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Poor work designs created by: bad or dumb managers?

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Abstract

Despite the proven benefits of providing subordinates with high-quality jobs containing opportunities for autonomy, we observe that a lot of jobs are still poorly designed and lacking this characteristic. This paper attempts to better understand why these low-quality jobs remain prevalent. For this purpose, a seven-point Likert-scale targeted towards measuring managers' expectancy, instrumentality, valence, and subjective norms with respect to providing autonomy was created. The scale was distributed to 201 managers, and multiple regression analysis was performed on the data gathered from this sample. Findings suggest that instrumentality for positive employee wellbeing outcomes, valence for positive employee wellbeing outcomes and subjective norms are positive predictors of managers' intention to provide autonomy. In contrast with the existing literature, expectancy was found to be a negative predictor of managers' intention to provide autonomy, while instrumentality for negative wellbeing outcomes and valence for negative wellbeing outcomes were not found to be significant predictors at all. In conclusion, some of these unexpected findings pave the way for potential future research.

Keywords: Autonomy; work design; job design; expectancy theory; theory of planned behaviour; scale development.

The topics of job and work design have received considerable attention from researchers in the past. Nevertheless, with the constant changes in society and in the work environment, they continue to remain important areas of research to this day. Job design entails the formal description of a job, and hence mostly comprises of an employee's tasks and responsibilities (Parker, Van Den Broeck & Holman, 2017). On the other hand, work design entails not only the job itself but also the relation between the job and its wider environment (Morgeson & Humphrey, 2006). Parker (2014) refers to work design as "the content and organisation of one's work tasks, activities, relationships, and responsibilities" (p. 662). Thus, we can consider job design as having a narrower focus than work design (Morgeson & Humphrey, 2006).

The understanding of work design and its effects have evolved a lot over time. Historically, the origin of work design can be traced back to the period of the industrial revolution when new machinery and automatization raised questions about how to design and organise work (Parker & Wall, 1998). It began with Adam Smith's division of labour as described it in his book "The Wealth of Nations". He stated that jobs should be split up into a series of separate tasks which should then be distributed amongst employees such that each worker gets to perform one single, repetitive task (Van Den Broeck & Parker, 2017). Another important early contribution to the field of work design that built further on the ideas of

Smith, was that of Frederick Taylor called scientific management. Taylor focused on the execution of standardized tasks in order to increase efficiency. He also advocated for the introduction of employee selection, training, and incentive systems (Steers, Mowday & Shapiro, 2004). This job simplification, albeit successful at reducing inefficiencies, had some negative consequences. This approach to work design focused on its benefits for enhancing efficiency but did not consider employee-centric benefits such as job satisfaction, personal growth, or wellbeing. The jobs that were created were monotonous and lackadaisical which engendered boredom and exhaustion among employees. Unsurprisingly, Tayloristic jobs led to low morale and, high absenteeism and turnover of employees which initiated an emphasis on more motivational work designs (Van Den Broeck & Parker, 2017).

One such motivational work design was proposed by Hackman and Oldham (1976) and called the Job Characteristics Model. This model defines the relationship between job design and individual responses to work. Hackman and Oldham (1975, 1976) distinguished five “core” dimensions that make a job motivating. They identified them as task variety, task identity, task significance, autonomy, and feedback. According to the authors, task variety implies that the worker is required to use a variety of his skills in the activities performed to execute the work. Task identity refers to the act of performing a job all the way from the start to its completion, while task significance refers to carrying out work that has considerable influence on individuals and their lives. Autonomy is defined by the authors as “the degree to which the job provides substantial freedom, interdependence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.” (p.258). Lastly, feedback refers to the level of comprehensible information the job incumbent obtains about the efficacy of his work while he performs it. These five job characteristics give rise to three psychological states namely, experienced meaningfulness of the work (which is enhanced by task variety, task identity and task significance), the experienced responsibility for outcomes (intensified by autonomy), and the knowledge of the actual results (created by feedback). Furthermore, the researchers suggest that the presence of these psychological states leads to four outcomes, namely, high internal work motivation, high-quality work performance, high satisfaction with work, and low absenteeism and turnover. The Job Characteristics Model also establishes a summary measure “The Motivating Potential Score (MPS)” which measures the overall motivating potential of a job. According to Hackman and Oldham, MPS is the strongest when “(a) the job is high on at least one . . . of the three job dimensions that lead to experienced meaningfulness, (b) the job is high on autonomy, and (c) the job is high on feedback.” (p.258). Their model also takes into account the moderating role of the strength of a person’s need for growth, also known as growth need strength (GNS). Critics of the model highlighted its lack of eclecticism and purported that the model includes only a few numbers of job characteristics and neglects others (Humphrey, Nahrgang & Morgeson, 2007).

However, despite the criticisms, the Job Characteristic Model proved to be a useful contribution to the theory of work design, even after 30 years of its development it continues to inspire research in work design (Humphrey et al., 2007). For instance, Demirkol and Nalla (2018) tested the Job Characteristics Model among aviation security personnel. Their research confirmed, amongst other things, that job characteristics such as feedback and autonomy were key predictors of employee motivation. Next to Hackman and Oldham’s model, there is a lot of research asserting the benefits of good work design. In

their meta-analysis Humphrey et al. (2007) link high-quality work design with positive factors such as job satisfaction and performance. In 1991, with his longitudinal study, Griffin also validated this relationship between enriched jobs and performance. The benefits of work design on employee wellbeing were, for instance, demonstrated by Luchman & González-Morales (2013). They found that burnout was related to task-related demands, and suggested that simply reducing task-related demands could help reduce burnouts.

Although researchers found consistent evidence for the various benefits of work design, recent research shows that there are still a substantial number of poorly designed jobs. The research of Holman (2013) differentiates 6 types of jobs based on work-related factors: active, saturated, team-based, passive, insecure, and high-strain. The job types differ based on their levels of job demands and job discretion, and the duration of the exposure to these factors. Active jobs consist of both high demands and high discretion, while passive jobs are a combination of low demands and low discretion. Saturated jobs, like active jobs they are characterized by high demands and high discretion. The difference between the two lies in the duration of the exposure to the job demands. This duration is higher in the case of saturated jobs than in the case of active jobs. Holman categorizes active jobs as high-quality jobs and, saturated and team-based jobs as moderate-quality ones. The passive, insecure, and high-strain jobs are classified as low-quality jobs. His study shows that in Europe only 16,4% of the jobs are of high quality and the most represented category, with 21,4%, is passive jobs that have a low to moderate quality. In their book "Good Jobs America" Osterman and Shulman (2011) state that there is still a notable presence of low-quality jobs, especially with regards to low wages. In the same spirit, Davis (2010) highlights the presence of low tenure jobs in the retail sector. He argues that this is, amongst other reasons, due to changes in technology, globalization, and other macro-economic changes. Furthermore, Parker (2014) mentions that in organisations, the existence of a poor-quality job could be ascribed to a shortage of knowledge and motivation for work design among managers and work designers. All of the above confirm that poor-quality jobs are indeed still a widespread reality.

In order to understand what contributes to the exacerbated situation, Campion and Stevens (1991) launched a study of 145 undergraduate students to investigate how people design jobs. The study consisted of a simulation task wherein participants had to choose from an assortment of clerical tasks and assign them to hypothetical employees. The results of the study showed that while designing jobs, people's main strategy was to group tasks based on the similarity of these activities (56,7% of times participants mentioned using this strategy). After declaring what strategy they had adopted, respondents were also asked to explain the reason behind their choices. It is noteworthy that while almost 45% of the respondents mentioned selecting a strategy because it was the most logical approach, only 2,9% indicated choosing it to make more satisfying jobs. Hence, Campion and Stevens suggest that for untrained work designers, thoughts of efficiency and productivity-oriented job designs may be more unforced or intuitive than thoughts about jobs that enhance the motivation and satisfaction of employees. Parker, Van Den Broeck, and Holman (2017) state that literature lacks an understanding of the antecedents of work design. Therefore, they developed a framework that consolidates all the various influences on work design by amalgamating theories from diverse areas. They distinguish contextual influences that consist of three categories (higher-level external influences, organisational

influences, and local context) and individual influences such as age, skills, personality, and so on. These factors can affect work design either directly or indirectly by first influencing managers' and/or employees' knowledge, skills and abilities (KSA's), motivation, and opportunities. In their paper, Parker et al., (2017), stress the need for further research on "when, why, and how managers shape work designs, including the motivational and opportunity factors that affect their decision-making" (p. 296).

Despite the efforts of the aforementioned authors to fill this gap, research targeted towards understanding managers' work design behaviour remains rather scarce (Campion & Stevens, 1991; Parker et al., 2019). In an attempt to better understand why poorly designed jobs are still as prevalent and to fill the gap in the existing literature, the current study attempts to develop a nuanced understanding of managers' motivation for developing good work design. This research aims to unravel why managers are (or aren't) motivated to design enriched jobs for their employees. More specifically, we will focus on their motivation to design jobs that provide employees with opportunities for autonomy. We will assess this using the framework of expectancy theories by focusing on 4 components, namely expectancy, instrumentality, valence, and subjective norms. Do managers believe that they do not have the ability to provide autonomy to their subordinates (expectancy)? Do they lack knowledge about the consequences and benefits of designing jobs that provide autonomy to the job holder (instrumentality)? Do they not care for the benefits that an autonomous job can yield for their employees (valence)? Or do they refrain from providing autonomy to their subordinates because they think it is not normative among their peers to do so (subjective norms)? The present study aims to find an answer to these questions and aspires to discover which of the aforementioned possibilities account for managers' poor work design behaviour. Therefore, the expectancy theory framework was also used to develop a scale that measures managers' expectancy, instrumentality, valence, and subjective norms regarding providing autonomy to subordinates.

Literature review

Autonomy

In this study, managers' motivation to provide autonomy as a job characteristic to their subordinates is investigated. According to Hackman and Oldham (1976), autonomy is one of five core job characteristics. As mentioned earlier, they defined autonomy as "the degree to which the job provides substantial freedom, interdependence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out." (p.258). Gagné and Deci (2005) in turn describe autonomy as having the experience of choice and acting out of a sense of free will. The authors contributed towards the development of self-determination theory which states that there are two different types of motivation. On the one hand, they consider autonomous motivation which is created by interest in the action itself and makes people behave out of complete willingness. On the other hand, they elucidate controlled motivation, which originates from a feeling of being obliged and pressurized into engaging in a certain type of action. This controlled motivation can often be associated with extrinsic rewards or punishment. The authors suggest that it is advisable to have autonomous motivation among

employees in an organisation as it contributes towards augmenting employees' wellbeing and job satisfaction. Employees' autonomous motivation firstly depends on their inherent need for autonomy, which Gagné and Deci consider being universal rather than personal. Secondly, they state it also depends on the extent to which the company provides support for autonomy. Hence, the more a need for autonomy is satisfied by the environment, the stronger the autonomous motivation. There is considerable literature maintaining that autonomy support is important in prompting positive outcomes (Gagné, 2003). Evidence for it comes from the research of Deci, Eghrari, Patrick, & Leone (1994), quoted by Gagné (2003, p. 204), who state that it has been demonstrated that autonomy support leads to higher involvement in, and stronger positive feelings towards, an activity that looked dull or unexciting at first. Based on their research findings, Liu, Zhang, Wang, and Lee (2011) advise managers to provide employees with an autonomy-supportive environment in order to decrease turnover and to encourage the employee's experience of empowerment. The previously mentioned definition of autonomy provided by Hackman and Oldham (1976) doesn't outline different sub-sections of autonomy but rather presents it as one whole construct. In contrast to that, Breaugh (1985) advocates for the distinction of three facets within autonomy, namely, work scheduling, work method, and work criteria. The work scheduling autonomy is defined by Breaugh as the level of choice job incumbents have in deciding when to do their work tasks and how to schedule them. He describes the work method autonomy as the extent to which workers have freedom in the choice of the procedures they employ to perform their job. Lastly, he mentions work criteria autonomy as the number of influence employees can have on the selection of the criteria that will be used to assess their performance. In their meta-analysis, Humphrey, Nahrgang, and Morgeson (2007), also distinguish three separate subtypes of autonomy. The first two, namely work scheduling and work methods, are the same as suggested by Breaugh (1985). However, for the third one, Humphrey et al. (2007) consider another type of autonomy called decision-making autonomy. Decision-making autonomy is defined by the authors as the degree to which employees are allowed to make decisions at work. Their results revealed positive relationships between autonomy and job satisfaction, internal work motivation, and objective performance. They also found that there were negative relationships between autonomy and, stress, and absenteeism. Job autonomy has also successfully been linked to job satisfaction in other studies stating that higher levels of autonomy lead to higher levels of satisfaction (Nguyen, Taylor & Bradley, 2003; Spector 1997). This study will focus on the provision of one specific type of autonomy, namely decision-making autonomy.

Expectancy theories

In this paper, managers' motivation to provide autonomy to their subordinates is examined through the lens of expectancy theories. The expectancy theory was first proposed by Vroom in 1964 and later, it was further developed by Porter and Lawler (1968). It belongs to the larger category of process theories of motivation. In their work 'The future of work motivation theory', Steers, Mowday, and Shapiro (2004) mention that process theories view work motivation from a more dynamic perspective than content theories do. The authors declare that the aim of most process theories is to try to comprehend the thought processes governing people's behaviour in the workplace. The expectancy-value theory (EVT), the theory of reasoned action (TRA) and the theory of planned behaviour (TPB) are some of the main

process theories. In this paper, these three process theories are combined in order to establish the key antecedents to intention and behaviour.

Vroom's expectancy theory (1964) provides important insights for managers and has often been used in work environments to forecast behaviour (Nebeker & Mitchell, 1974). The theory is based on three main components which together determine people's motivation. The components are, firstly the effort-to-performance expectancy, secondly the performance-to-reward instrumentality, and lastly, reward valences (Lunenberg, 2011). The expectancy theory proposed by Vroom, as explained by Lunenberg (2011), insinuates that people will behave a certain way if they believe that their efforts will lead to a performance, that this performance engenders a reward and at the same time they value the associated reward. According to Vroom, the actual motivation is measured as a multiplication of the three factors, expectancy, instrumentality, and valence. This implies that when all three factors are combined, they enhance the motivation to act multiplicatively instead of additively. This also implies that if either expectancy, instrumentality, or valence equals zero, the motivation to act does not materialize at all (Lunenberg, 2011).

Another construct that can be influential in affecting a manager's work design behaviour is found within the theory of reasoned action. In 1967, Fishbein and Ajzen developed this theory in order to explain the links between attitudes, intentions, and behaviours. According to this theory, attitudes and subjective norms pertaining to a behaviour determine people's intentions to perform the behaviour. They also purport that such behavioural intentions are the best forecasters of the behaviour itself (Montano & Kasprzyk, 2008). Both attitudes and subjective norms are determined by a set of beliefs, such that, attitude is governed by behavioural beliefs and subjective norms are dictated by normative beliefs (Madden, Ellen & Ajzen, 1992). As explained by Montano & Kasprzyk (2008), behavioural beliefs are a person's judgments about the consequences of executing a certain behaviour. They clarify that, when determining what Fishbein and Azjen (1967) named attitudes, these behavioural beliefs are mediated by that person's value assessments of the results or outcomes. A link can be seen between the attitudes from Fishbein and Azjen's theory of reasoned action, and the instrumentality of Vroom's expectancy theory (1964) as both components refer to a person's expectations about the consequences of performing a behaviour. In the interest of parsimony, this paper relies on the accordance between instrumentality and attitudes. Consequently, only instrumentality is considered to represent this antecedent to intention. The normative beliefs, on the other hand, refer to the opinions about a certain behaviour as held by the significant peers of the actor, which can serve as a form of social pressure to make the actor perform the behaviour (Montano & Kasprzyk, 2008). Montano & Kasprzyk explain that, when determining subjective norms, the aforementioned normative beliefs are moderated by a person's incitement to adhere to significant peers. The theory of reasoned action was later revised and expanded to the theory of planned behaviour. This theory adds perceived control to the list of factors that influence behavioural intention and, consequently, behaviour. Perceived control takes into account situations where a person's behaviour can be influenced by elements that aren't in his control (Montano & Kasprzyk, 2008). The concept of perceived control relates to Vroom's expectancy dimension, which underlines that a person's perception of their ability to transform efforts into performance, influences their motivation to perform. Likewise, the theory of planned behaviour states that if the attitudes and

subjective norms are favourable, higher control of the situation leads to stronger beliefs about the feasibility of enacting the said behaviour. Such an increment in belief in turn positively influences the behavioural intention (Montano & Kasprzyk, 2008). Given the commonalities between perceived control and expectancy, this study relies only on expectancy to represent both constructs.

As stated earlier, the first factor considered to understand managers' motivation for work design is expectancy. Expectancy is a part of Vroom's original theory and as Lunenberg (2011) explains in his paper, level of expectancy can be used to infer whether a person will be motivated to act in a certain manner given that he/she believes that these efforts will prompt a satisfactory performance. Lunenberg describes expectancy as "a person's estimate of the probability that job-related effort will result in a given level of performance" (p. 2). Considering that expectancy consists of a probability, it must necessarily take on a value that ranges from zero to one. For our study, this expectancy needs to be interpreted from the viewpoint of managers. The performance considered in this paper refers to managers instilling autonomy in their subordinates' work designs. Therefore, with regards to the performance of such behaviour, expectancy evaluations would concern whether or not managers believe that their efforts to provide autonomy can materialize into the job design of their subordinates. Considering the expectancy element can illustrate managers' beliefs about whether they think they have the necessary knowledge, skills, abilities, and authority to provide autonomy to their employees. Managers' perceptions about whether they have the authority to provide autonomy to their subordinates also relate to the perceived control factor as suggested by the theory of planned behaviour. Therefore, based on the propositions of the expectancy theory (1964) and the theory of planned behaviour (Azjen, 1991), we reason that when managers believe they have the KSA's, and authority to design jobs with autonomy, their expectancy with regards to providing autonomy will enhance and as a consequence they will be more likely to be motivated to provide autonomy to their subordinates.

Hypothesis 1: Managers' perceived expectancy with regards to providing autonomy to their subordinates, positively predicts their intention to provide autonomy to their subordinates.

The second factor that we consider in our research to understand managers' work design behaviour is instrumentality. Instrumentality relates to the conviction that the performance will yield a particular reward or particular rewards (Lunenberg, 2011). Just like expectancy, instrumentality entails a probability and is therefore forced to take on a value between one and zero. In our study, instrumentality concerns whether managers know and believe that providing jobs with a high degree of autonomy could lead to potential rewards. The work design literature provides considerable evidence highlighting the benefits of the design of autonomous jobs. The positive outcomes of such work designs range from enhanced job satisfaction, work performance and, health and wellbeing among employees. Literature has also been able to demonstrate the efficacy of autonomy in preventing negative outcomes such as turnover, stress and burnout. However, given that not all managers are educated and trained to design motivational jobs, it is possible that they aren't aware of these outcomes. This is highlighted by Montaño & Kasprzyk (2008) who state that, in order to carry out a certain action, a person not only needs to have strong behavioural intention but also needs to possess the necessary knowledge and skills to perform the behaviour. According to Vroom (1964), people are motivated to perform if they believe that their

performance will lead to rewards. Hence, we argue that if managers are knowledgeable about the benefits of work design, they would be likely to be motivated to provide autonomy in their subordinates' work design.

Hypothesis 2: Managers' perceived instrumentality about the benefits of providing autonomy to subordinates, positively predicts their intention to provide autonomy to their subordinates.

The third factor that we consider in our study is valence. Lunenberg (2011) describes valence as "the strength of an employee's preference for a particular reward" (p. 3). Valence is not a probability like expectancy or instrumentality, but it represents a value that can be positive or negative depending on whether a person strongly values the reward or not (Lunenberg, 2011). He illustrates that valence would, for instance, take value zero if the individual is completely impartial towards the reward. Even if managers are aware that good job design behaviour can lead to "rewards" such as fewer burnouts and higher job satisfaction, it would not necessarily imply that they would engage in such behaviour. The reason for demotivation towards good work design behaviour, in that case, could relate to the value the manager places on such rewards. For managers to be motivated to invest in designing autonomous work designs, it is essential that they value the benefits associated with it. Therefore, in order to understand managers' motivation for providing autonomy, it is crucial to address the question of whether managers care about the employee-centric benefits of autonomous job designs. In line with the principles of the expectancy theory (Vroom, 1964), we argue that managers who strongly value the employee-centric benefits of autonomous work design, such as the wellbeing and satisfaction of their employees, will be more likely to be motivated to provide autonomy to their subordinates.

Hypothesis 3: Managers' perceived valence about the employee-centric benefits of providing autonomy to subordinates, positively predicts their intention to provide autonomy to their subordinates.

The last factor that we consider to understand managers' work design behaviour is the role of subjective norms. As per the theory of planned behaviour, subjective norms affect one's intentions of performing a behaviour. Montaño & Kasprzyk (2008) state that normative beliefs consist of both descriptive and injunctive norms. They explain that while injunctive norms correspond to beliefs about what others in one's network consider to be appropriate behaviour, descriptive norms pertain to beliefs about what those people do themselves. The authors also state that the normative beliefs that determine subjective norms tend to be stronger when a person firmly thinks that significant peers perform the behaviour themselves and/or that these people deem the behaviour as appropriate. In the context of the present study, this implies that managers' autonomy providing behaviour could be influenced by people they consider important within their network such as other colleagues, managers from other companies, and so on. Based on the propositions of the theory of planned behaviour and theory of reasoned action, we argue that when managers believe that other significant individuals in their network provide autonomous job designs to their employees or consider doing so as desirable, their intention to do the same would be enhanced.

Hypothesis 4: Manager's perceived subjective norms about providing autonomy to subordinates, positively predicts their intention to provide autonomy to their subordinates.

In conclusion, we estimate a model with four predictors of managers' intention to provide autonomy: (a) managers' perceived expectancy (b) managers' perceived instrumentality, (c) managers' perceived valence, and (d) managers' perceived subjective norms. A graphical representation of the model can be seen in Figure 1.

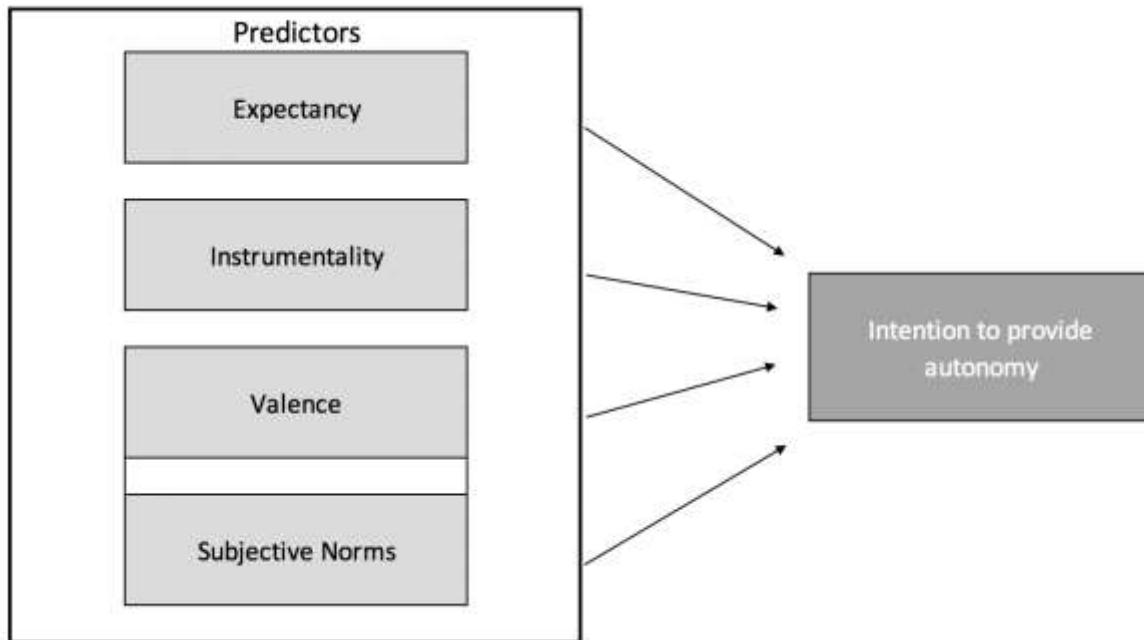


Figure 1. Model of managers' intention to provide autonomy to their subordinates

Method

To assess the various antecedents of managers' intentions to provide decision-making autonomy to their subordinates, a scale was developed using Qualtrics. This scale was targeted towards measuring the expectancy, instrumentality, valence, and subjective norms that managers associate with such job design behaviour.

A seven-point Likert-scale (where one denotes strongly disagree and seven denotes strongly agree), containing a total of 26 items, was used to measure responses. The categorization of the sub-scales is shown in table 1.

Scale development

Developing the scale was a lengthy process. The first step in the creation of the scale was to perform an extensive literature review by reading, summarizing, and connecting research papers on the topic at hand. This allowed to consolidate the conceptual and operational definitions of the constructs the scale is trying to measure i.e. expectancy, instrumentality, valence, subjective norms, and autonomy. Those definitions were then used to frame the items for the scale such that all the essential components of the constructs were measured by the items.

The items of the “The Work Design Questionnaire” developed by Morgeson and Humphrey in 2006 formed a base for building the items related to expectancy. Three questions from this questionnaire relate directly to decision-making autonomy. These specific items were modified in order to assess whether or not managers believed that their efforts to provide decision-making autonomy could be materialized. For instance, the item “The job provides me with significant autonomy in making decisions.” (Morgeson & Humphrey, 2006) was adapted to form items such as “Whether or not my subordinates are allowed to make autonomous decisions at work is up to me.”. In the final scale, manager’s expectancy about providing autonomy to subordinates was measured using four items. One of these four items was reverse scored, namely, “Whether or not my subordinates are allowed to make decisions at work is out of my control”.

Next, the scale intended to tap into managers’ knowledge about the instrumentality of autonomy in affecting employee wellbeing and their valence of these effects. To preserve the internal consistency of the scale, the same two sets of employee wellbeing outcomes were chosen to assess both the instrumentality and the valence of managers. An equilibrium was sought by having a rather balanced number of positive and negative outcomes (with respect to employee wellbeing) in the scale. The positive employee wellbeing outcomes included work engagement, job satisfaction, overall wellbeing, work motivation, and performance. The negative outcomes included turnover, stress, exhaustion and burnout, and absenteeism. Ultimately, managers’ instrumentality concerning outcomes that stem from having autonomy at work was measured with nine items. Five of these items related to the positive wellbeing outcomes (e.g. “Providing decision-making autonomy to subordinates contributes to their work motivation”), while the other four items related to the negative ones (e.g. “If subordinates have the autonomy to make their own work-related decisions, they are less likely to call in sick”). Managers’ valence with regards to those employee wellbeing outcomes were also assessed using nine items with the same division between positive (e.g. “My subordinates’ level of work engagement is very important to me.”) and negative outcomes (e.g. “Avoiding exhaustion and burnout among my subordinates is essential to me.”).

The items for assessing managers’ subjective norms were constructed mainly based on two papers, firstly a paper from Francis et al. (2004) and secondly Azjen’s paper “Constructing a theory of planned behaviour questionnaire” (2006). For instance, the item “People important to me want me to refer patients who have lower back pains for x-rays.” (Francis et al., 2004) was adapted to “People who are important to me would approve of me if I allowed my subordinates to make their own decisions at work”. In the final scale, managers’ subjective norms with regards to providing autonomy to their subordinates were determined by four items. One of these items was negatively formulated, namely “I have rarely seen someone in my position providing their subordinates with the autonomy to make work-related decisions”.

Table 1. Categorization of the sub-scales

Category	Item Code	Number of items
Expectancy	EXPT_1 - REXPT_4	4
Instrumentality	INST_1 - INST_10	9
Valence	VAL_1 - VAL_10	9
Subjective norms	SNORM_1 - RSNORM_4	4

Lastly, by adapting the items pertaining to decision-making autonomy from the WDQ, a subscale containing three items was formed to evaluate managers' intention to provide autonomy to their subordinates. Managers were asked, "If it were totally **up to you to choose**, to which degree would you like to: (a) give them the chance to use their personal initiative or judgement in carrying out their work, (b) allow them to make a lot of decisions on their own, (c) provide them with significant autonomy to make decisions. The answers were measured on a five-point Likert scale, where one denotes "strongly disagree" and five denotes "strongly agree".

The questionnaire also contained some questions about the demographics of the participants, in particular their gender, age, level of education, sector, and tenure were asked. Appendix A and B contain the items for each subscale in English and Dutch respectively.

Data collection

The population consists of all managers/supervisors who have at least two paid subordinates working under their supervision. A combination of purposive and snowball sampling methods were used to distribute the survey. Eligible personal contacts, such as family, friends, neighbours, and colleagues were requested to participate in this study. After verifying with them that they met the requirements to participate in this study, they were sent invitations to take part.

To increase the number of respondents, personal contacts and respondents were asked to look for potential participants in their circle. When participants were willing to invite other managers within their company to take part in the survey, they received an e-mail with a link made especially for their company. This allowed for all data collected within one same company to be grouped and easily traceable. In addition, social media sites such as LinkedIn and Facebook were also used to contact potential participants. After one week, a first reminder, re-stating the purpose of the study, was sent to participants who had not yet completed the survey. Later on, a second reminder was sent out, this one also highlighted the unprecedented and difficult times we were all going through in light of the COVID-19. The different types of invitations and reminders that were used in this study can be found, respectively, under appendices C and D.

Mid-April, the process of data collection was ended and all the data was exported from Qualtrics to SPSS. Before starting the analysis, data cleaning was performed in order to eliminate potential missing or pattern responses. Moreover, variables "Whether or not my subordinates are allowed to make

decisions about their work is **out of** my control" and "I have rarely seen someone in my position providing their subordinates the autonomy to make work-related decisions" were re-coded.

The individual links were sent out to 230 people who agreed to participate in the survey. Out of all the managers who received an invitation, 142 started the survey and 106 finished it, leading to a decent completion rate of 75%. Only the responses of participants who completed the whole survey were considered for the analysis. The survey was also sent specifically to managers of nineteen companies who had agreed to share it with their work peers, this method generated an additional 34 responses. On top of that, 63 people filled out the survey by using the anonymous link that was posted on social media platforms. Thus, a total of 203 managers participated in the survey. From those, two responses were left out due to missing or inconsistent responses, creating a sample of 201 managers.

Sample

67,2% of the total respondents were males, 32,3% were females and one participant identified as other (0,5%). Almost half of the sample was younger than 39 years old (49,8%), with the youngest respondent being 21 years old and the oldest respondent being 68. While 59,2% of the respondents possessed a master's degree, other respondents had either a bachelor's degree (27,9%), secondary education (10,4%), primary education (0,5%) or other (2,0%). The two most represented sectors in our sample were the service sector with 46,3% and other sectors with 27,4%. Most of the respondents had been in their current position for a period between one and five years (43,3%), and a 27,4% of the managers reported already being in their position for more than 10 years. These demographics can be observed in table 2.

Table 2. Demographics of the sample

DEMOGRAPHICS	Frequency	Percent
GENDER		
Male	135	67.2
Female	65	32.3
Other	1	.5
EDUCATION		
Primary education	1	.5
Secondary education	21	10.4
College/Professional bachelors	56	27.9
University/Academic masters	119	59.2
Others	4	2.0
SECTOR		
Industry	30	14.9
Service Sector	93	46.3
Government	6	3.0
Education	9	4.5
Health and welfare sector or social cultural sector	8	4.0
TENURE		
A few days	5	2.5
A few months but less than a year	22	10.9
1-5 years	87	43.3
5-10 years	32	15.9
More than 10 years	55	27.4

Results

Factor analysis and distributions

After data cleaning, exploratory factor analysis in SPSS was done to examine underlying constructs. The extraction method used for the exploratory analysis was the principal component method, this is the default setting in SPSS and one of the simplest methods.

Two key statistics combined, provide a minimum standard that should be reached in order for a factor analysis to be appropriate. The first statistic is the Kaiser - Meyer - Olkin measure of sampling adequacy (KMO) which compares the sizes of the correlation coefficients to the size of the partial correlation coefficients. If its value is close to one, it means that the partial correlations are relatively small and therefore, a factor analysis could be useful (Field, 2009). The second key statistic is Bartlett's test of sphericity which tests whether there is enough correlation between the variables. The null hypothesis of this test states that the correlation matrix is the same as the identity matrix. Rejecting the null hypothesis in favour of the alternative hypothesis means that a factor analysis could be appropriate (Field, 2009)

A first factor analysis, performed on the four items related to expectancy, namely, EXPT_1, EXPT_2, EXPT_3 and the recoded EXPT_4, the KMO takes a value of 0,688 which can be considered as acceptable, even though not good ($> 0,6$). The Bartlett's test has a significance level of .000 which allows us to confidently reject the null hypothesis. Both of these results point towards the fact that conducting a factor analysis is appropriate. The default criterion in SPSS for deciding how many factors to keep is the eigenvalue > 1 . Considering this criterion, our four items for expectancy can be reduced to one factor, explaining 51,34% of the variance. Another criterion to decide how many factors to keep is to look at the inflexion point on the scree plot and retain only the factors which lie on the left side of this point (Stevens, 2002, cited by Field, 2009). In our analysis, the inflexion point is found at the second factor, confirming the fact that only one factor should be retained. Communalities indicate how much of the variance of a variable is reproduced by the factor model. When these communalities are rather low, it is worth considering removing them from the model (Berlinschi. R, personal communication, November 20, 2019). The item EXPT_3 was deleted because it had a rather low communality (0.316). Moreover, the deletion of this item increased the Cronbach Alpha to 0,691. A reliability of 0,691 is relatively low but, being close enough to 0,7, it could be considered acceptable (Kline, 1999, cited by Field, 2009). A first factor, consisting of three variables that explain 62,08% of the variance, was retained.

The mean score for this factor was 5,11 with a standard deviation of 1,13. This means that on average, the managers in our sample, "somewhat agreed" with the statements about their expectancy. The range of answers for this factor was quite large, with a minimum of 1,67 (somewhere between "strongly disagree" and "disagree") and a maximum of 7 (strongly agree). The histogram in Figure 2, that plots the frequency of each rating, shows that the answers almost follow a normal distribution but are slightly left-skewed.

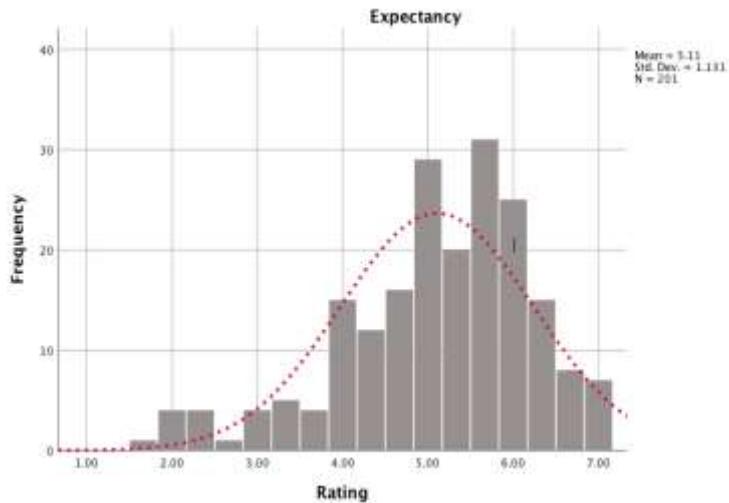


Figure 2. Distribution of perceived expectancy

A second exploratory analysis was performed on the nine items measuring a manager's instrumentality with regards to providing autonomy. The KMO measure at 0.837 and Bartlett's test of sphericity with $p < .001$, indicated that the standard for conducting a factor analysis was met. The eigenvalue > 1 criterion and the scree plot both pointed towards the retainment of 2 factors. Thus, all 9 items were retained in a two factor solution which together accounted for 63,70% of the variance. In order to make the interpretation of the factors easier, varimax rotation was performed on the factor loadings. The items INST_1, INST_2, INST_3, INST_4 and INST_5 loaded higher on the first factor while INST_7, INST_8, INST_9 and INST_10 load higher on the second factor. Thus, the first factor could be interpreted as the instrumentality for positive outcomes, as it includes items related to work engagement, job satisfaction, overall wellbeing, work motivation, and performance. The second factor can be interpreted as managers' instrumentality for negative wellbeing outcomes, more specifically, turnover, stress, exhaustion and burnout, and absenteeism. Next, reliability analysis was performed on both factors separately. The first factor, which will be referred to as Instrumentality Positive Outcomes, had a Cronbach Alpha of 0,857. This is sufficiently high to consider the scale reliable. The second factor, Instrumentality Negative Outcomes, had a lower but still acceptable Cronbach Alpha of 0,783. For the rest of the analysis, instrumentality will be examined with both factors separately.

Managers' instrumentality for positive outcomes had an average score of 5,96 with a standard deviation of 0,73. The answers ranged between somewhat disagree (3,00) and strongly agree (7,00). The histogram in Figure 3 shows that answers are rather left-skewed with a high peak at 6,00.

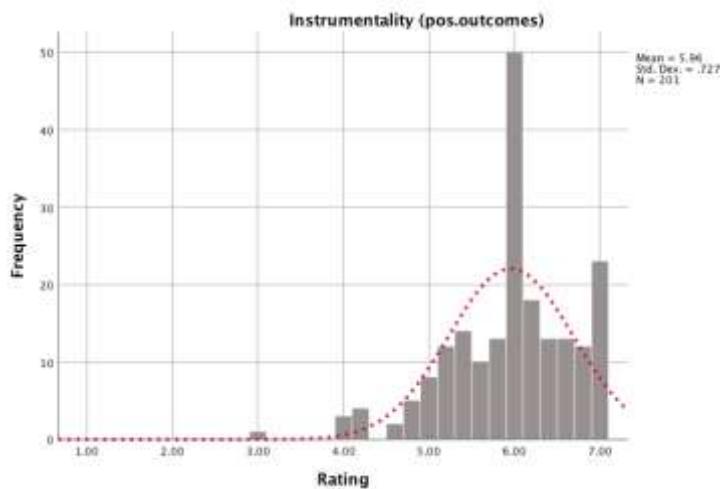


Figure 3. Distribution of perceived instrumentality for positive outcomes

With regards to managers' instrumentality for negative outcomes, the average score was 4,93 ($SD = 1,04$) which corresponds to a value slightly lower than 'agree'. This factor had the largest range of answers, with a minimum of 1,25 and a maximum of 7,00. In the histogram in Figure 4, it can be seen that the data shows no apparent pattern and contains several peaks.

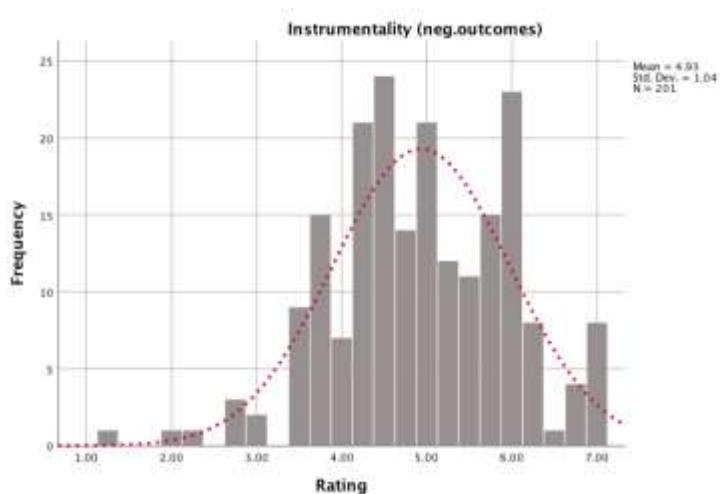


Figure 4. Distribution of perceived instrumentality for negative outcomes

Subsequently, the principal component analysis was performed on the nine items assessing managers' valence of work-related outcomes. The KMO statistic of 0,867 and Bartlett's test with $p < .001$ showed that such analysis would be appropriate. Two factors, that respectively explained 49,20% and 13,02% of the variance, had an eigenvalue bigger than one. Moreover, the scree plot indicated that either one or two factors should be kept. The component matrix table was rotated in order to make the interpretation of both factors simpler. As with instrumentality, the interpretation of the factors can be linked to the evaluation of the outcomes. Factor 1 consists of VAL_1, VAL_2, VAL_3, VAL_4 and VAL_5 which correspond to statements about the positively valued outcomes while factor 2 consists of VAL_7, VAL_8, VAL_9 and VAL_10 corresponding to statements about the negatively valued outcomes. Given

the ease of interpretation, two factors were retained containing respectively five and four variables. Thereafter, a reliability analysis was performed on both factors. The first factor turned out to be quite reliable with a Cronbach Alpha of 0,883. However, the second factor doesn't meet the threshold to be considered reliable, as it has a Cronbach Alpha of 0,683. For the rest of the analysis, valence will be examined with both factors separately.

The mean score for the valence for positive outcomes factor was 6,39 with a standard deviation of 0,66, making it the highest average score among all the factors. The answers lied between 3,00 and 7,00. The histogram in Figure 5 shows the frequency of each score for this factor, the answers were left-skewed with a high peak at 7,00.

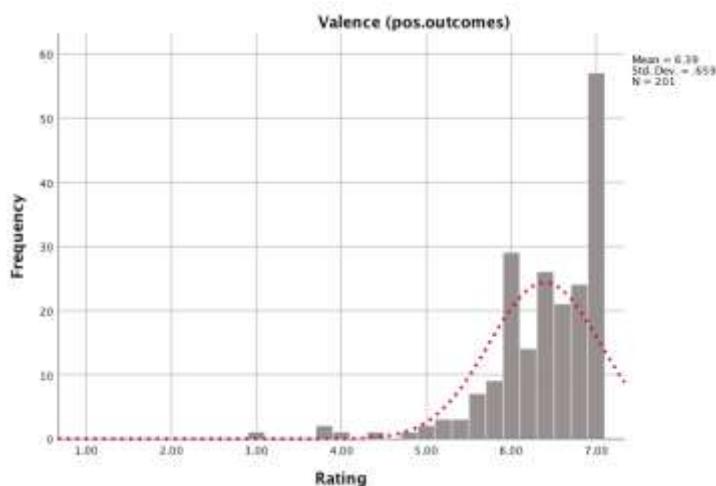


Figure 5. Distribution of perceived valence for positive outcomes

The valence of negative outcomes had a lower mean score than the valence for positive outcomes at 5,82 ($SD = 0,73$). The minimum score was 3,50 and the maximum score was 7,00, this makes it the factor with the smallest range. The histogram in Figure 6 demonstrates that the factor almost follows a normal distribution with a peak around 6,00.

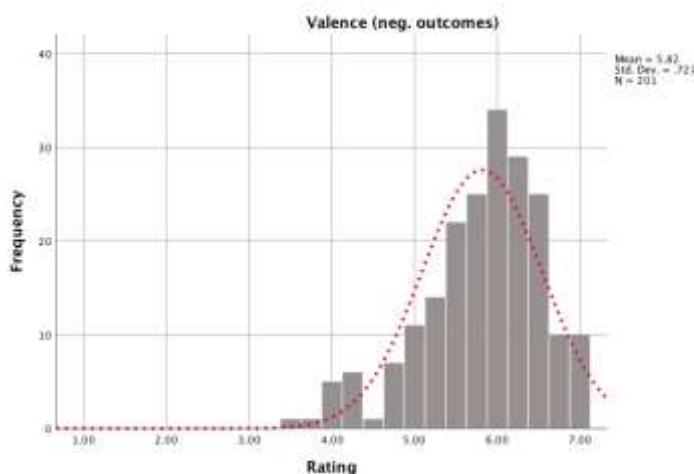


Figure 6. Distribution of perceived valence for negative outcomes

A fourth exploratory factor analysis was performed on the four items in the scale that relate to the subjective norms of managers. These are items SNORM_1, SNORM_2, SNORM_3 and the recoded version of RSNORM_4, SNORM_4. With a KMO value of 0,673 and Bartlett's test significance of .000, this analysis appeared to be suitable. Both the eigenvalue bigger than unity and the scree plot criterion indicated that only one factor should be retained. This factor explains 51, 33% of the total variance, which is considered sufficient to be a good factor model (Berlinschi. R, personal communication, November 20, 2019). The recoded item, SNORM_4, was deleted because of a lower communality (0,414). In addition, dropping the item increased the Cronbach Alpha coefficient significantly, from 0,638 to 0,732, bringing it to a sufficient level. A factor, consisting of three variables explaining 65,25% of the variance, was retained.

This factor had a mean score of 5,15 with a standard deviation of 0,92. The range for this factor was five, with values between "disagree" (2,00) and "strongly agree" (7,00). The histogram in Figure 7 shows that the factor is almost normally distributed, even though slightly left-skewed with a peak around 6,00.

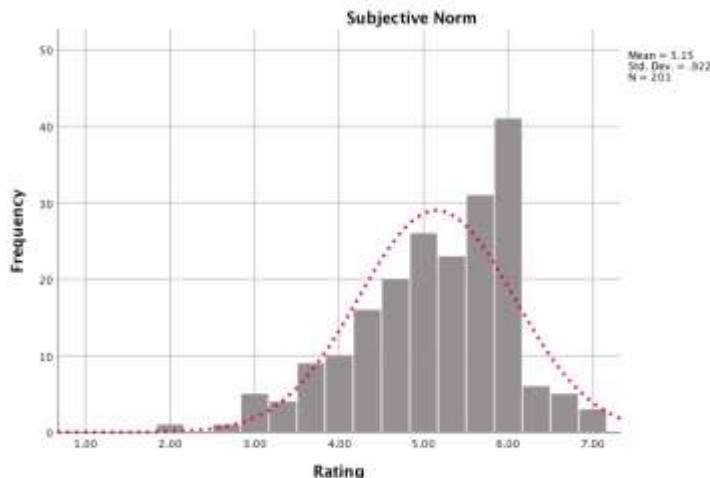


Figure 7. Distribution of perceived subjective norms

Lastly, a factor analysis was performed on the three items evaluating managers' intention to provide autonomy. The KMO statistic of 0,652 was above the acceptable threshold of 0,5. Combined with a significance level of .000 for Bartlett's test of Sphericity, the minimum standard for conducting a factor analysis was met. Only one factor had an eigenvalue higher than one (2,159), and this factor accounted for 71,98% of the total variance on its own. The inflection point of the scree plot was found at two, confirming that only one factor should be kept. The factor loadings of the three items were high with a value of 0,777 for AUTINT_1, 0,859 for AUTINT_2 and 0,907 for AUTINT_3. The scale appeared to be sufficiently reliable with a Cronbach Alpha of 0,805.

This factor had an average score of 4,29 and a standard deviation of 0,64. Note that items belonging to this factor were measured on a 5-point Likert scale, unlike the other items which were measured on a 7-point Likert scale. This means that for this factor, 4,29 corresponds to a value slightly above

"somewhat agree". Answers ranged between 2,00 and 5,00 and appeared to be rather left-skewed when looking at a histogram in Figure 8.

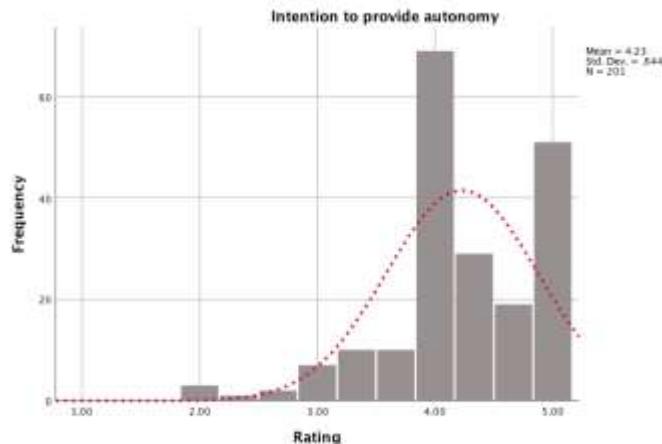


Figure 8. Distribution of the intention to provide autonomy

In a nutshell, all of the seven factors had a Cronbach Alpha that lied between 0,683 and 0,883. As mentioned by Ajzen (2011), TPB constructs can contain measurement errors. Consequently, the measures rarely have reliabilities higher than 0,75 even when they are effectively constructed (Ajzen, 2011). Thus, the reliabilities of our factors, although not high can be considered sufficient for these types of constructs. The factor scores were computed as means and saved as new variables in order to perform further analysis.

Table 3. Overview of factors

Factor	Item code	Mean	Std. Dev.	Min	Max	Cronbach's α
Factor 1: Expectancy		5,106	1,131	1,67	7,00	0,691
I can control whether or not my subordinates are allowed to make work-related decisions	EXPT_1	5,22	1,393			
Whether or not my subordinates are allowed to make autonomous decisions at work is up to me	EXPT_2	4,88	1,476			
Whether or not my subordinates are allowed to make decisions about their work is out of my control. (*)	EXPT_4	5,22	1,444			
Factor 2: Instrumentality (pos. outcomes)		5,958	0,727	3,00	7,00	0,857
Subordinates who can make their own decisions at work tend to be engaged in their work.	INST_1	6,070	1,010			
Subordinates tend to be satisfied with their jobs when they are provided the autonomy to make decisions about their own work.	INST_2	6,030	0,830			
Having decision-making opportunities contributes towards subordinates' overall wellbeing at work.	INST_3	5,910	0,884			
Providing decision making autonomy to subordinates contributes to their work motivation.	INST_4	6,090	0,873			
Providing decision-making autonomy to subordinates leads to increased performance.	INST_5	5,690	0,952			
Factor 3: Instrumentality (neg. outcomes)		4,933	1,040	1,25	7,00	0,783
Providing subordinates the freedom to make decisions at work can prevent them from leaving the company.	INST_7	5,310	1,223			
Allowing subordinates to have a say regarding work-related decisions helps reduce their stress at work.	INST_8	5,000	1,364			
When subordinates have the possibility to make decisions at work, they are less likely to suffer from exhaustion and burn out.	INST_9	4,640	1,415			
If subordinates have the autonomy to make their own work-related decisions, they are less likely to call in sick.	INST_10	4,780	1,336			
Factor 4: Valence (pos. outcomes)		6,393	0,659	3,00	7,00	0,883
My subordinates' level of work engagement is very important to me.	VAL_1	6,360	0,862			
It is important to me that my subordinates feel satisfied with their job.	VAL_2	6,420	0,834			
The health and wellbeing of my subordinates are very important to me.	VAL_3	6,510	0,715			
It is important to me that my subordinates feel motivated about their job.	VAL_4	6,460	0,735			
Obtaining optimal performance from my subordinates is of key importance to me.	VAL_5	6,200	0,833			
Factor 5: Valence (neg. outcomes)		5,816	0,727	3,50	7,00	0,683
It is important to me that my subordinates do not leave the organization.	VAL_7	5,700	1,026			
It is important to me that my subordinates do not experience excessive work-related stress.	VAL_8	5,870	0,904			
Avoiding exhaustion and burn out among my subordinates is essential to me.	VAL_9	6,070	1,020			
I attach a lot of importance to the level of absenteeism among my subordinates.	VAL_10	5,630	1,102			
Factor 6: Subjective norm		5,151	0,923	2,00	7,00	0,732
My work peers think it is important to provide subordinates with opportunities for decision-making.	SNORM_1	5,240	1,047			
Other managers in my organization usually give their subordinates the freedom to make decisions about their own work.	SNORM_2	4,790	1,245			
People who are important to me would approve of me if I allowed my subordinates to make their own decisions at work.	SNORM_3	5,420	1,129			
Factor 7: Intention to provide autonomy		4,229	0,644	2,00	5,00	0,805
give them a chance to use their personal initiative or judgment in carrying out the work.	AUTINT_1	4,350	0,684			
allow them to make a lot of decisions on their own.	AUTINT_2	4,180	0,773			
provide them with significant autonomy to make decisions.	AUTINT_3	4,160	0,815			

Multiple Regression Analysis

A multiple regression was run to investigate whether managers' intention to provide autonomy could be significantly predicted by expectancy, instrumentality for positive outcomes, instrumentality for negative outcomes, valence for positive outcomes, valence for negative outcomes and subjective norms. The model specification included gender and education as control variables. These control variables were selected based on literature that suggested they could interfere with the relationship studied. In their paper, "A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision-Making Processes", Venkatesh, Morris & Ackerman (2000) highlighted several differences between men and women that could influence the components of the Theory of Planned Behaviour. For instance, research has shown that women are more likely than men to care about pleasing others (Miller, 1976, as cited by Venkatesh, Morris & Ackerman, 2000). On the same note, Barnett and Karson (1988, as cited by Venkatesh, Morris & Ackerman, 2000) stated that women tend to act in a way that is expected to be approved by others. These gender differences could influence the subjective norms of participants. In addition, the level of perceived control, which corresponds to perceived expectancy in the expectancy-value theory, could be influenced by gender as women tend to experience less personal control with regards to their work (Venkatesh, Morris & Ackerman, 2000). In turn, Jalilvand and Ebrahimabadi (2011), found that education had an influence on instrumentality which is why it was controlled for in our model. Besides, in 1991, Campion & Stevens found that people who receive training in job design are better at designing jobs. Many MBA students or higher educated people, who often received an education in people management, eventually take up managerial roles. Thus, to ensure that these differences in education do not affect the results of the analysis, education was also controlled for.

Both control variables were categorical, consequently, they were re-coded into dummy variables before being entered in the regression. For gender, two new dichotomous variables were created. Firstly, a new variable "female" was constructed that takes the value one if the gender is female and value zero in all other cases. Secondly, a variable was made for the gender category "other". This variable takes value one in case the respondent indicated other as their gender and a zero in the other cases. The male level contains zeros in both variables and thus becomes the reference category. Likewise, dummy variables were created for the different levels of education, except for the university/academic master level which became the reference category. The regression was performed hierarchically, with the predictors entered in block 1 and the two control variables, represented by six dummy variables, entered in block 2.

The results of the regression indicated that the model was a good fit of the data and a significant predictor of the intention to provide autonomy, $F(12, 188) = 7,774, p < 0,001$. The regression model explained 33,2% of the variance in the outcome ($R^2 = 0,332$). It can also be noted that by including the control variables in the model the R^2 was raised from 0,292 to 0,332. This indicates that the control variables explain 3,4% of the variance in the outcome ($0,332 - 0,298 = 0,034$). Moreover, the adjusted R^2 gives an indication of how well the model would perform it was derived from the population rather than the sample. Generally, the closer the adjusted R^2 is to the actual R^2 , the better (Field, 2009). The

adjusted R² value for our model is 0.289, in other words, if the model was derived from the population, it would explain 4,3% (0,332 - 0,289) less of the variance in the dependent variable.

Afterwards, the individual predictors and their contributions were investigated in more detail. While it appeared that expectancy, instrumentality for positive outcomes, valence for positive outcomes and subjective norms significantly contributed to our model at the 0,05 level, instrumentality and valence for negative outcomes did not. The correlation table and the results of the regression analysis are shown, respectively, in table 4 and 5.

Expectancy ($B_1 = -0,08$, $p = 0,025$) was one of the factors that significantly contributed to our model. The b coefficient is negative, which indicates a negative relationship between expectancy and the intention to provide autonomy. As the perceived expectancy goes up with one unit, the intention to decision-making provide autonomy decreases by 0,08 units. Hence, our first hypothesis was not supported.

Another factor that significantly contributed to the model is the instrumentality for positive outcomes ($B_2 = 0,238$, $p = 0,001$). Our model demonstrates a positive relationship between instrumentality for positive outcomes and the dependent variable. As the perceived instrumentality for positive outcomes goes up by one unit, the intention to provide decision-making autonomy increases by 0,238 units. This relationship has the lowest value for sig in our model, which points towards the fact that this predictor makes the greatest contribution to our model (Field, 2008). Thus, our second hypothesis was only partially supported.

Furthermore, a significant positive relationship was found between the valence for positive outcomes and the intention to provide decision-making autonomy to subordinates ($B_4 = 0,225$, $p = 0,004$). When the valence for positive outcomes goes up by one unit, the intention to provide decision-making autonomy goes up by 0,225 units. This means that our third hypothesis was only partially supported.

Finally, the subjective norms factor also significantly contributed to our prediction of the intention to provide decision-making autonomy ($B_6 = 0,105$, $p = 0,027$). The b coefficient is positive, which shows a positive relationship between subjective norms and intention to provide autonomy. When the perceived subjective norms go up with one unit, the intention to provide decision-making autonomy rises by 0,105 units. Hence, our fourth hypothesis was supported.

The instrumentality for negative outcomes ($B_3 = 0,09$, $p = 0,053$) and valence for negative outcomes ($B_5 = -0,007$, $p = 0,918$), however, did not significantly contribute to predicting the intention to provide decision-making autonomy to subordinates.

Regarding the control variables, it appears that gender didn't make a statistically significant contribution to our model. For what concerns education, only the professional bachelor level was significant ($B_9 = -0,219$, $p = 0,016$). This means that the intention to provide decision-making autonomy to subordinates is 0,219 units lower for managers with a college/professional bachelor compared to managers with a university/academic master.

Table 4. Pearson's correlation table

Factors	Expectancy	Instrumentality (pos. outcomes)	Instrumentality (neg. outcomes)	Valence (pos. outcomes)	Valence (neg. outcomes)	Subjective norm	Intention to provide autonomy
Expectancy	1						
Instrumentality (pos. outcomes)	.089	1					
Instrumentality (neg. outcomes)	.050	.532**	1				
Valence (pos. outcomes)	.255**	.381**	.209**	1			
Valence (neg. outcomes)	.202**	.302**	.344**	.555**	1		
Subjective norm	.207**	.342**	.197**	.361**	.245**	1	
Intention to provide autonomy	.013	.455**	.330**	.386**	.251**	.329**	1

** Correlation is significant at the 0.01 level (2-tailed).

Table 5. Results of multiple regression analysis

Model	Unstandardized Coefficients		t	Sig.	R2	Adjusted R2
	B					
1					0,298	0,276
	(Constant)	.815	1.844	.067		
	Expectancy	-.061	-1.689	.093		
	Instrumentality (pos. outcomes)	.230	3.375	.001		
	Instrumentality (neg. outcomes)	.077	1.687	.093		
	Valence (pos. outcomes)	.241	3.142	.002		
	Valence (neg. outcomes)	-.021	-.312	.755		
	Subjective norm	.109	2.319	.021		
2					0,332	0,289
	(Constant)	.975	2.195	.029		
	Expectancy	-.083	-2.265	.025		
	Instrumentality (pos.outcomes)	.238	3.515	.001		
	Instrumentality (neg. outcomes)	.090	1.950	.053		
	Valence (pos. outcomes)	.225	2.908	.004		
	Valence (neg. outcomes)	-.007	-.103	.918		
	Subjective norm	.105	2.227	.027		
	Education (Primary)	-.373	-.673	.501		
	Education (Secundary)	-.219	-1.687	.093		
	Education (College/professional bachelor)	-.219	-2.424	.016		
	Education (other)	-.081	-.288	.773		
	Gender (Female)	-.120	-1.397	.164		
	Gender (other)	-.135	-.241	.810		

a Dependent Variable: intention to provide autonomy

As a last part of this regression analysis, certain assumptions were checked to determine whether the model that had been obtained for our sample could be accurately applied to the population (Field, 2009). Firstly, the model was tested for using the variance inflation factor (VIF). A good rule of thumb is to be concerned about multicollinearity if the VIF of one of the predictors exceeds 10 (Myers, 1990, as cited

by Field, 2009). In our regression model, the VIF for all of our predictors is largely under ten which suggests that multicollinearity isn't a problem (see table 6).

Table 6. Collinearity statistics of multiple regression model

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Expectancy	.913	1.095
Instrumentality (pos. outcomes)	.614	1.628
Instrumentality (neg. outcomes)	.669	1.495
Valence (pos. outcomes)	.590	1.694
Valence (neg. outcomes)	.633	1.581
Subjective norm	.806	1.241
2 (Constant)		
Expectancy	.862	1.160
Instrumentality (pos.outcomes)	.608	1.645
Instrumentality (neg. outcomes)	.641	1.559
Valence (pos. outcomes)	.566	1.766
Valence (neg. outcomes)	.610	1.640
Subjective norm	.784	1.275
Education (Primary)	.968	1.033
Education (Secundary)	.931	1.074
Education (College/professional bachelor)	.897	1.115
Education (other)	.951	1.051
Gender (Female)	.917	1.091
Gender (other)	.941	1.062

a Dependent Variable: intention to provide autonomy

Another assumption that was checked were the outliers, this was done by looking at the casewise diagnostics' table. Theory suggests that, in a sample, it is desirable that 95% of the cases have standardized residuals that lie between -2 and 2 (Field, 2009). Our sample consisted of 201 respondents, accordingly, there should only be around ten cases outside of these boundaries. The casewise table reported eight cases, so our model conforms to what can be expected from a reasonably accurate model. Moreover, only 1% of the cases are expected to have standardized residuals outside of the +/- 2,5 boundaries (Field, 2009). The casewise list reported four such cases in our sample, which corresponds to 2% instead of the 1% that is expected for a reasonably accurate model. Out of these four cases, one case (case 12) had a standardized residual lower than -3 which indicates that it is a possible outlier. Before deciding to remove the outlier, it was further investigated to determine whether or not it was a cause for concern. This was done by looking at the Cook's distance which should have a value below one in order for the case not to have an excessive influence on the model (Field, 2009). For our possible outlier, the Cook's distance was 0,6617 indicating that the influence of the case on the model is not too high. The leverage was also checked by calculating the average leverage value and comparing it to all leverage values. In our model, the average leverage value amounts to 0,0646 ((12+1)/201). According to Hoaglin and Welsch (1978, as cited by Field, 2009) leverage values that are higher than two times this average leverage value ($2 \times 0,0646 = 0,129$) should be investigated. The leverage value of case 12 was 0,0674 and thus, way below this cut-off value. Hence, it can be concluded that the case doesn't appear to be a cause for concern and it was therefore not removed.

Next, the normality of the residuals was assessed by looking at the normal probability plot (Figure 9) and the histogram of the standardized residuals (Figure 10). In the histogram, the red dotted line represents the shape of the normal distribution. The bars of the histogram fit this shape relatively well and, consequently, our residuals are more or less normally distributed. In the normal probability plot, normality is represented by the straight red line. Here again, all the dots lie close to the line, pointing towards a relatively normal distribution.

Normal Probability Plot of Regression Standardized Residual

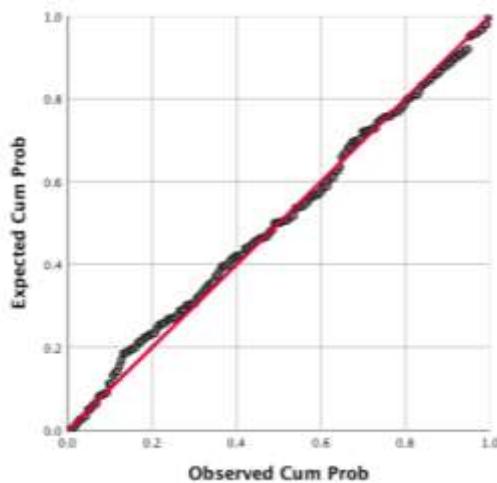


Figure 9. Normal Probability Plot of regression standardized residuals

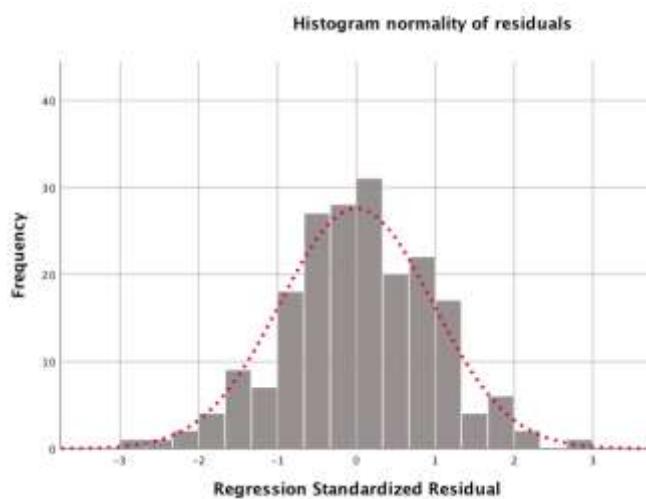


Figure 10. Histogram of standardized residuals

Finally, the assumption of independent errors is investigated by looking at the Durbin-Watson statistic. This statistic can take on values between zero and four and, according to Field (2009), values close to 2 are good while values smaller than one or greater than three are cause for concern. In our multiple regression, the Durbin-Watson statistic takes on the value 2.065 which is close enough to two to assume that residuals are uncorrelated. To conclude, as most of the assumptions have been met, the model that was obtained for the sample can accurately be applied to the population.

Discussion

As pointed out in the literature, in today's society, high-quality jobs i.e. jobs that contain opportunities for autonomy and other characteristics, are still not the norm despite their proven benefits for both the employer and the employee. In an attempt to uncover the cause of this phenomenon, the present study investigates the antecedents of managers' intentions to provide autonomy to their subordinates using a combination of the Expectancy-Value Theory (EVT) and the Theory of Planned Behaviour (TPB). By applying these theories to the context of job design, four hypotheses were formulated:

H1: Managers' perceived expectancy with regards to providing autonomy to their subordinates, positively predicts their intention to provide autonomy while designing jobs for their subordinates.

The first hypothesis concerning managers' perceived expectancy was not supported by the findings of our study. It was expected that, as implied by the expectancy theory, a high level of perceived expectancy would lead to a high intention to provide decision-making autonomy among managers. In other words, it was presumed that if managers believed they have control over the design of the job of their subordinates, they would be more likely to intend to provide them with decision-making autonomy. However, the relationship between perceived expectancy and intention to provide autonomy appeared to be a negative one. This implies that as managers feel they are more able to provide autonomy, they are less likely to intend to do so. A possible justification for this unexpected finding can be found in Langfred and Rockmann's (2016) argument on the push and pull of autonomy. In their paper, the authors highlight an existing tension between the need for autonomy of employees and the need for control of organisations. They suggest that organisations have an inherent need to retain control and that increasing the autonomy of the workers leads to less organizational control thereby making it more stressful for managers to manage them. This could potentially explain why managers who are more able to provide opportunities for decision-making autonomy would decide not to do so. Yet, it should be highlighted that, although the results point towards a significant contribution of expectancy to the intention to provide autonomy, this contribution is really small ($B = -0,083$). Thus, the increase in perceived expectancy only leads to a small decrease in the intention to provide autonomy, suggesting that there might be other, more important factors at play.

H2: Managers' perceived instrumentality about the benefits of providing autonomous job designs to subordinates, positively predicts their intention to provide autonomy while designing jobs for their subordinates.

The second hypothesis regarding managers' perceived instrumentality was partially supported by our results. That is, a positive relationship has been found between instrumentality for positive employee wellbeing outcomes and intention to provide autonomy. Managers appear to be aware of the rewards stemming from providing jobs with decision-making autonomy and this knowledge is found to increase their intention to provide such jobs. This is in line with our predictions and with the general functioning of EVT. In fact, instrumentality for positive outcomes was found to be the best predictor of the intention to provide decision-making autonomy among managers. As a result, to increase the number of high-

quality jobs in society, it could be beneficial to better inform managers and convince them of their benefits. This idea can be supported by the research of Campion and Stevens (1991) who, as mentioned earlier, found that job design principles and concepts can be learnt easily. Thus, job design experts could train managers on the benefits of providing decision-making autonomy, and as our finding suggests, by doing so they would increase their intention to provide such jobs.

With regards to the negative employee wellbeing outcomes, namely, turnover, work-related stress, burnout, exhaustion, and absenteeism, managers were found to believe that providing autonomy would be instrumental in reducing such outcomes. However, they believed that providing autonomy was less beneficial for reducing negative employee outcomes than it was for increasing positive wellbeing outcomes such as work engagement and performance. Results also showed that the instrumentality with regards to negative wellbeing outcomes could not significantly predict the intention to provide autonomy. This implies that knowledge about autonomy being instrumental in preventing stress, exhaustion and burnout, turnover, and absenteeism among employees, didn't influence managers' intention to provide autonomy. This is a result that was not anticipated, a clear distinction should be made between knowledge about the attainment of rewards and knowledge about the avoidance of negative outcomes, as they do not influence intentions in the same way. The fact that managers perceived autonomy to be less instrumental in reducing negative wellbeing outcomes among employees and more instrumental in increasing positive wellbeing outcomes, could explain why instrumentality to reduce negative wellbeing outcomes was not found to be a good predictor of the intention to provide autonomy. Put differently, managers may believe that providing autonomy relieves stress and so on among employees, but also that these effects are not of considerable size. So it is possible that, although managers are aware of the benefits, they may not consider them while framing their intention to provide autonomy because they don't find them substantial.

H3: Managers' perceived valence about the employee-centric benefits of autonomous job designs, positively predicts their intention to provide autonomy while designing jobs for their subordinates.

The third hypothesis was also only partially supported by the findings of our study. Managers seem to strongly value the employee-centric benefits stemming from the provision of autonomy. The valence of positive wellbeing outcomes was found to be the second best predictor of manager's intention to provide autonomy. In other words, the more managers value employees' work engagement, job satisfaction, overall health and wellbeing, work motivation, and performance, the more they would intend to provide autonomy. Consequently, in order to increase the number of jobs that provide employees with decision-making autonomy, managers who value these positive employee wellbeing outcomes should be appointed. Additionally, informing managers about how employees' performance, job satisfaction, work engagement, overall health and wellbeing, and work motivation can help promote their own wellbeing at work, may help managers to value employee wellbeing more. This would, in turn, make them more inclined to provide autonomy to their subordinates.

With regards to the valence of negative wellbeing outcomes, results did not support our hypothesis. Even though managers seem to value the lack of stress, exhaustion and burnout, absenteeism, and turnover, it was not found to significantly influence their intention to provide autonomy. There are several

possible justifications for such an unexpected finding, it is possible that managers perceive negative wellbeing outcomes such as stress or burnout as employees' personal problems rather than a company problem and thus, not feel like it is their responsibility to take care of those issues. Consequently, even though managers may value stress and so on among their subordinates, they may believe that these are problems that subordinates should tackle on their own. Moreover, as most of these issues do not refrain employees from delivering performance, managers may not be inclined enough to do something about relieving those problems.

H4: Manager's perceived subjective norms about providing autonomy to subordinates, positively predicts their intention to provide autonomy while designing jobs for their subordinates.

With regards to subjective norms, managers in our sample tended to believe that referent others such as work peers or people important to them, would find it appropriate that they provide decision-making autonomy to their subordinates. Interestingly, statements about the importance that referent others attach to providing autonomy (injunctive norms) were rated higher than the statement about referent others performing this behaviour. This indicates that managers believe that their referent others find it important to provide decision-making autonomy to subordinates, but they feel less like these referent others do design such jobs for their subordinates in practice. In line with TPB, hypothesis four was supported and it was found that when managers perceive subjective norms as affirmative of providing subordinates with autonomy, they were more inclined to provide autonomy. This implies that if a certain number of managers would set the example by giving their subordinates more freedom to make decisions, they could increase the intention of their work peers to do the same. This could create a positive circle where more and more managers are inspired to design high-quality jobs.

Conclusion

All in all in this study, managers' perceived expectancy, instrumentality, valence, and subjective norms were found to be theoretically conducive for enhancing their intention to provide autonomy. However, the results of the regression analysis were not always in support of the theoretical predictions. While instrumentality for positive wellbeing outcomes, valence for positive wellbeing outcomes and subjective norms were found to positively predict managers' intention to provide autonomy, expectancy was found to be a negative predictor. Furthermore, instrumentality for negative wellbeing outcomes and valence for negative wellbeing outcomes had an insignificant relationship with managers' intention to provide autonomy to their subordinates.

Hence, the findings of this study indicate that to make high-quality jobs more prevalent, organizations need to focus on increasing managers' (a) perceived instrumentality for positive employee wellbeing outcomes, (b) perceived valence for positive wellbeing outcomes and (c) perceived subjective norms, as these factors increase managers' intention to provide such jobs. Additionally, this study also sheds light upon an unexpected finding, which indicates that expectancy about providing autonomy may have a negative impact on managers' intention to provide autonomy to their subordinates. This finding needs

to be investigated more deeply in future research in order to check whether it is a reliable finding or a mere exception.

Limitations and future research

Despite its contributions, this study is not without limitations. A first limitation concerns the composition of the sample. Although a sufficiently large sample was gathered, this sample may not have been representative as purposive and snowball sampling methods were used. Moreover, the sample was composed mostly of Belgian managers, thereby limiting the generalization of its findings. Another limitation regards the scope of the research. In this study, only managers' intention to provide decision-making autonomy was considered. However, managers might reason differently when it comes to providing work methods autonomy and scheduling autonomy. Attention should also be brought to the limited number of items in certain sub-scales. The sub-scales measuring expectancy and subjective norms both only consisted of three valid items, which could be too little to give a realistic representation of the constructs. Additionally, it needs to be noted that our model focusses on predicting managers' intentions to provide decision-making autonomy and not on predicting the behaviour itself. TRA and TPB both suggest that intention is the best predictor of behaviour (Montaño & Kasprzyk, 2015), while this may be true critics call attention to the fact that a lot of factors could interfere with the relationship between intention and behaviour. Thereupon, a suggestion for future research would be to conduct this research on a bigger, more diverse sample and to also investigate both intentional and actual. In addition, similar research should be carried out for other job characteristics such as task significance, task variety and feedback, that contribute to enhancing the quality of jobs. Only by putting all those elements together, and looking at the whole picture, will it possible to fully understand why there is a prevalence of low-quality jobs.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2006). Constructing a theory of planned behavior questionnaire.
- Ajzen, I. (2011). The Theory of Planned Behaviour: Reactions and Reflections. *Psychology & Health*, 26, 1113-1127.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.
- Breathnach, J. A. (1985). The measurement of work autonomy. *Human relations*, 38(6), 551-570. *Behavior*, 31(2/3), 302-308.
- Campion, M. A., & Stevens, M. J. (1991). Neglected questions in job design: How people

- design jobs, task-job predictability, and influence of training. *Journal of Business and Psychology*, 6(2), 169-191. *Behavior*, 31(2/3), 302-308.
- Carpenter, S. (2018) Ten Steps in Scale Development and Reporting: A Guide for Researchers, *Communication Methods and Measures*, 12:1, 25-44.
- Davis, G. F. (2010). Job design meets organizational sociology. *Journal of Organizational Behavior*, 31(2/3), 302-308.
- Demirkol, I. C., & Nalla, M. K. (2018). Predicting job satisfaction and motivation of aviation security personnel: a test of job characteristics theory. *Security Journal*, 31(4), 901-923.
- Field, A. (2008). Multiple regression using SPSS. *Research Methods in Psychology*, C8057, 1-11.
- Field, A. (2009). *Discovering Statistics Using SPSS*. London: Sage Publications Ltd.
- Fishbein, M., Ajzen, I., Albarracin, D., & Hornik, R. (2007). A reasoned action approach: Some issues, questions, and clarifications. *Prediction and change of health behavior: Applying the reasoned action approach*, 281-295.
- Francis, J., Eccles, M. P., Johnston, M., Walker, A. E., Grimshaw, J. M., Foy, R., ... & Bonetti, D. (2004). Constructing questionnaires based on the theory of planned behaviour: A manual for health services researchers.
- Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and emotion*, 27(3), 199-223.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, 26(4), 331-362.
- Griffin, R. W. (1991). Effects of work redesign on employee perceptions, attitudes, and behaviors: A long-term investigation. *Academy of management Journal*, 34(2), 425-435.
- Holman, D. (2013). Job types and job quality in Europe. *Human Relations*, 66(4), 475-502.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of applied psychology*, 92(5), 1332.
- Jalilvand, M. R., & Ebrahimabadi, F. (2011). The effects of demographic characteristics on employees' motivation to participate in the in-service training courses based on the

- modified expectancy theory. *Canadian Social Science*, 7(3), 150-158.
- Liu, D., Zhang, S., Wang, L., & Lee, T. W. (2011). The effects of autonomy and empowerment on employee turnover: Test of a multilevel model in teams. *Journal of Applied Psychology*, 96(6), 1305.
- Luchman, J. N., & González-Morales, M. G. (2013). Demands, control, and support: A meta-analytic review of work characteristics interrelationships. *Journal of occupational health psychology*, 18(1), 37.
- Lunenburg, F. C. (2011). Expectancy Theory of Motivation: Motivating by Altering Expectations. *International Journal of Management, Business, and Administration*, 15(1), 1-6.
- Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A Comparison of the Theory of Planned Behavior and the Theory of Reasoned Action. *Personality and Social Psychology Bulletin*, 18(1), 3–9.
- Malhotra, N. K. (2006). Questionnaire design and scale development. *The handbook of marketing research: Uses, misuses, and future advances*, 83-94.
- Maslow, A., & Lewis, K. J. (1987). Maslow's hierarchy of needs. Salenger Incorporated, 14, 987.
- Montano, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health behavior: Theory, research and practice*, 70(4), 231.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of applied psychology*, 91(6), 1321.
- Nebeker, D. M., & Mitchell, T. R. (1974). Leader behavior: An expectancy theory approach. *Organizational Behavior and Human Performance*, 11(3), 355-367.
- Nguyen, A. N., Taylor, J., & Bradley, S. (2003). Job autonomy and job satisfaction: new evidence
- Osterman, P., & Shulman, B. (2011). *Good Jobs America*. Russell Sage Foundation.
- Parker, S. K. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual review of psychology*, 65, 661-691.

- Parker, S. K., & Wall, T. D. (1998). *Job and work design: Organizing work to promote well-being and effectiveness* (Vol. 4). Sage Publications.
- Parker, S. K., Andrei, D. M., & Van den Broeck, A. (2019). Poor work design begets poor work design: Capacity and willingness antecedents of individual work design behavior. *Journal of Applied Psychology*.
- Parker, S. K., Van den Broeck, A., & Holman, D. (2017). Work design influences: A synthesis of multilevel factors that affect the design of jobs. *Academy of Management Annals*, 11(1), 267-308.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of consumer research*, 15(3), 325-343.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage publications.
- Steers, R. M., Mowday, R. T., & Shapiro, D. L. (2004). The future of work motivation theory. *Academy of Management review*, 29(3), 379-387.
- Van den Broeck, A., & Parker, S. K. (2017). Job and work design.
- Venkatesh, V., Morris, M. G., & Ackerman, P. L. (2000). A longitudinal field investigation of gender differences in individual technology adoption decision-making processes. *Organizational behavior and human decision processes*, 83(1), 33-60.
- Zhang, Y., & Shaw, J. D. (2012). Publishing in AMJ—Part 5: Crafting the methods and results.
- Yu, W., Jamasb, T., & Pollitt, M. (2009). Does weather explain cost and quality performance? An analysis of UK electricity distribution companies. *Energy Policy*, 37(11), 4177-4188.

Appendix A: English scale

STATEMENT	CODE	SCALE						
		Strongly disagree	Disagree	More or less disagree	Neither agree nor disagree	More or less agree	Agree	Strongly agree
1. I can control whether or not my subordinates are allowed to make work related decisions	EXPT_1	1	2	3	4	5	6	7
2. Whether or not my subordinates are allowed to make autonomous decisions at work is up to me	EXPT_2	1	2	3	4	5	6	7
3. I am able to provide jobs for my subordinates in which they have the freedom to make decisions	EXPT_3	1	2	3	4	5	6	7
4. Whether or not my subordinates are allowed to make decisions about their work is out of my control. (*)	EXPT_4	1	2	3	4	5	6	7
5. Subordinates who can make their own decisions at work tend to be engaged in their work.	INST_1	1	2	3	4	5	6	7
6. Subordinates tend to be satisfied with their jobs when they are provided the autonomy to make decisions about their own work.	INST_2	1	2	3	4	5	6	7
7. Having decision-making opportunities contributes towards subordinates' overall wellbeing at work.	INST_3	1	2	3	4	5	6	7
8. Providing decision making autonomy to subordinates contributes to their work motivation.	INST_4	1	2	3	4	5	6	7
9. Providing decision-making autonomy to subordinates leads to increased performance.	INST_5	1	2	3	4	5	6	7
10. Providing subordinates the freedom to make decisions at work can prevent them from leaving the company.	INST_7	1	2	3	4	5	6	7
11. Allowing subordinates to have a say regarding work-related decisions helps reduce their stress at work.	INST_8	1	2	3	4	5	6	7
12. When subordinates have the possibility to make decisions at work, they are less likely to suffer from exhaustion and burnout.	INST_9	1	2	3	4	5	6	7
13. If subordinates have the autonomy to make their own work-related decisions, they are less likely to call in sick.	INST_10	1	2	3	4	5	6	7
14. My subordinates' level of work engagement is very important to me.	VAL_1	1	2	3	4	5	6	7
15. It is important to me that my subordinates feel satisfied with their job.	VAL_2	1	2	3	4	5	6	7
16. The health and well-being of my subordinates are very important to me.	VAL_3	1	2	3	4	5	6	7
17. It is important to me that my subordinates feel motivated about their job.	VAL_4	1	2	3	4	5	6	7
18. Obtaining optimal performance from my subordinates is of key importance to me.	VAL_5	1	2	3	4	5	6	7
19. It is important to me that my subordinates do not leave the organization.	VAL_7	1	2	3	4	5	6	7
20. It is important to me that my subordinates do not experience excessive work-related stress.	VAL_8	1	2	3	4	5	6	7
21. Avoiding exhaustion and burn out among my subordinates is essential to me.	VAL_9	1	2	3	4	5	6	7
22. I attach a lot of importance to the level of absenteeism among my subordinates.	VAL_10	1	2	3	4	5	6	7
23. My work peers think it is important to provide subordinates with opportunities for decision-making.	SNORM_1	1	2	3	4	5	6	7
24. Other managers in my organization usually give their subordinates the freedom to make decisions about their own work.	SNORM_2	1	2	3	4	5	6	7
25. People who are important to me would approve of me if I allowed my subordinates to make their own decisions at work.	SNORM_3	1	2	3	4	5	6	7
26. I have rarely seen someone in my position providing their subordinates the autonomy to make work-related decisions. (*)	SNORM_4	1	2	3	4	5	6	7

(*): these items are negatively formulated and scoring will be reversed.

We would like to understand, if it were **totally up to you to choose**, to which degree would you like to provide autonomy to your subordinates?

As your subordinates' manager **you would like to**

STATEMENT	CODE	SCALE				
		Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. give them a chance to use their personal initiative or judgment in carrying out the work.	AUTINT_1	1	2	3	4	5
2. allow them to make a lot of decisions on their own.	AUTINT_2	1	2	3	4	5
3. provide them with significant autonomy to make decisions.	AUTINT_3	1	2	3	4	5

Appendix B: Dutch translation scale

STATEMENT	CODE	SCALE						
		Helemaal oneens	oneens	Eerder oneens	Noch eens, nog oneens	Eerder eens	Eens	Helemaal eens
1. Ik kan controleren of mijn ondergeschikten al dan niet zijn toegestaan om werk gerelateerde beslissingen te nemen.	EXPT_1	1	2	3	4	5	6	7
2. Of mijn ondergeschikten al dan niet zijn toegestaan om autonome beslissingen te nemen op het werk is aan mij overgelaten.	EXPT_2	1	2	3	4	5	6	7
3. Ik ben in staat om jobs te voorzien voor mijn ondergeschikten in dewelke ze de vrijheid hebben om beslissingen te nemen.	EXPT_3	1	2	3	4	5	6	7
4. Of mijn ondergeschikten al dan niet zijn toegestaan om beslissingen te nemen over hun werk is buiten mijn controle. (*)	EXPT_4	1	2	3	4	5	6	7
5. Ondergeschikten die hun eigen beslissingen kunnen nemen op het werk hebben de neiging om betrokkenheid te voelen bij hun werk.	INST_1	1	2	3	4	5	6	7
6. Ondergeschikten hebben de neiging om tevreden te zijn met hun job wanneer ze voorzien zijn van de autonomie om beslissingen te maken over hun eigen werk.	INST_2	1	2	3	4	5	6	7
7. Besluitvormingsmogelijkheden hebben draagt bij aan het algemeen welzijn van de ondergeschikten op het werk.	INST_3	1	2	3	4	5	6	7
8. Het verstrekken van besluitvormingsautonomie aan ondergeschikten draagt bij aan hun werkmotivatie.	INST_4	1	2	3	4	5	6	7
9. Het verstrekken van besluitvormingsautonomie aan ondergeschikten leidt tot verbeterde prestaties.	INST_5	1	2	3	4	5	6	7
10. Ondergeschikten voorzien van de vrijheid om beslissingen te nemen op het werk kan voorkomen dat ze de onderneming verlaten.	INST_7	1	2	3	4	5	6	7
11. Ondergeschikten toestaan om inspraak te hebben betreffende werkgerelateerde beslissingen helpt hun stress op het werk te verminderen.	INST_8	1	2	3	4	5	6	7
12. Wanneer ondergeschikten de mogelijkheid hebben om beslissingen te nemen op het werk, hebben ze minder kans om te lijden aan uitputting en burnout.	INST_9	1	2	3	4	5	6	7
13. Als ondergeschikten de autonomie hebben om hun eigen werkgerelateerde beslissingen te nemen, zullen ze minder geneigd zijn om zich ziek te melden.	INST_10	1	2	3	4	5	6	7
14. Het niveau van werk betrokkenheid van mijn ondergeschikten is heel belangrijk voor mij.	VAL_1	1	2	3	4	5	6	7
15. Het is belangrijk voor mij dat mijn ondergeschikten tevreden zijn met hun job.	VAL_2	1	2	3	4	5	6	7
16. De gezondheid en het welzijn van mijn ondergeschikten is heel belangrijk voor mij.	VAL_3	1	2	3	4	5	6	7
17. Het is belangrijk voor mij dat mijn ondergeschikten zich gemotiveerd voelen voor hun job.	VAL_4	1	2	3	4	5	6	7
18. Het verkrijgen van optimale prestaties van mijn ondergeschikten is van cruciaal belang voor mij.	VAL_5	1	2	3	4	5	6	7
19. Het is belangrijk voor mij dat mijn ondergeschikten de onderneming niet verlaten.	VAL_7	1	2	3	4	5	6	7
20. Het is belangrijk voor mij dat mijn ondergeschikten geen overmatige werkgerelateerde stress ervaren.	VAL_8	1	2	3	4	5	6	7
21. Uitputting en burnout vermijden onder mijn ondergeschikten is essentieel voor mij.	VAL_9	1	2	3	4	5	6	7
22. Ik hecht veel belang aan het verzuimpercentage onder mijn ondergeschikten.	VAL_10	1	2	3	4	5	6	7
23. Mijn collega's denken dat het belangrijk is om ondergeschikten te voorzien van oportuniteten om zelf beslissingen te nemen.	SNORM_1	1	2	3	4	5	6	7
24. Andere managers in mijn onderneming geven hun ondergeschikten meestal de vrijheid om beslissingen te nemen over hun eigen werk.	SNORM_2	1	2	3	4	5	6	7
25. Mensen die belangrijk zijn voor mij zouden goedkeuren dat ik mijn ondergeschikten toelaat om hun eigen beslissingen te nemen op het werk.	SNORM_3	1	2	3	4	5	6	7
26. Ik heb zelden meegemaakt dat iemand in mijn positie zijn ondergeschikten voorziet van de autonomie om werkgerelateerde beslissingen te nemen. (*)	SNORM_4	1	2	3	4	5	6	7

(*): deze items zijn negatief verwoord en de score zal worden omgezet.

Als het helemaal aan u was om te kiezen, in welke mate zou u dan uw werknemers zelf beslissingen laten maken?

Als manager van uw ondergeschikten in welke mate zou u het volgende willen doen?

STATEMENT	CODE	SCALE				
		Helemaal oneens	Eerder oneens	Noch eens, noch oneens	Eerder eens	Helemaal eens
1. hen de kans geven om hun persoonlijk initiatief of oordeel te gebruiken bij de uitvoering van het werk.	AUTINT_1	1	2	3	4	5
2. hen de mogelijkheid bieden om veel zelf te beslissen.	AUTINT_2	1	2	3	4	5
3. hen veel vrijheid geven om beslissingen te nemen.	AUTINT_3	1	2	3	4	5

Appendix C: Invitations to participate in the survey

Invitation 1:

Dear,

My name is Amandine Van Dooren and I am a student in the Master of Business Administration (Leadership and Change Management) at the Katholieke Universiteit Leuven, Belgium.

As part of my master thesis, I am conducting a questionnaire under the supervision of the Work and Organisation research group of KU Leuven. I would be very grateful if you could help us with this research by completing our questionnaire. **This would take approximately 10 to 15 minutes of your time and the data will be used for scientific research only.**

By filling in the questionnaire, you will help us gain a deeper understanding of how supervisors decide what their subordinates are allowed to do as part of their job. Hence, your cooperation in this study is very important.

If you would like to participate in this research (or if you know someone who would), please send me your e-mail such that I can provide you with the invitation link to our questionnaire. Furthermore, do not hesitate to contact me if you have any questions or would like further information.

Looking forward to hearing from you!

Sincerely,

Amandine Van Dooren

Beste,

Mijn naam is Amandine Van Dooren en ik ben een masterstudent in Business Administration - Leadership and Change Management aan de Katholieke Universiteit Leuven.

In het kader van mijn thesis, verricht ik een onderzoek in samenwerking met de Werk en Organisatie Onderzoeksgroep van de KU Leuven. Ik zou u enorm dankbaar zijn als u ons kan helpen met dit onderzoek door onze vragenlijst te beantwoorden. Dit zal ongeveer 10 tot 15 minuten van u tijd in beslag nemen en de data zal enkel voor wetenschappelijk onderzoek gebruikt worden.

Door onze vragenlijst in te vullen, helpt u ons een dieper inzicht te verwerven in hoe managers beslissen wat hun ondergeschikten zijn toegestaan om te doen als deel van hun job. Vandaar is uw medewerking aan deze studie heel belangrijk.

Als u geïnteresseerd bent om aan deze studie deel te nemen (of als u iemand kent die zou willen deelnemen) mag u mij uw email adres meedelen zodanig dat ik u de uitnodiging link voor de survey kan doorsturen. Aarzel bovendien niet om mij te contacteren indien u nog vragen heeft.

Alvast bedankt!

MVG,

Amandine Van Dooren

Invitation 2 : Qualtrics e-mail individuals

Dutch version is available below.

Dear Sir/Madam,

We would like to thank you for agreeing to participate in this survey conducted by Amandine Van Dooren and Olga Sjepelova, under the supervision of Doctoral researcher Pallavi Sarmah and Prof. Dr. Karin Proost of the Faculty of Economics and Business at the KU Leuven, Belgium.

As has already been mentioned to you, the aim of our study is to gain a deeper understanding of how managers decide what their subordinates can do as part of their jobs. This survey will take you approximately 15 minutes to complete. If necessary, it also allows you to resume working on your partially filled survey at a later time.

Thank you for your kind cooperation!

Kind Regards,

Amandine Van Dooren

Olga Sjepelova

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Follow this link to the Survey:

[\\${I://SurveyLink?d=Take the Survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${I://SurveyURL}](#)

Follow the link to opt-out of future emails:

[\\${I://OptOutLink?d=Click here to unsubscribe}](#)

Geachte Heer/Mevrouw,

We zouden u graag nog eens bedanken om in te stemmen met de deelname aan dit survey-onderzoek uitgevoerd door Amandine Van Dooren en Olga Sjepelava, onder toezicht van Doctoraal onderzoeker Pallavi Sarmah en Prof. Dr. Karin Proost van de Faculteit Economie en Bedrijfswetenschappen aan de KU Leuven, België.

Zoals eerder vermeld is het doel van deze studie om een beter inzicht te krijgen in hoe managers beslissen wat hun ondergeschikten kunnen doen als onderdeel van hun werk. Het invullen van de enquête duurt ongeveer 15 minuten. Indien nodig kunt u ook op een later tijdstip verder werken aan u gedeeltelijk ingevulde enquête (op hetzelfde toestel).

Hieronder vindt u de link om deel te nemen aan ons onderzoek.

Bedankt voor uw medewerking!

Met vriendelijke groeten,

Amandine Van Dooren

Olga Sjepelava

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Klik op de volgende link om de Survey te starten:

[\\${I://SurveyLink?d=Take the Survey}](#)

Of kopieer en plak de volgende URL in uw internet browser:

[\\${I://SurveyURL}](#)

Via deze link geeft u aan om dit soort mail niet meer te ontvangen:

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Invitation 3: Qualtrics e-mail companies

Dutch version is available below.

Dear Sir/Madam,

We would like to thank you for agreeing to participate to this survey conducted by Amandine Van Dooren and Olga Sjepelova, under the supervision of Doctoral researcher Pallavi Sarmah and Prof. Dr. Karin Proost of the Faculty of Economics and Business at the KU Leuven, Belgium.

As has already been mentioned to you, the aim of our study is to gain a deeper understanding of how managers decide what their subordinates can do as part of their jobs. This survey will take you approximately 15 minutes to complete. If necessary, it also allows you to resume working on your partially filled survey at a later time.

You can find the link to participate in the research below. This link was made for your organisation in particular, you can forward it to other managers within the organisation who would also be willing to participate in this study.

Thank you for your kind cooperation!

Kind Regards,

Amandine Van Dooren

Olga Sjepelova

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Follow this link to the Survey:

[\\${I://SurveyLink?d=Take the Survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${I://SurveyURL}](#)

Follow the link to opt out of future emails:

[\\${I://OptOutLink?d=Click here to unsubscribe}](#)

Geachte Heer/Mevrouw,

We zouden u graag nog eens bedanken om in te stemmen met de deelname aan dit survey-onderzoek uitgevoerd door Amandine Van Dooren en Olga Sjepelova, onder toezicht van Doctoraal onderzoeker Pallavi Sarmah en Prof. Dr. Karin Proost van de Faculteit Economie en Bedrijfswetenschappen aan de KU Leuven, België.

Zoals eerder vermeld is het doel van deze studie om een beter inzicht te krijgen in hoe managers beslissen wat hun ondergeschikten kunnen doen als onderdeel van hun werk. Het invullen van de

enquête duurt ongeveer 10 minuten. Indien nodig kunt u ook op een later tijdstip verder werken aan u gedeeltelijk ingevulde enquête (op hetzelfde toestel).

Hieronder vindt u de link om deel te nemen aan ons onderzoek. Deze link werd gemaakt voor uw onderneming, u kan het delen met andere managers binnen de onderneming die ook aan deze studie zouden willen deelnemen.

Bedankt voor uw medewerking!

Met vriendelijke groeten,

Amandine Van Dooren

Olga Sjepelava

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Klik op de volgende link om de Survey te starten:

[\\${I://SurveyLink?d=Take the Survey}](#)

Of kopieer en plak de volgende URL in uw internet browser:

[\\${I://SurveyURL}](#)

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Appendix D: Reminders

Reminder 1:

Dear Sir/Madam,

You were recently invited to participate in a survey research conducted by Amandine Van Dooren and Olga Sjepelova, under the supervision of Doctoral researcher Pallavi Sarmah and Prof. Dr. Karin Proost of the Faculty of Economics and Business at the KU Leuven, Belgium. We noticed that you have not yet responded. Therefore, we kindly ask that you spend just a few minutes filling out the survey.

Your participation will help us gain a deeper understanding of how managers decide what their subordinates can do as part of their jobs. **It should take approximately 15 minutes to complete this survey and data will be used for scientific research only.** If necessary, it also allows you to resume working on your partially filled survey at a later time (on the same device).

You can find the link to participate in the research below.

Thank you for your kind cooperation!

Kind Regards,

Amandine Van Dooren

Olga Sjepelova

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Follow this link to the Survey:

[\\${l://SurveyLink?d=Take the Survey}](#)

Or copy and paste the URL below into your internet browser:

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Reminder 2:

Dutch version is available below.

Dear Sir/Madam,

You were recently invited to participate in a survey research conducted by Amandine Van Dooren and Olga Sjepelova, under the supervision of Doctoral researcher Pallavi Sarmah and Prof. Dr. Karin Proost of the Faculty of Economics and Business at the KU Leuven, Belgium.

We would like to kindly remind you that you have not yet responded to the survey. As our deadline is approaching, we would really appreciate it if you could spend just a few minutes filling it out for us. Given the unprecedented and difficult times we are in, it is really hard to find respondents. Therefore, every answer matters!

Your participation will help us gain a deeper understanding of how managers decide what their subordinates can do as part of their jobs. **It should take approximately 10 minutes to complete this survey and data will be used for scientific research only.** You can find the link to participate in the research below.

Thank you for your kind cooperation and stay safe!

Kind Regards,

Amandine Van Dooren

Olga Sjepelova

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Follow this link to the Survey:

[\\${1://SurveyLink?d=Take the Survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${1://SurveyURL}](#)

Follow the link to opt-out of future emails:

[\\${1://OptOutLink?d=Click here to unsubscribe}](#)

Geachte Heer/Mevrouw,

U werd onlangs uitgenodigd om deel te nemen aan een survey-onderzoek uitgevoerd door Amandine Van Dooren en Olga Sjepelova, onder toezicht van Doctoraal onderzoeker Pallavi Sarmah en Prof. Dr. Karin Proost van de Faculteit Economie en Bedrijfswetenschappen aan de KU Leuven, België.

We willen u er vriendelijk aan herinneren dat u de survey nog niet heeft ingevuld. Aangezien onze deadline nadert zouden we het op prijs stellen moest u even de tijd te nemen om deze te beantwoorden. In de moeilijke periode die we nu meemaken is het zeer ingewikkeld om deelnemers te vinden, daarom doet elk antwoord er toe!

Uw deelname helpt ons om een beter inzicht te krijgen in hoe managers beslissen wat hun ondergeschikten kunnen doen als onderdeel van hun werk. **Het invullen van de enquête duurt ongeveer 10 minuten en de**

data wordt enkel voor wetenschappelijk onderzoek gebruikt. Hieronder vindt u de link om deel te nemen aan ons onderzoek.

Bedankt voor uw medewerking en blijf veilig!

Met vriendelijke groeten,

Amandine Van Dooren

Olga Sjepelava

Drs. Pallavi Sarmah

Prof. Dr. Karin Proost

Klik op de volgende link om de Survey te starten:

[\\${1://SurveyLink?d=Take the Survey}](#)

Of kopieer en plak de volgende URL in uw internet browser:

[\\${1://SurveyURL}](#)

Via deze link geeft u aan om dit soort mail niet meer te ontvangen:

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