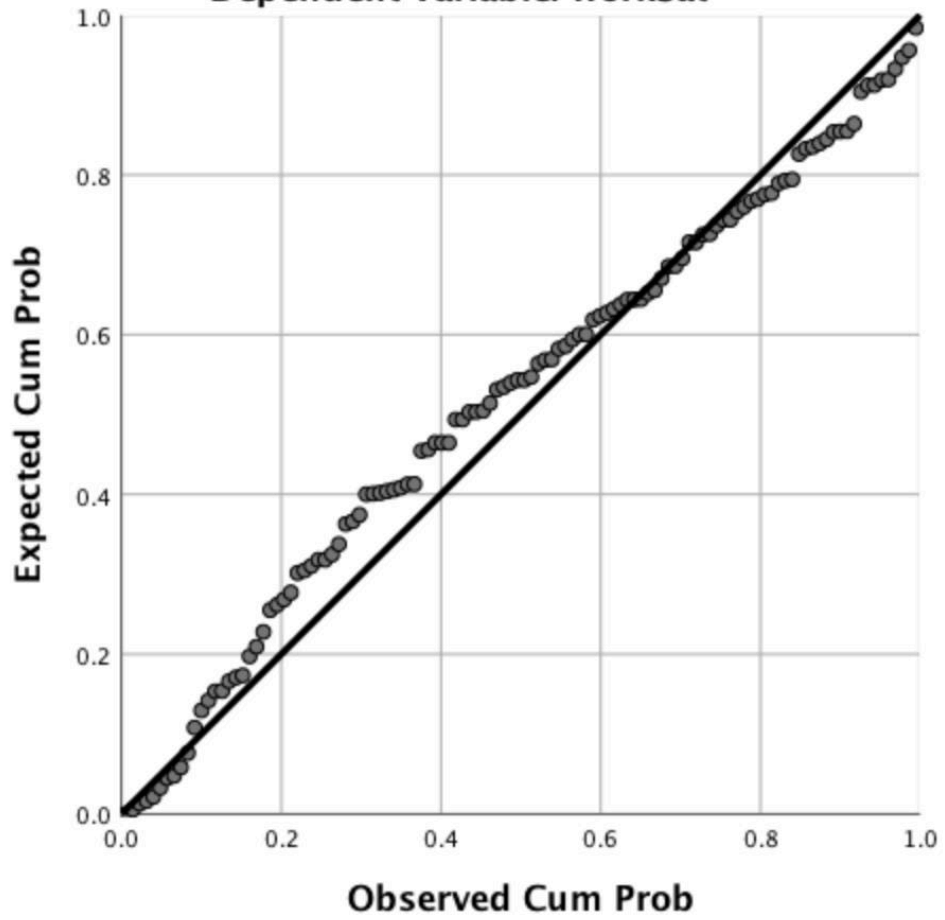
Jobbtilfredshet 7-punkts Likert, svært uenig/svært enig

De 3 utsagnene under handler om i hvilken grad du er fornøyd med din nåværende arbeidsplass:

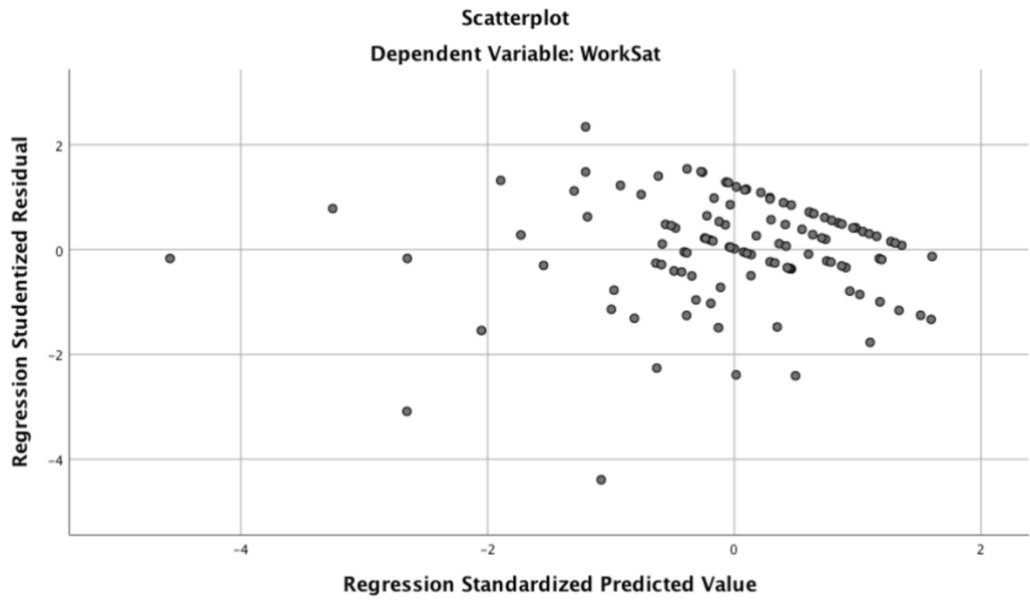
1. Alt i alt er jeg fornøyd med jobben min
2. Generelt liker jeg ikke jobben min (rev)
3. Generelt liker jeg å jobbe her

Appendix C – Normal P-P Plot of Expected Values against Observed Values

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: WorkSat



Appendix D – Scatter Plot for Full Regression Model – Testing for Heteroscedasticity



Appendix E – factor loadings from confirmatory factor analysis

	Estimate
DM_1R <--- Digital Mindset	.795
DM_2R <--- Digital Mindset	.656
DM_3 <--- Digital Mindset	.416
DM_4R <--- Digital Mindset	.523
DM_5R <--- Digital Mindset	.681
DM_6 <--- Digital Mindset	.536
JS_1 <--- Job Satisfaction	.916
JS_2R <--- Job Satisfaction	.660
JS_3 <--- Job Satisfaction	.882
Autonomy_1 <--- Autonomy	.866
Autonomy_2 <--- Autonomy	.811
Autonomy_3 <--- Autonomy	.843
TSE_1 <--- Technological Self-efficacy	.881
TSE_2 <--- Technological Self-efficacy	.857
TSE_3 <--- Technological Self-efficacy	.723
TSE_4 <--- Technological Self-efficacy	.947
TSE_5 <--- Technological Self-efficacy	.912
TSE_6 <--- Technological Self-efficacy	.863
Uncertainty_1 <--- Intolerance of Uncertainty	.538
Uncertainty_2 <--- Intolerance of Uncertainty	.350
Uncertainty_3 <--- Intolerance of Uncertainty	-.051
Uncertainty_4 <--- Intolerance of Uncertainty	.347
Uncertainty_5 <--- Intolerance of Uncertainty	.300
Uncertainty_6 <--- Intolerance of Uncertainty	.543
Uncertainty_7 <--- Intolerance of Uncertainty	.293
Uncertainty_8 <--- Intolerance of Uncertainty	.735
Uncertainty_9 <--- Intolerance of Uncertainty	.630
Uncertainty_10 <--- Intolerance of Uncertainty	.536
Uncertainty_11 <--- Intolerance of Uncertainty	.561
Uncertainty_12 <--- Intolerance of Uncertainty	.410
