

Running head: SATISFACTION AND HAPPINESS AT WORK

The Relation Between Employee Satisfaction and Happiness at Work and The Moderating
Roles of Work Pressure and Intrinsic Motivation

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Executive Summary

Introduction

Happiness at work is a prominent topic in organisations these days. Awareness of the benefits of happy employees make this a popular topic for organisational change trajectories. Research shows that happy employees are more productive, perform better, take less sick leaves and stay longer with their organisation. Therefore, a Dutch consultancy firm was intrigued to focus on happiness at work as the topic of this investigation.

The study aims to investigate the relation between happiness at work and employee satisfaction. Additionally, the influence of work pressure and intrinsic motivation on this relationship was explored. The goal being, to gather information on how happiness at work can be optimized. It was expected that an increase in work pressure would weaken the relation between employee satisfaction and happiness at work, and that an increase in intrinsic motivation would strengthen the relation between employee satisfaction and happiness at work.

Method and Results

The study was conducted for Meglio!, a Dutch consultancy firm. The data was gathered by two of their client firms. In total 92 Dutch employees participated in the study, which was conducted by means of a digital questionnaire. The questionnaire was composed of several shorter questionnaires about happiness at work, employee satisfaction, work pressure and intrinsic motivation. The questionnaire was distributed via an email, containing information about the study and the link to the questionnaire.

The data was analysed using a hierarchical regression analysis. Results showed that employee satisfaction is strongly related to happiness at work, indicating satisfied employees are happier. A moderating effect of work pressure and intrinsic motivation on this relation was not found. However, intrinsic motivation was strongly relation to happiness at work,

meaning that intrinsically motivated employees are happier.

Discussion and Conclusion

Based on the results of this investigation a few recommendations can be made to Meglio! to optimize happiness at work in their client firms. The findings suggest that employee satisfaction and intrinsic motivation both associate with happiness at work. Recommendations entail to increase satisfaction and intrinsic motivation of employees to stimulate happiness at work. Employee satisfaction can be increased by involving employees in organisational change processes, asking for their evaluation of the implemented change multiple times over a period of one year. Meglio! should advise their client firms to incorporate the work evaluations of their employees in further implementation of a change, or restructuring it according to these evaluations. Ideally, this will result in more positive evaluations when their employees' voice is incorporated in organisational developments too.

Intrinsic motivation can be increased by involving the employees in the change process by active participation, where they collaborate with an organisational change consultant from Meglio!. Involving employees in a change intervention, giving them responsibility, hands on experience about their role, and a voice in organisational decision-making processes, fulfils the basic needs of relatedness, competence and autonomy, which are related to an increase in intrinsic motivation. With these types of interventions, happiness at work can be stimulated, which is something organisations should cherish for well-being of their employees and optimal functioning of the organisation.

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Abstract

Positive emotions, and specifically happiness, are a prominent topic in organisations these days. Employees want to feel good and in control of their work. Organisational management wants to improve job performance, increase productivity, and decrease sick-leaves and turnover rates. All of these outcomes have been linked to happy employees, so both employees and organisations can benefit from happiness at work. Happiness at work has been linked to employee satisfaction, but also other work-related factor might influence happiness and the relation between happiness at work and employee satisfaction. This study investigates the relation between employee satisfaction and happiness at work, and whether this relation is moderated by work pressure and intrinsic motivation. A cross-sectional study was conducted, and data was gathered using an online self-report questionnaire. A hierarchical regression analysis was performed among 92 employees (50 males and 42 females; $M_{\text{age}} = 43.49$, $SD = 12.58$), of client firms of a Dutch consultancy firm. The results confirm that employee satisfaction is related to happiness at work. Neither work pressure or intrinsic motivation moderates the relation between employee satisfaction and happiness at work. However, intrinsic motivation relates to happiness at work. These findings highlight that, in order to optimize happiness at work, factors as employee satisfaction and intrinsic motivation are important. In addition to happiness at work, organisations should consider ways to stimulate these factors too.

Keywords: happiness at work, employee satisfaction, work pressure, intrinsic motivation

The Relation Between Employee Satisfaction and Happiness at Work and The Moderating Roles of Work Pressure and Intrinsic Motivation

Happiness at work seems to be an important topic in organisations these days (Fisher, 2010; Pryce-Jones, 2010). Individuals are familiar with the pleasant feeling of *happiness* outside work, but the prevalence of wanting to be being *happy at work* is increasing. Happiness can be defined as “a state of the high level of satisfaction with life coupled with high level of positive affect and low level of negative affect” (p. 2) (Singh & Aggarwal, 2017). Where affect encompasses the momentary nature of emotions, like happiness (Fisher, 2000). Following this, happiness at work could be described as a high level of satisfaction towards work, coupled with a high level of positive affect and a low level of negative affect. Being happy at work has been associated with greater career success, higher earnings, better job performance and an increase in helping behaviour among colleagues (Boehm & Lyubomirsky, 2008). Additionally, happy employees are found to be twice as productive, more energized, take less sick-leaves, and stay longer with the organisation compared to unhappy employees (Pryce-Jones & Lindsay, 2014).

A Dutch consultancy firm was intrigued by this phenomenon and wants to explore the topic in order to assist their clients with optimizing happiness at work. The current findings show to be very profitable for an organisation as a whole, and for the well-being of its employees (Singh & Aggarwal, 2017). Despite its increasing prevalence, organisations like this consultancy firm, are unaware of how they can foster happiness at work and use it to cultivate the above mentioned benefits it brings. This study investigates happiness at work in relation to other work-related constructs, which are expected to stimulate happiness at the workplace.

To be able to determine the happiness of employees, and how this can be optimized, some constructs that are associated with happiness have to be identified first. Fisher (2000)

found that mood and emotions are strongly related to employee satisfaction. Satisfaction can be defined as “an individual’s positive attitude towards their job” (p. 4) (Singh & Aggarwal, 2017; Eagly & Chaiken, 1993). Where attitude can be explained by “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (p. 1) (Eagly & Chaiken, 1993). Satisfaction provides information on job descriptions, evaluations of job features, and provides insight on how employees rate their job, both emotionally and cognitively (Brief, 1998). Intrinsic aspects of satisfaction are whether the job provides steady employment, or if the employee experiences freedom to use their own judgement. While extrinsic aspects of satisfaction are related to salary, or the possibilities for advancement. Intrinsic and extrinsic aspects together form an employee’s attitude towards work (Weiss, Dawis, England, & Lofquist, 1967).

Employee satisfaction and happiness are predicted by average levels of positive mood while working, i.e. happy and pleasant feelings, in conjunction with overall satisfaction (Weiss, Nicholas, & Daus, 1999). Moreover, for employees to be happy at work, they should have a positive attitude towards their work before they can experience positive emotions about the job. This indicates that employee satisfaction is an important precursor for the experience of happiness at work (Singh & Aggarwal, 2017). Thereby not only confirming the relation between the two constructs, but also indicating its causal inference. It is therefore meaningful to investigate whether this relation, between employee satisfaction and happiness at work, is also found in the population that is investigated for this consultancy firm. Results from this study can be useful to other consultancy firms.

The Affective Events Theory (AET) supports that subjective evaluations of employees, for example about interacting with co-workers, working in teams, and their supervisors, reflect on their satisfaction and subsequently on their happiness at work (Weiss & Cropanzano, 1996; Singh & Aggarwal, 2017). The AET elaborates on the distinction between

cognitive and affective evaluations about work. The theory illustrates that mood and emotions form an affective evaluation of the job. This reflects on whether employees are happy or not. Cognitive evaluations about job attributes reflect on employees judgements and attitudes towards work. This is an employee's satisfaction (Weiss & Cropanzano, 1996).

In exploring how we can optimize happiness at work, this study also evaluates work experiences that relate to employees' happiness. Employees' work experiences will include information on their emotions and moods, in conjunction with information on their attitude towards work. The AET emphasizes that work-related events are often proximal causes of how an employee develops an attitude and mood about their job (Weiss & Cropanzano, 1996). Therefore, when investigating employee satisfaction and happiness at work in this study, work-related factors that can influence the relation between employee satisfaction and happiness at work have to be considered.

The first factor that will be investigated is work pressure. Work pressure has been increasing over the past decennia, and heightened work pressure has been linked to decreased satisfaction at work (Lopes, Lagoa, & Calapes, 2014; Green, 2006). The Job Demands – Resources Model states that work demands are influential to someone's work evaluations (Bailey, Madden, Alfes, & Fletcher, 2017; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Work pressure is an important, and much investigated, work demand (Liu & Lo, 2018), and can be described as a too high amount of work to properly finish within a certain time frame (Pejtersen, Kristensen, Borg, & Bjorner, 2010). Experienced work pressure provides information on how challenging a job is for someone, but also if they feel competent and challenged while working (Lopes et al., 2014). Since work pressure has been linked to satisfaction, it raises the question whether work pressure is related to happiness at work, as well as, whether it moderates the relation between employee satisfaction and happiness at work (Fisher, 2000).

According to the Job Demand-Control-Support Model (Karasek & Theorell, 1990), work pressure is not necessarily detrimental, however if employees experience too much pressure and too little control over their work task, then it will induce negative consequences for work performance and well-being. Seligman (2002) found that challenged, experiencing a certain amount of pressure, and getting possibilities for advancement is important to be happy at work. Fisher (2010) explained this as being able to thrive at work, and a prominent factor that might influence happiness at work. This might imply that there is a relation between work pressure and happiness at work, and leaves the question whether work pressure could moderate the relation between employee satisfaction and happiness at work.

The second factor to investigate, that might influence the relation between employee satisfaction and happiness at work, is the employees' intrinsic motivation. Intrinsic motivation has been investigated parallel to employee satisfaction or happiness at work as a predictor variable, and there are suggestions on how these constructs relate, however the exact relationship between these variables is not yet established. Therefore, investigating intrinsic motivation might provide interesting findings. Intrinsic motivation is the highest form of motivation and refers to engaging in an activity freely, being sustained by the experience of interest and enjoyment (Deci & Ryan, 1985). The construct of intrinsic motivation has been associated with voluntarily spending time on a task after it is clear that there is no extrinsic reason to persist (Deci & Ryan, 1985). Some extrinsic motivational aspects of jobs are pay, hours of work, health, and safety. While more intrinsic motivational factors of work are autonomy (control) and work intensity (pressure) (Lopes et al., 2014).

Additionally, intrinsic motivation relies on our perceptions of self-determination. This is explained by the Self-Determination Theory (SDT) (Deci & Ryan, 1985). According to the SDT, autonomy is the factor that differentiates the different levels of extrinsic motivation with being fully intrinsically motivated (Deci & Ryan, 1985). Autonomy can be described as the

need to act voluntarily and experiencing the freedom to choose how to act (Deci & Ryan, 2000). Autonomy at work is important for employee well-being, for optimal functioning, as well as for experiencing positive emotions, like happiness (Karasek & Theorell, 1990; Deci & Ryan, 2000; Seligman, 2002). This research suggests that autonomy stimulates factors that are also associated with the experience of happiness at work, like better job performance, higher productivity, and being more energized (Boehm & Lyubomirsky, 2008; Pryce-Jones & Lindsay, 2014). Therefore, the experience of autonomy, and thus being intrinsically motivated, is valuable to investigate in association with the relation between employee satisfaction and happiness at work.

The Present Study

Considering these findings, and consequences of the downsides to not having happy employees, promoting happiness at work should be incorporated by every organisation (Pryce-Jones, 2011). If organisations are facing productivity losses, lack of sales successes, sick leaves and high turnover rates. Happiness at work can provide a solution by generating more productive, better performing, more energized, and more successful happy employees (Boehm & Lyubomirsky, 2008; Pryce-Jones, 2011). The prevalence of optimizing happiness at work, is therefore of great value. Leading to the research question of this study: How are employee satisfaction and happiness at work related, and is this relation moderated by work pressure and intrinsic motivation?

The established relationship between employee satisfaction and happiness at work (Fisher, 2000) provides a basis for this by linking two constructs to tackle for optimizing happiness at work. Confirming this relationship among their clients, was important for the consultancy firm. Therefore, it is expected that:

Hypothesis 1: Employee satisfaction is positively related to employees' experience of happiness at work.

In addition, work pressure and intrinsic motivation have been linked to either, or both, employee satisfaction and happiness at work (Green, 2006). However, associations of these other work-related factors in a moderating role have not yet been explored. Even though the body of research on the relation between employee satisfaction and happiness at work is big already, there is more knowledge on how factors as work pressure and intrinsic motivation can be enhanced. Investigating work pressure and intrinsic motivation, as additional factors that could moderate the relation between employee satisfaction and happiness at work, could therefore provide new insights on this relation and how to optimize happiness at work. The expectation for the moderating effects is as follows:

Hypothesis 2: The relation between employee satisfaction and happiness at work weakens when work pressure increases.

Hypothesis 3: The relation between employee satisfaction and happiness at work strengthens when intrinsic motivation increases.

The hypotheses are visually presented in Figure 1.

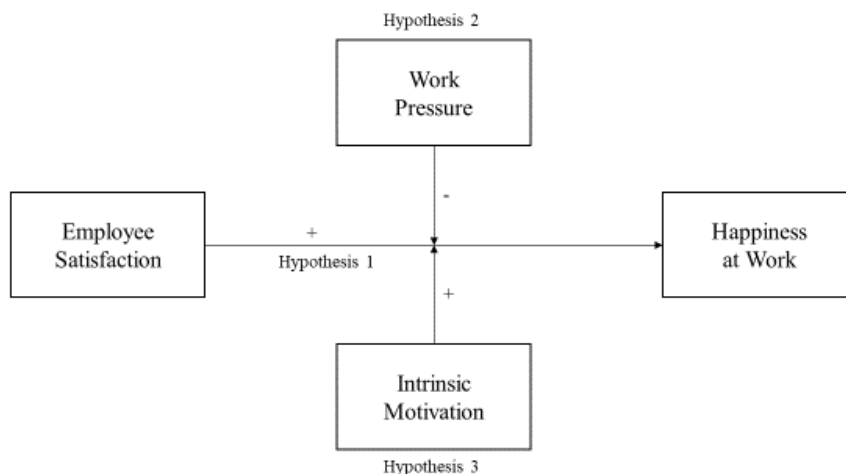


Figure 1. Model of hypothesis 1, 2, and 3.

To investigate these hypotheses an online questionnaire was distributed among employees of clients of the consultancy firm about their work experiences.

Method

Participants

To calculate how many participants were needed for this investigation to make the probability of finding an effect, assuming there is an effect, as high as possible, the program G*Power 3.1 was used. The sample size (n) for this study was calculated using a a-priori power analysis, with an effect size (f^2) of .15, α error probability of .05, and a power of $P(1 - \beta \text{ err prob}) = .80$. G*Power calculated the sample should be at least $n = 92$ in order to assure this power (Faul, Erdfelder, Buchner, & Lang, 2009).

This study involved the employees of two client firms of Meglio!. In total 92 employees completed the questionnaire (50 males and 42 females; $M_{\text{age}} = 43.49$, $SD = 12.58$), therefore assuring the power calculated a-priori to the study. Employees had been working at their current firm for an average of 7.66 years ($SD = 7.18$). Most participants reported MBO as previous education (45), among the other employees 29 reported HBO, one reported a WO Bachelor, six reported a WO Master, one reported a PhD, and 10 employee reported to have finished another form of previous education. The Ethics Committee of the Radboud University Nijmegen provided ethical approval for the study. All participants participated voluntarily.

Procedure

A digital questionnaire was be set up in Qualtrics (Qualtrics, 2014). With Qualtrics a link to the survey was created and thereafter distributed among the employees. An email was set up with information on the study, information about informed consent, and the link to the questionnaire. Permission to conduct the study with two client firms was provided by the director of both firms. Then the email was send to the HR department or the director of the client firms, who forwarded the email to the right departments and employees. This approach covered necessary precautions for the Dutch GDPR rules. Participants were not restricted to a location while answering the questionnaire, only internet connection was requirement because

of the digital nature of the questionnaire. All employees understood a sufficient level of Dutch in order for them to understand and fill-out the Dutch questionnaires. The questionnaire was filled out once.

The questionnaire started with an informed consent, which is set up with a forced-choice answer. This ensured that participants could not continue without giving their consent first. The survey continued with questions about demographic characteristics (date of birth and gender), situational factors (how long they have been employed at the firm and previous education level), employee satisfaction, happiness at work, experienced work pressure and their intrinsic motivation related to their current employment. To guarantee anonymity the date of birth and gender formed the participants' 'ID' within the study. Based on this the analyses were performed, no further personal information was asked. The questionnaire took about 15 minutes to complete. The participants were asked to fill out the questionnaire thinking about their current working experiences.

Materials

The online questionnaire started with the informed consent, which was followed by demographics (date of birth and gender (1 = male, 2 = female), what B.V. they work at, how long they have been employed at this firm (in years) and what their highest completed education is (1 = MBO, 2 = HBO, 3 = WO Bachelor, 4 = WO Master, 5 = PhD, 6 = Other).

Happiness at work was measured with the Shortened Happiness at Work Scale, $\alpha = .92$ (SHAW; Salas-Vallina & Alegre, 2018). The questionnaire includes nine items, divided among three subscales. Engagement, three items (e.g. "*I am enthusiastic about my job*"), $\alpha = .96$; job satisfaction, three items (e.g. "*How satisfied are you with the pay you receive for your job?*"), $\alpha = .90$; and affective organisational commitment, three items (e.g. "*I feel emotionally attached' to this organisation*"), $\alpha = .93$. All items were rated on a 5-point Likert scale of 1-5; 1 = totally disagree, and 5 = totally agree (Salas-Vallina & Alegre, 2018; Likert, 1931). The

employees rated the different statements along: *“Indicate to what extent the following statements apply to you during your work...”*. The complete SHAW scale, combining scores of the three subscales, measures the construct happiness at work (Salas-Vallina & Alegre, 2018).

Employee satisfaction was measured with the Minnesota Job Satisfaction Questionnaire – short form, $\alpha = .87$ (MSQ-S; Weiss et al, 1967). The questionnaire includes 16 items, divided among two subscales. Intrinsic job satisfaction (IJS), 10 items (e.g. *“The freedom to use my own judgement”*), $\alpha = .86$; and extrinsic job satisfaction (EJS), six items (e.g. *“The way company policies are put into practice”*), $\alpha = .80$. The scale was rated on a 5-point Likert scale of 1-5; 1 = not satisfied, and 5 = extremely satisfied (Weiss et al, 1967; Likert, 1931). The employees rated the different statements along: *“If you think about your current job, how satisfied are you with...”*. The complete MSQ-S scale, combining scores of the two subscales, measures the construct employee satisfaction, where each item loads equally (Weiss et al., 1967).

Work pressure was measured using the work pressure subscale of the VBBA, $\alpha = .74$ (Van Veldhoven & Meijman, 1994). The subscale includes 11 items (e.g. *“Do you work under time pressure?”*). The employees rated the different statements along: *“If you think about your current job, how often...”*. The scale was rated on a 4-point Likert scale of 1-4; 1 = never, and 4 = always (Van Veldhoven & Meijman, 1994; Likert, 1931).

Intrinsic motivation was measured using the intrinsic motivation subscale of the Motivation At Work Scale, $\alpha = .89$ (MAWS; Gagné et al., 2010). The subscale includes three items (e.g. *“Because I enjoy this work very much”*). Other subscale of the MAWS are not used, because they represent other (extrinsic) types of motivation (Gagné et al., 2010). The employees rated the different statements along: *“To what extent do the following statements correspond to the reasons why you currently have this specific job?”*. The scale was rated on

a 7-point Likert scale of 1-7; 1 = not at all, and 7 = exactly (Gagné et al., 2010; Likert, 1931).

All materials were translated from English to Dutch, using a back-to-back translation. The original scales were translated to Dutch by the researcher and the back translation was executed by Jessica van Dijk, a fellow master student. According to Brislin (1970), both the 'forward' and 'back' translators should master a certain level of both languages, English and Dutch in this study, for a sufficient back-to-back translation. Since both, the researcher and Jessica, master Dutch as their mother tongue and are native English speakers, this is sufficient for a valid back-to-back translation (Brislin, 1970). An overview of the back-to-back translation procedure can be found in the appendix (appendix 1).

Design and Analysis

Design

The study has a cross-sectional design with happiness at work as the dependent variable and employee satisfaction as the independent variable. Where the independent variable was a between-subjects factor. Moderators in this study were work pressure and intrinsic motivation, and control variables were age, gender, length of employment and education. Age was included as control variable because experienced happiness at work seems to differ for people with a different age (Mroczek & Kolarz, 1998). Gender was included because women seems to express happiness at work to a different extent than men do (Sloan, 2012). By including employment length and education as extra control variables, results can be interpreted independent of how long an employee works at their organisation and what education they have completed.

Preliminary Analysis

The responses of all participants were exported from Qualtrics to IBM Statistical Package for Social Sciences (SPSS) 25 (Field, 2017). In SPSS the analyses were performed. First, the raw dataset was cleaned. Incomplete responses were deleted. Four Cronbach's

Alpha's reliability analysis were performed for the measurement scales of the variables happiness at work, employee satisfaction, work pressure, and intrinsic motivation. Then mean scores were calculated per participant for the same four variables, and mean values were computed as a new variable for these (sub)scales. Following this the data set was checked for outliers. Then the statistical assumptions were tested on the clean data set.

Descriptive statistics (M and SD) were calculated, and a bivariate correlation analyses was performed to calculate the coherence between all variables in the study, using the Pearson (r) correlation (table 1). A descriptive summary of the data was derived from this, and effect sizes were calculated manually for the significant relations following the formula for Cohen's

$$f^2 : f^2 = \frac{R^2}{1-R^2} \text{ (Cohen, 1992).}$$

Before conducting the main analyses, two interaction variables were computed for 'employee satisfaction X work pressure' and 'employee satisfaction X intrinsic motivation'. This started with creating centred values for the three separate variables employee satisfaction, work pressure and intrinsic motivation. Centred values were used for computation of the interaction variables, because centred values control for multicollinearity between the independent and moderator variables and reassure a better and more pure interpretation of the data in this study (Cohen, Cohen, West, & Aiken, 2003; Aiken, West, Sechrest, & Reno, 1990). With these centred values two new variables were computed by multiplying the centred values of employee satisfaction with the centred values of work pressure (employee satisfaction X work pressure), and multiplying the centred values of employee satisfaction with the centred values of intrinsic motivation (employee satisfaction X intrinsic motivation).

Main Analysis

A hierarchical regression analysis was performed in SPSS. The different hierarchical models were tested for the dependent variable happiness at work. Other variables were

entered in the analysis in the following order; in model 1 the control variables were entered. In model 2 employee satisfaction was entered, being the independent variable in this study. In model 3 both moderators, work pressure and intrinsic motivation, were entered. Lastly, in model 4 the interaction variables, ‘employee satisfaction X work pressure’ and ‘employee satisfaction X intrinsic motivation’, were entered. When testing the hypotheses, the models explained above, will be used as a reference. An overview of the hierarchical regression analysis can be found in table 2.

In reporting the evidence for the relations in the main analyses beta (β) coefficient scores are used. Since beta values are standardized coefficients, those values allowed a comparison between the outcomes of the different parts of the questionnaire, which were measured on either 4-point, 5-point or 7-point Likert scales (Field, 2017; Tabachnick & Fidell, 2013).

The effect sizes for the consecutive models in this hierarchical multiple regression analysis were reported using Cohen’s f^2 (Cohen, 1992).

Results

Preliminary Analyses

The final data set consists of 92 complete responses. One outlier was identified for the dependent variable ‘happiness at work’, by a standardized value which was higher than 3.29, therefore being an outlier (Field, 2009). Since the sample was just large enough to reach a power of $P = .80$, with $n = 92$, it was decided not to delete the outlier and thereby not damage the power of the study. In order to use the values of the outlier its value was changed to the value of 3.28, just within the boundaries of 3.29 which, according to Field (2009), controls for the outlier and enables the use of the scores of this participant.

The Cronbach’s Alpha reliability analysis for all measuring scales (SHAW, MSQ-S, Work Pressure subscale of the VBBA, and Intrinsic Motivation subscale of the MAWS) all

indicated $\alpha > .80$. The rules of thumb for interpreting Cronbach's Alpha of George and Mallery (2003) indicate, an α score $> .70$ is acceptable and an $\alpha > .80$ is good. This means reliability of all scales in this study were high enough (see Table 1; Nunnally & Bernstein, 1994; Gliem & Gliem, 2003).

All the assumptions, of normality, independence, homoscedasticity, and linearity, are met for the data of this study (Field, 2009; Tabachnick & Fidell, 2013). Also the sample size allows unbiased and accurate examination of the assumptions (Maas & Hox, 2006). The normality assumption for happiness at work was checked with a visual inspection of a histogram (see figure 2 in appendix 2; Field, 2009; Tabachnick & Fidell, 2013). Then multicollinearity was checked by the *VIF* of employee satisfaction, $VIF = 1.34$; work pressure, $VIF = 1.10$; and motivation at work, $VIF = 1.34$. Since all $VIF < 10$, no multicollinearity between the predictor variables is present (Tabachnick & Fidell, 2013). Homoscedasticity was checked with a visual inspection in a scatterplot (see figure 3 in appendix 3; Tabachnick & Fidell, 2013). Lastly, the linearity assumption was checked with a visual inspection of a scatter plot (see figure 3 in appendix 3; Tabachnick & Fidell, 2013).

Subsequently, descriptive data and correlations between happiness at work and other variables in this study were examined (Table 1). The mean of employee satisfaction shows that employees in this sample were averagely satisfied ($M = 3.33$, $SD = .50$). Similarly, the mean of happiness at work indicates that employee are also averagely happy at work ($M = 3.59$, $SD = .51$). Additionally, looking at the correlations in table 1, age is weakly positively related to happiness at work. Implying that older employees are happier at work. Employee satisfaction is strongly positively related to happiness at work, and intrinsic motivation of employees is strongly positively related with being happy at work, meaning that more satisfied and intrinsically motivated employees are also happier. Being satisfied and intrinsically motivated are strongly positively related, which implies that employees who are

more satisfied about their work are also more intrinsically motivated. Lastly, age is weakly positively related with intrinsic motivation, this means that older employees are more intrinsically motivated at work (see Table 1).

Only age will be entered in the hierarchical regression analysis as a control variable, because gender, employment time, and education showed no significant correlation with either the dependent, independent or moderator variables in this study (see table 1). When no correlation is present, this indicates that the control variable does not influence the relation between the dependent, independent and moderator variables. These variables are not confounding variables, and can therefore be left out the analysis (Pourhoseingholi, Baghestani, & Vahedi, 2012; Skelly, Dettori, & Brod, 2012).

Table 1

Means, standard deviations and correlations

	Mean	SD	1	2	3	4	5	6	7	8
1. Age	43.49	12.58								
2. Gender	1.46	.50	.13							
3. Employment Time	7.66	7.18	.35	-.05						
4. Education	2.12	1.62	-.05	-.10	.21*					
5. Happiness at Work	3.59	.51	.26*	.12	.13	-.13	(.84)			
6. Employee Satisfaction	3.33	.50	.06	-.04	.05	-.12	.59**	(.91)		
7. Work Pressure	2.14	.50	.07	-.02	.03	-.06	-.19	-.16	(.85)	
8. Intrinsic Motivation	4.83	.95	.23*	.07	.07	-.18	.66**	.62**	-.02	(.93)

Note. $N = 92$, for Gender (1= male, 2= female), Education (1= MBO, 2= HBO, 3= WO Bachelor, 4= WO Master, 5= PhD, 6= Other), Happiness at Work (1= not happy,, 5= very happy), Employee Satisfaction (1= not satisfied,, 5= very satisfied), Work Pressure (1= no pressure,, 4 = a lot of pressure), Intrinsic Motivation (1= not intrinsically motivated, ..., 7= very intrinsically motivated). Reliability (Cronbach's alpha) on the diagonal in parentheses. Effect sizes (ES) are interpreted based on Cohen (1992), where weak, moderate, and strong ESs are .10, .30, and .50 respectively. * $p < .05$, ** $p < .01$.

Main Analysis

A hierarchical regression analysis was performed to test the three hypotheses of this study. Before testing the first hypothesis the control variable, age, was analysed in model 1. Model 1 showed a significant fit to the data ($F_{(1,90)} = 6.61, p = .012$). Age, explains a small part of the variance of happiness at work ($R^2 = .07, p = .012, f^2 = .07$). Additionally, age is positively related to being happy at work ($\beta = .26, SE = .00, p = .012$), meaning the older people are often happier at their work.

In testing the first hypothesis model 2 showed a significant fit to the data ($F_{(2,89)} = 30.24, p = .000$). Also does model 2 explain significantly more of the variance of happiness at work, compared to model 1 (R^2 change = .34, $p = .000, f^2 = .68$). Being satisfied as an employee is positively related to being happy at work ($\beta = .58, SE = .08, p = .000$), which means that employees that are more satisfied about their job are also happier at their work. This confirms hypothesis 1.

When assessing the moderators in this study, model 3 showed a significant fit to the data ($F_{(4,87)} = 24.92, p = .000$). Additionally, model 3 explains significantly more of the variance of happiness at work compared to model 2 (R^2 change = .13, $p = .000, f^2 = 1.15$). When looking at the separate moderators, experiencing work pressure is not related to happiness at work ($\beta = -.14, SE = .08, p = .058$), while being intrinsically motivated is positively related to happiness at work ($\beta = .45, SE = .05, p = .000$). Meaning that employees who are intrinsically motivated are also happier at their work.

When testing the second and third hypothesis, model 4 showed a significant fit to the data ($F_{(6,85)} = 16.48, p = .000$). However, model 4 does not explain more of the variance of happiness at work compared to model 3 (R^2 change = .00, $p = .710, f^2 = 1.16$). Also the interaction effects of 'employee satisfaction X work pressure' ($\beta = .04, SE = .15, p = .586$), and 'employee satisfaction X intrinsic motivation' ($\beta = .06, SE = .06, p = .469$) are not associated with the experience of happiness at work in this study. This means hypothesis 2

and 3 are not confirmed.

All results are presented in table 2.

Table 2

Model Summary of Hierarchical Regression Analysis for Variables Predicting Happiness at Work

Model Summary Regression Analyses Happiness at work

Variables	Coefficients											
	Model 1			Model 2			Model 3			Model 4		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Age	.01	.00	.26*	.01	.00	.23**	.01	.00	.15*	.01	.00	.15*
Employee Satisfaction				.60	.08	.58**	.29	.10	.29**	.32	.10	.31**
Work Pressure							-.15	.08	-.14	-.14	.08	-.14
Intrinsic Motivation							.24	.05	.45**	.24	.05	.45**
Employee Satisfaction X Work Pressure										.08	.15	.04
Employee Satisfaction X Intrinsic Motivation at Work										.05	.06	.06
R^2 Change	.07*			.34**			.13**			.00		
F Change	6.61*			50.24**			12.08**			.34		
F	6.61*			30.24**			24.92**			16.48**		
Cohen's f^2	.07			.68			1.15			1.16		

Note. Dependent variable: Happiness at Work, $N = 92$, * $p < .05$, ** $p < .01$.

Discussion

This study investigated the relationship between employee satisfaction and happiness at work, and whether work pressure and intrinsic motivation moderate this relation. The

results showed that satisfied employees were also happier. Additionally, intrinsically motivated employees experience more happiness at work. However, the moderating effects of both work pressure and intrinsic motivation on the relation between employee satisfaction were not found. The results will be further discussed based on the hypotheses of this study.

In line with the first hypothesis, employee satisfaction was positively related to employees' experience of happiness at work. This results corresponds to the findings of Fisher (2000) and Weiss et al. (1999). The study confirms that satisfied employees are also happier at work. The prevalence for confirming this relation among their client firms was requested specifically by the Dutch consultancy firm. It is interesting that employees scored above average for both satisfaction ($M = 3.33$) and happiness ($M = 3.59$) regarding work, even though the study took place during the COVID-19 pandemic. Interpretation of the mean scores was based on the range of the 1-5 answer scales of the SHAW and MSQ-S (Salas-Vallina & Alegre, 2018; Weiss et al., 1967). The COVID-19 pandemic has an enormous impact on job availability and many people lost their job worldwide (UN, 2020). It could be that the employees were still satisfied and happy, because they did not lose their job due to the pandemic. Gudmundsdottir (2013) found, in a longitudinal study, that financial uncertainty was a predictor of happiness. The fact that employees at these firms had job, and therefore financial security at the time they filled out the questionnaire, might explain that their satisfaction and happiness scores were not affected by the pandemic.

Subsequently, the second hypothesis predicted that experienced work pressure would negatively influence the relation between employee satisfaction and happiness at work. No support was found for this prediction, indicating that the relation between employee satisfaction and happiness at work is not influenced by work pressure. An explanation for this can be that employees in this study did not experience pressure at their work. Participants' average scores indicated they only experienced work pressure occasionally ($M = 2.14$; Van

Veldhoven & Meijman, 1994). Generally, the experienced work pressure could be at such a level that employees can still handle it, and therefore not affect their attitude and emotions towards their work. As Karasek and Theorell (1990) explained, work pressure is only experienced negatively when it is *too high*. Since the employees in this sample experienced work pressure occasionally, this might explain why work pressure did not affect the relationship between employee satisfaction and happiness at work in this study. Moreover, this might suggest that work pressure is not related to happiness at work how it was expected to. Since it was linked through its association with employee satisfaction (Green, 2006). This therefore contributes to knowledge about the construct of happiness at work.

In addition to experienced work pressure, intrinsic motivation was investigated as a second factor that might influence the relation between employee satisfaction and happiness at work. Hypothesis 3 was not confirmed either, indicating that intrinsic motivation does not moderate the relation between employee satisfaction and happiness at work. The interaction variable was computed from employee satisfaction and intrinsic motivation, which both correlate strongly positively with happiness at work, $r = .59$ and $r = .66$ respectively, however this association disappears in the regression analysis for the interaction variable. Interestingly, also employee satisfaction and intrinsic motivation correlate strongly positively ($r = .62$). An explanation could be that either of employee satisfaction or intrinsic motivation mediate the other's relation with happiness at work instead of the expected moderating effect. These constructs have been investigated in many studies together, however they were generally all treated as predictor variables (Ceci & Kumar, 2015; Khoshnam, Ghamari, & Gendavani, 2013). The correlations in this study present a relation between the constructs, however, further investigating the relationship between the constructs employee satisfaction, intrinsic motivation and happiness at work could reveal how they are related.

Limitations and Future Research

In evaluation of this study several limitations have to be discussed. First, because the study used a cross-sectional design, the constructs happiness at work, employee satisfaction, work pressure and motivation were measured at one point in time. A relation between the variables at that point can be identified, however it limits the study in inferring causality (Bland, 2001). Ideally, information on happiness at work, and the related constructs, is inquired multiple times and over a longer period of time. That will provide an organisation with knowledge about happiness their employees, how happiness develops, and what situational factors can influence employee happiness, satisfaction, and motivation (Bland, 2001). This study forms a nice basis on the topic happiness at work, because it provides information about the relation of the construct to both employee satisfaction and intrinsic motivation. Future research can build upon this by investigating happiness at work with another, for example longitudinal, study design to further examine happiness at work (Bland, 2001).

Second, this study used a self-report questionnaire to gather data. Self-report can lead to social desirable answers, this can distort the data (Donaldson & Grant-Vallone, 2002). A measure based on retrieving information from multiple sources could increase the validity of the data (Woehr, Sheenan, & Bennett, 2005).

Finally, the findings in this study indicate that, besides work pressure and intrinsic motivation were investigated, happiness at work and employee satisfaction might also be susceptible to demographic factors. This study indicates a positive relation between age and happiness work ($r = .26$), which indicates that when the employee gets older, they are happier at work. Mroczek and Kolarz (1998), also found this relation between positive emotions and age. If younger employees might generally be less happy, then an organisation should take this into a count. Additionally, they should investigate what work-related factors would improve happiness of younger employees.

Practical Relevance and Implications

The positive relation between employee satisfaction and happiness at work suggests that increasing satisfaction will stimulate happiness at work (Singh & Aggarwal, 2017). If an organisation seeks to increase happiness at work, they should invest in an intervention that fosters employee satisfaction. A one year longitudinal intervention, that monitors employee evaluations about organisational changes using questionnaires, can provide information on work evaluations and psychosocial factors that employees experience due to the implementation of changes at work (Wahlstedt & Edling, 1997). When a questionnaire is administered three times, at the beginning, after six months, and after 12 months, changes in evaluations can be identified. Employee evaluations should be incorporated in deciding on new changes or restructuring current developmental trajectories. The authority employees experience in organisational decision-making contributes to their satisfaction at work (Wahlstedt & Edling, 1997).

The positive relation between intrinsic motivation and happiness at work suggests that increasing intrinsic motivation among employees might stimulate happiness at work. If employers seek to enhance employees' happiness at work, they should invest in a work environment that stimulates intrinsic motivation. Deci and Ryan (2000), link motivation to the Self-Determination Theory (SDT). They argue that the fulfilment of all three basic needs, competence, relatedness, and autonomy, fosters intrinsic motivation. Specifically, experiencing autonomy differentiates intrinsic motivation from extrinsic motivational types (Deci & Ryan, 1985). To stimulate intrinsic motivation, it is advised to implement a participatory action intervention with a focus on increasing intrinsic motivation of employees. This type of intervention stimulates employees to collaborate with an organisational change consultant and contribute their knowledge in every phase of the intervention (Chevalier & Buckles, 2019). Employees learn how they can contribute to the decision-making process in

their organisation, and they get a voice in how intrinsic motivation can be increased.

Involving employee with decision-making and this type of intervention increases feelings of relatedness, they feel competent because they experience the value of their knowledge and they get hands on experience what role they can play in this, and autonomy is increasing by letting employees experience they have a voice and can express their choice (Deci & Ryan, 1985; Mikkelsen & Saksvik, 1999).

Conclusion

This study showed that the relation between employee satisfaction and happiness at work is not moderated by work pressure and intrinsic motivation. Intrinsic motivation does, however, relate to happiness at work. Fostering happiness among employees can play an important role in employee well-being, but also increase their productivity, improve their performance, and reduce sick leaves and turnover. The findings highlight that organisations, and their employees, should cherish happiness at work, and find ways to optimize this by also considering factors as employee satisfaction and intrinsic motivation.

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Appendix

Appendix 1

Overview of back-to-back translation and procedure

Example:

1. Item that was translated from English to Dutch

- a. Dutch translation of the item
- b. English back-translation of the item

Shortened Happiness at Work Scale (Salas-Vallina & Alegre, 2018)

- 1. At my job, I feel strong and vigorous**
 - a. Op mijn werk voel ik mij sterk en energiek
 - b. At my job I feel strong and energetic
- 2. I am enthusiastic about my job**
 - a. Ik ben enthousiast over mijn baan
 - b. I am enthusiastic about my job
- 3. I get carried away when I am working**
 - a. Ik word meegesleept als ik aan het werk ben
 - b. I get carried away when I am working
- 4. How satisfied are you with the nature of the work you perform?**
 - a. Hoe tevreden ben je met de aard van het werk dat je uitvoert?
 - b. How satisfied are you with the nature of the job that you perform?
- 5. How satisfied are you with the pay you receive for your job?**
 - a. Hoe tevreden ben je met het salaris wat je ontvangt voor je baan?
 - b. How satisfied are you with the salary you receive for your job?
- 6. How satisfied are you with the opportunities which exist in this organisation for advancement [promotion]?**
 - a. Hoe tevreden ben je met de mogelijkheden welke bestaan in de organisatie om door te groeien (promotie)?
 - b. How satisfied are you with the opportunities which exist in the organisation for advancement (promotion)?
- 7. I would be very happy to spend the rest of my career with this organisation**
 - a. Ik zou heel gelukkig zijn om de rest van mijn carrière bij deze organisatie te spenderen
 - b. I would be very happy to spend the rest of my career with this organisation
- 8. I feel emotionally attached' to this organisation**
 - a. Ik voel me emotioneel gehecht aan deze organisatie
 - b. I feel emotionally attached to this organisation
- 9. I feel a strong sense of belonging to my organisation**
 - a. Ik ervaar een sterk gevoel van saamhorigheid naar mijn organisatie
 - b. I feel a strong sense of belongingness to my organisation

Minnesota Job Satisfaction Questionnaire – short form (Weiss et al, 1967)

- 1. The chance to do different things from time to time**
 - a. De kans om verschillende dingen te doen van tijd tot tijd (IJS1)
 - b. The chance to do different things from time to time
- 2. The chance to be somebody in the community**
 - a. De kans om iemand te zijn in de gemeenschap (IJS2)
 - b. The chance to be someone in the community
- 3. Being able to do things that don't go against my conscience**
 - a. Dingen kunnen doen die niet tegen mijn geweten in gaan (IJS3)
 - b. Being able to do things that do not go against my conscience
- 4. The way my job provides for steady employment**
 - a. De manier hoe mijn baan stabiele werkgelegenheid biedt (IJS4)
 - b. The way my job offers steady employment
- 5. The chance to do things for other people**
 - a. De kans om dingen voor andere mensen te doen (IJS5)
 - b. The chance to do things for other people
- 6. The chance to tell people what to do**
 - a. De kans om mensen te zeggen wat te doen (IJS6)
 - b. The chance to tell people what to do
- 7. The chance to do something that makes use of my abilities**
 - a. De kans om iets te doen wat gebruik maakt bij van mijn bekwaamheden (IJS7)
 - b. The chance to do something that makes use of my abilities
- 8. The freedom to use my own judgment**
 - a. De vrijheid om mijn eigen oordeel te gebruiken (IJS8)
 - b. The freedom to use my own judgment
- 9. The chance to try my own methods of doing the job**
 - a. De kans om mijn eigen methoden te proberen om het werk te doen (IJS9)
 - b. The chance to try my own methods of doing the job
- 10. The feeling of accomplishment I get from the job**
 - a. Het gevoel van voldoening die ik van de baan krijg (IJS10)
 - b. The feeling of achievement that I get from the job
- 11. The praise I get for doing a good job**
 - a. De lof die ik krijg voor het doen van goed werk (EJS1)
 - b. The praise I get for doing a good job
- 12. The chances for advancement on this job**
 - a. De kansen om door te groeien bij deze baan (EJS2)
 - b. The chances for advancement on this job
- 13. My pay and the amount of work I do**
 - a. Mijn salaris en de hoeveelheid werk die ik doe (EJS3)
 - b. My pay and the amount of work I do
- 14. The way company policies are put into practice**
 - a. De manier hoe het bedrijfsbeleid in de praktijk wordt gebracht (EJS4)
 - b. The way in which the company policies are put into practice
- 15. The competency of my supervisor in making decisions**

- a. De bekwaamheid van mijn leidinggevende in het maken van beslissingen (EJS5)
- b. The competency of my supervisor in making decisions

16. The way my supervisor handles his/her workers

- a. De manier hoe mijn leidinggevende met zijn/haar medewerkers omgaat (EJS6)
- b. The way my supervisor handles his/her employees

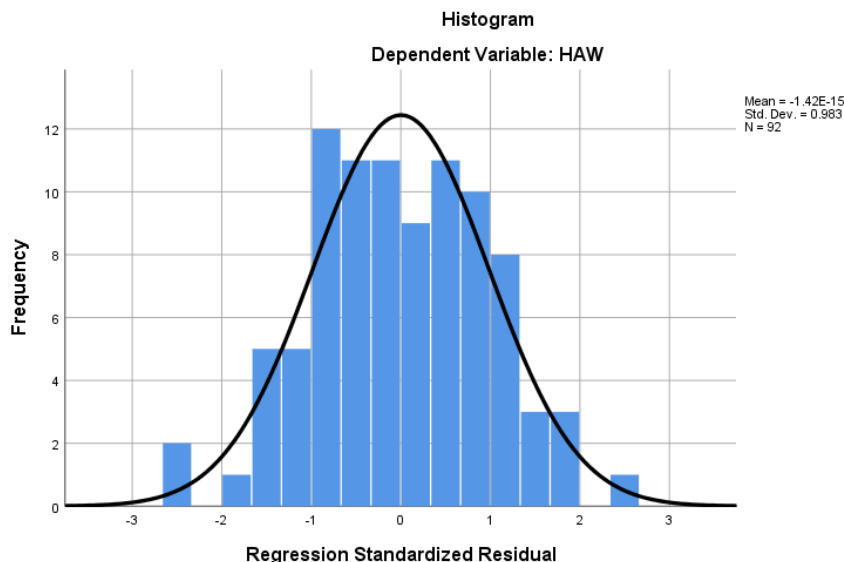
Intrinsic Motivation subscale of the Motivation at Work Scale (Gagné et al., 2010)

- 1. Because I enjoy this work very much**
 - a. Omdat ik erg geniet van dit werk (int1)
 - b. Because I really like this work
- 2. Because I have fun doing my job**
 - a. Omdat ik plezier heb in mijn werk (int2)
 - b. Because I have fun doing my work
- 3. For the moments of pleasure that this job brings me**
 - a. Voor de momenten van plezier die deze baan mij brengt (int3)
 - b. For the moments of pleasure that this job brings me

Appendix 2

Figure 2

Histogram for checking the normality assumption

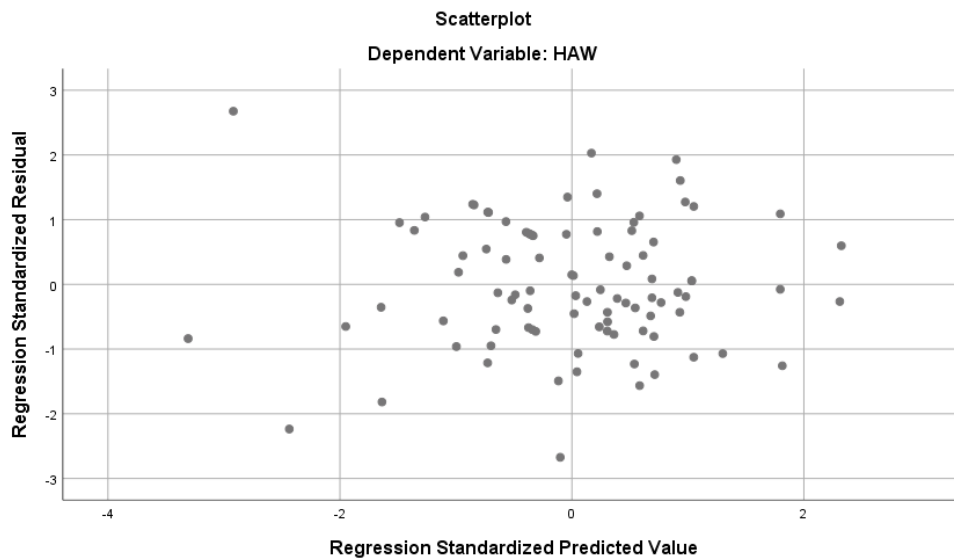


Note. The histogram shows a somewhat normal distribution from which I can conclude that the normality assumption is met.

Appendix 3

Figure 3

Scatterplot for checking the linearity and homoscedasticity assumptions



Note. The scatterplot shows a somewhat oval/rectangular shape, which reflects that the assumption for linearity in the sample is met (Tabachnick & Fidell, 2013). Additionally, the random scattering of point in this plot, the variability in the plot is approximately the same for all values of X (homoscedasticity), and no curvature is detected in the shape. This implies also that other assumptions are met for this data set (Tabachnick & Fidell, 2013).