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The Association between Workplace Fear of Missing Out and Work Engagement and motivation to learn,
and the moderating role of mindfulness.

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Abstract

Workplace Fear of Missing Out (FoMO) is a pervasive apprehension that, relative to other employees, one might miss valuable career opportunities when away or disconnected from work. The purpose of this study was to examine the association between workplace FoMO and work engagement and between workplace FoMO and motivation to learn. In addition, a moderating role of mindfulness on the association between workplace FoMO and work engagement was examined. This research expands the scientific research of workplace FoMO, work engagement, motivation to learn and mindfulness. In total, 166 participants were included in this study. Contrary to the expectation, workplace FoMO did not negatively associate with work engagement. No negative or positive association between workplace FoMO and work engagement was found. As expected, a positive association of workplace FoMO with the motivation to learn was found. Higher levels of workplace FoMO lead to more motivation to learn. Furthermore, it was expected that mindfulness would weaken the association between workplace FoMO and work engagement. However, a strengthening effect was found. The higher the level of mindfulness, the more workplace FoMO decreased work engagement. Because workplace FoMO is a relatively new concept, future research will need to further clarify the full range of effects of workplace FoMO and the ways in which workplace FoMO itself is affected.

Keywords: workplace fear of missing out, work engagement, motivation to learn, mindfulness.

Introduction

In the past few years, a new subject has caught the attention of the popular media: the fear of missing out (FoMO; Budnick, Rogers & Barber, 2020). *FoMO* is defined as the “pervasive apprehension that others might be having rewarding experiences from which one is absent” (Przybylski, Murayama, DeHaan & Gladwell, 2013, p. 1814). A result of FoMO is that people feel the need to stay connected with their social network at all times (Elhai, Yang & Montag, 2021). Research has shown that FoMO has a negative effect in several areas. Examples of side-effects of FoMO are irregular sleep, excessive eating and drinking, lack of focus, anxiety, delaying responsibilities and increased stress levels (Tanhan, Özok & Tayiz, 2022). This shows that FoMO can be a serious problem.

In this study, the focus is not on regular FoMO but on workplace FoMO. *Workplace FoMO* can be defined as “a pervasive apprehension that, relative to other employees, one might miss valuable career opportunities when away or disconnected from work” (Budnick et al, 2020, p. 2). An example of workplace FoMO is the employees’ fear that missing out on networking opportunities could negatively impact professional relationships (Budnick et al., 2020). Employees experiencing workplace FoMO may have positive and negative effects for the organization. For example, a positive effect of workplace FoMO is that workplace FoMO predicts more positive feelings toward work (when working in an organization that does not encourage the setting of work-home boundaries; Budnick et al., 2020). An example of a negative effect of workplace FoMO is the relation to higher reports of work burnout (Budnick et al., 2020).

This study will take a closer look at the association between workplace FoMO and two work-related outcomes. Firstly, the way that workers experience their work, which is captured by work engagement. High levels of work engagement indicate that workers experience working as fun (Bakker, Albrecht & Leiter, 2011). Secondly, the motivation to learn of employees within the organization. *Motivation* is “the process whereby goal-directed activities are instigated and sustained” (Cook & Artino JR., 2016, p. 998).

Organizations benefit when their employees are highly motivated to learn because it helps expand the repertoire of skills needed to achieve work aspirations (Taris & Feij, 2004).

Furthermore, this study investigates a possible moderating effect of mindfulness and workplace FoMO on work. Mindfulness indicates a state of awareness and observation of the present moment without reactivity or judgment (Glomb, Duffy, Bono & Yang, 2011). Research on mindfulness has shown that higher levels of mindfulness have a positive effect on work engagement (Liu, Xin, Shen, He and Liu, 2020). Furthermore, mindfulness could possibly reduce the feeling of workplace FoMO (Milyavskaya, Saffran, Hope & Koestner, 2018), this may add to a moderating effect of mindfulness on the relation between workplace FoMO and work engagement.

This study is relevant to organizations because it provides an understanding of the potential advantages and disadvantages of workplace FoMO and organizations can use this to their advantage. Furthermore, this study will add to the scientific research about workplace FoMO. Research about workplace FoMO is limited due to workplace FoMO being a relatively new concept. One recent research has looked at the effect of workplace FoMO on work engagement (Budnick et al., 2020). This research did not find a negative or positive association of workplace FoMO with work engagement. To extend the research by Budnick and colleagues (2020), this study will reexamine the possible association between workplace FoMO and work engagement. Adding to the scientific research about workplace FoMO and work engagement. In addition, the association between motivation to learn and workplace FoMO has not been researched yet. Meaning this study will also add to the scientific research of motivation to learn and workplace FoMO. Lastly, no research has yet been done on a possible moderating effect of mindfulness and workplace FoMO on work engagement. Adding to the scientific research about mindfulness, workplace FoMO and work engagement.

Fear of Missing Out

First, a closer look will be taken at FoMO in general. Broadly speaking, FoMO presents as distress when socially separated, rejected, or excluded (Budnick et al., 2020). The concept of FoMO was developed within undergraduate students in non-work contexts, often referencing to “friends” and what they are doing on social media (e.g., social experiences; Budnick et al., 2020). Besides missing out on social experiences, the concept of FoMO is also applicable in a work context. To applicate FoMO within a work context the focus needs to be on (a) social comparisons with other employees and (b) valuable workplace opportunities (Budnick et al., 2020). As mentioned earlier, this results in the definition of *workplace FoMO* being “a pervasive apprehensions that, relative to other employees, one might miss valuable career opportunities when away or disconnected from work” (Budnick et al., 2020, p. 2). For example, workplace FoMO is focused on the fear of missing out on potentially rewarding experiences such as gaining valuable information, building professional relationships, and contributing to key organizational decisions and projects (Budnick et al., 2020).

Budnick and colleagues (2020) found two types of exclusion related to workplace FoMO. Namely, *relational exclusion* (e.g., missed networking opportunities) and *informational exclusion* (e.g., being uninformed). Firstly, relational exclusion describes the fear of employees that professional relationships might suffer due to missed networking opportunities or opportunities to sustain business relationships. Secondly, informational exclusion describes the fear of employees of being uninformed of relevant social or task information in a group. Originally, Budnick and colleagues (2020) expected a third type of exclusion, *work output exclusion*. Work output exclusion describes the fear of employees that they are unable to provide tangible input into work processes that might lead to career advancement. However, after factor analyses, this exclusion type was removed because it was not found to be reliable. Resulting in relational exclusion and informational exclusion together forming workplace FoMO.

Measures of workplace FoMO by Budnick and colleagues (2020) have shown predictions of workplace FoMO on both behavioral outcomes and employee well-being. Firstly, Budnick and colleagues

(2020) found that higher workplace FoMO predicted more message checking behaviors, a behavioral outcome. Secondly, two findings on employee well-being were found. On the one hand, higher workplace FoMO related to higher reports of work burnout, but on the other hand not to lower reports of work well-being. A possible explanation offered by the authors is that while there is a decline in health as result of workplace FoMO, people may not necessarily attribute negative outcomes to the experience of workplace FoMO. In some cases, workplace FOMO may even signal employees that they enjoy their work, or at least do not view work negatively.

Work Engagement

Second, organizations benefit when their employees experience high levels of work engagement. Work engagement exists out of three components which describe how workers experience their work (Bakker et al., 2011). Firstly, the *vigor* component describes the work experience as stimulating and energizing and as something employees really want to devote their time and effort to. Secondly, the *dedication* component describes work as a significant and meaningful pursuit. Lastly, the *absorption* component describes work as captivating and something on which the worker is fully concentrated (Bakker et al., 2011). A high level of work engagement is desirable for organizations for several reasons. Employees with high levels of work engagement experience their work as fun and they are highly energetic and confident individuals who have influence over the events that affect their lives (Bakker et al., 2011). These engaged employees create their own positive feedback, in terms of appreciation, recognition, and success (Bakker et al., 2011). Unlike workaholics, not a strong and irresistible inner drive makes engaged employees work hard, but simply because working is fun to them (Bakker et al., 2011). In addition, engaged workers are optimistic, they have the tendency to believe that they will generally experience good outcomes in life, and they believe they can satisfy their needs by participating in roles within the organization (organizational-based self-esteem; Bakker et al., 2011).

As mentioned before, Budnick and colleagues (2020) have shown that higher workplace FoMO levels lead to more message checking behaviors. Consequently, it might be expected that work engagement would increase as well, but this relation was not found. Neither a positive nor a negative association between workplace FoMO and work engagement was found by Budnick and colleagues (2020). A possible explanation provided by the authors is that an employee will not act on a message or engage with work tasks simply because they view a message. Some employees may even only check their messages to remain informed (i.e., reduce information exclusion apprehensions) with the intent to respond during their next working period.

Despite Budnick and colleagues (2020) finding no association between workplace FoMO and work engagement, this study hypothesizes a negative association. It may be that workplace FoMO has a reducing effect on the three components of work engagement. For example, the vigor and dedication component may be reduced when a work task makes them miss out on networking opportunities. This could trigger workplace FoMO because employees fear relational exclusion. Leading to the employees finding the work task less stimulating and not wanting to devote their time and effort into this (*vigor component*), and possibly making them see the work as a less meaningful pursuit (*dedication component*). In addition, the absorption component may be reduced as workplace FoMO may act as a distraction, because employees are possibly not solely concentrated and captivated by their work in the moment. Because the level of these components may be reduced by workplace FoMO, the hypothesis is that workplace FoMO has a negative association with work engagement.

Hypothesis 1: Workplace FoMO is negatively associated with work engagement of employees.

Motivation to Learn

Third, the motivation to learn of employees is important to organizations. Organizations learn through their individual members and therefore organizations are directly or indirectly affected by individual

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learning (Kim, 2009). Because organizations are affected by individual learning, the motivation to learn of employees is of importance. Motivation consists out of four key concepts: (a) motivation is focused on a goal; (b) it is a process; and (c) it deals with both the initiation and (d) the continuation of activities directed at achieving that goal (Cook & Artino Jr, 2016). A high motivation to learn helps employees to enlarge their skillset needed to realize the work aspirations, which ultimately benefits the organization as well (Taris & Feij, 2004).

In general, the motivation to learn has shown to get influenced by situational and personal characteristics (Kontoghiorghes, 2002). Workplace FoMO could be seen as both a situational and a personal characteristic. Firstly, workplace FoMO may be seen as a situational characteristic as workplace FoMO may occur in the situation when an employee is away or disconnected from work (Budnick et al., 2020). Secondly, workplace FoMO may be seen as a personal characteristic, as the level of workplace FoMO differs per individual. This combination of workplace FoMO as a situational and personal characteristic could possibly influences the motivation to learn.

A positive association between workplace FoMO and the motivation to learn is hypothesized. This positive association could possibly come forward from employees trying to reduce informational exclusion. By learning more, employees will miss out on less information, and this could possibly help close the gap to information missed when not present. Thus, when workplace FoMO is high, an increase of motivation to learn may occur as employees try to reduce the informational exclusion.

Hypothesis 2: Workplace FoMO is positively associated with motivation to learn of employees.

Mindfulness

Lastly, mindfulness has both personal and organizational advantages, as it has far-reaching advantages for well-being and health, work meaningfulness, and individual and organizational performance (Sutcliffe, Vogus & Dane, 2016). Glomb and colleagues (2011) have given a definition of *mindfulness*: “We

define mindfulness as a state of consciousness characterized by receptive attention to and awareness of present events and experiences, without evaluation, judgment, and cognitive filters.” (p. 119). An example of basic-level mindfulness is being aware of our bodies sitting in the car when we drive and noticing the traffic, the road, and the passing scenery, all while refraining from evaluating it positively or negatively (Glomb et al., 2011). Mindfulness can be trained by mindfulness-based practices, which aim to train individuals to observe internal and external stimuli objectively, creating meta-awareness (Glomb et al., 2011). In general, the benefits of mindfulness and mindfulness-based practices are (a) an improved physical health, (b) the reduction of symptoms of mental, psychological, and psychiatric conditions, (c) an improvement of overall well-being and human flourishing, and (d) neurobiological changes in the brain related to heightened awareness, positive mental experiences, and attentional, affective, and physiological regulation (Glomb et al., 2011).

On the one hand, mindfulness could possibly reduce the feeling of workplace FoMO, as it helps people to deeply engage in what they are doing in the moment and this reduces the likeliness of them thinking of alternatives and fearing they miss out on these alternatives (Milyavskaya et al., 2018). On the other hand, workplace FoMO could possibly reduce mindfulness because it distracts people from being in the moment (Milyavskaya et al., 2018).

In addition to a possible direct effect of workplace FoMO on mindfulness, it could be hypothesized that mindfulness acts as a moderator between workplace FoMO and work engagement. In relation to work engagement, mindfulness has shown to have a positive influence (Liu et al., 2020). This positive influence of mindfulness on work engagement may happen in three ways. Firstly, mindfulness reduces wandering of thoughts and attention because it improves attention efficiency, and mindfulness is more likely to keep an individual in a state of concentration (*stable attention*). Secondly, mindfulness enhances self-awareness of emotions, thoughts, and behaviors, supports actions based on self-consciousness, and fosters more autonomous motivation. This motivation encourages employees to actively acquire and obtain the resources they need and prompts them to put more enthusiasm and energy into work tasks (*self-awareness*). Thirdly,

mindfulness can help people to better manage themselves, by achieving more current attention and awareness, and enhance autonomous behavior (*self-regulation*; Liu et al., 2020). Mindfulness may act as a moderator due to the possible negative association between workplace FoMO and mindfulness. Meaning that more mindfulness may lead to less workplace FoMO. Which ultimately means that the higher the level of mindfulness, the less workplace FoMO reduces work engagement.

Hypothesis 3: Mindfulness will weaken the association between workplace FoMO and work engagement of employees.

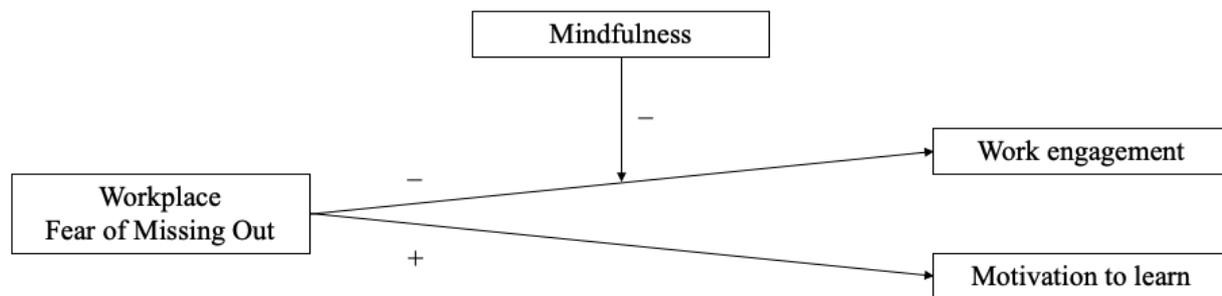
Research Question

Concluding, from the existing literature on workplace FoMO, work engagement, motivation to learn and mindfulness, the following research question emerges: “What is the association between workplace FoMO and work engagement and motivation to learn; and does mindfulness have a moderating effect on the relation between workplace FoMO and work engagement?”. To answer the research question, the following hypotheses will be tested:

1. Workplace FoMO is negatively associated with work engagement of employees.
2. Workplace FoMO is positively associated with motivation to learn of employees.
3. Mindfulness will weaken the association between workplace FoMO and work engagement of employees.

Figure 1.

Hypothesized Research Model of the Relationship between Workplace Fear of Missing out, Work Engagement, Motivation to Learn, and Mindfulness



Method

To answer the research question quantitative research has been conducted. The design of this study is a quantitative cross-sectional research design. Participants answered questions in an online survey with regards to workplace FoMO, work engagement, motivation to learn and mindfulness.

Participants and Procedure

Before starting the data collection, the study was registered and approved by the Utrecht University, Social and Behavioral Science Faculty Ethics Review Board (reference number: 22-0897).

Data was collected with an online survey using the Qualtrics program during April and May 2022. At the start of the survey participant had to choose their preferred language, English or Dutch. Then some general information was provided with regards to the aims of the study, the requirements for participation, the participation being anonymous and voluntary, and who to contact when they have questions (e.g., about their participation, treatment of the data, or the study). To proceed with the survey, the participants had to give to their informed consent. After this the demographic questions were asked, followed by questions about work engagement, motivation to learn, mindfulness and workplace FoMO.

The participants for this study were recruited through various social media channels (e.g., LinkedIn, Facebook, and WhatsApp) and snowball sampling was used in this process. The requirements to participate were that the participant should be 18+ years old, proficiently skilled in Dutch or English and currently working in the Netherlands for at least 12 hours per week. For studying two interaction effects (2 subscales workplace FoMO X Mindfulness) (small-medium effect .05) a G-power analysis advised to use 196 participants (power .80, alpha .05).

A total of 261 participants completed the survey. Due to several reasons, 94 participants were removed and excluded from the data that was further used in the study. The responses of four participants were removed because they did not give consent after reading the informed consent and therefore automatically stopped the survey. In addition, two participants were removed despite fully completing the questionnaire. These participants did not give consent, due to a possible glitch of Qualtrics. Furthermore, 89 participants were removed because they did not complete the survey. Removal of these participants resulted in a total of 166 participants whose data was included in the study. The survey was completed in English by 69 participants (41,3%) and in Dutch by 98 participants (58,7%). There was a total of 71 male participants (42,5%), 94 female participants (56,3%), and 2 participants that preferred not to say their gender (1,2%). Most of the participant were aged between 18 and 25 years old ($n=45$, 26,9%). Followed by 50+ years old ($n=42$, 25,1%), 26 to 33 years old ($n=35$, 21%), 42 to 50 years old ($n=30$, 18%), and 34 to 41 years old ($n=15$, 9%). The highest level of education completed by most participants was the university level ($n=117$, 70,1%), followed by 42 participants completing HBO (25,1%), 4 participants completing MAVO, MBO (2,4%), 3 participants completing VWO (1,8%), and 1 participant completing MAVO, LBO, VMBO (0,6%).

Measures

Four different variables are measured in this study: workplace FoMO, work engagement, motivation to learn, and mindfulness (see full scales in *Appendix A*). Firstly, Workplace FoMO has been measured with the Workplace Fear of Missing Out Measurement Scale (Albers, 2020) extended and based on Budnick and colleagues (2020), which consists of 16 items ($\alpha = .92$). Participants had to indicate their agreement with

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statements while thinking of how they typically feel or feel on average when away (e.g., off duty) or disconnected (e.g., not available via email, text, or instant messaging devices) from work (Albers, 2020). Examples of the statements are “I worry that I will miss out on networking opportunities that my coworkers will have”, and “I worry that my colleagues are having fun without me”. Answers were given on a Likert scale (1 = *strongly disagree* to 5 = *strongly agree*).

Secondly, work engagement has been measured with the Utrecht Work Engagement Scale (UWES; Schaufeli, Bakker & Salanova, 2006), which consists of 9 items (UWES-9) ($\alpha = .69$). For example, “Time flies when I am working”; “I am enthusiastic about my job”; and “I get carried away when I am working”. Statements had to be answered with a scale from 0 (*never*) to 6 (*every day*) (7-point Likert scale) with regards to how often the participant feel this way.

Thirdly, the motivation to learn has been measured with a scale compiled by Taris and Feij (2004), which consists of 6 items ($\alpha = .86$). The items tap into the degree to which workers engage in activities targeted towards the enlargement of their repertoire of skills needed to realize their work aspirations and the degree to which they had actually learned new skills (Taris & Feij, 2004). This scale is based on three-items from Backman (e.g., “I have recently sought advice from my co-worker”) and three items from Penley and Gould (e.g., “I have developed skills which may be needed in future positions”; Taris & Feij, 2004). The answers ranged from *strongly disagree* (1) to *strongly agree* (5).

Lastly, the moderator mindfulness has been measured with the Mindfulness Attention Awareness Scale (MAAS), which consists of 15 items ($\alpha = .96$; Brown & Ryan, 2003). Participants had to indicate how frequently or infrequently they currently have each experience on a scale of 1 (*almost always*) to 6 (*almost never*). Example of statements used are “I find it difficult to stay focused on what’s happening in the present” and “I forget a person’s name almost as soon as I’ve been told it for the first time”.

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Statistical analysis

The collected data has been analyzed with the help of Statistical Program for Social Sciences (IBM SPSS Statistics v28). First, descriptive analyses have been conducted, looking at the means, standard deviations, and correlations of several variables. Secondly, tests have been done to check for assumptions. Thirdly, hypotheses have been tested using hierarchical multiple regression analyses to examine the association between workplace FoMO and work engagement (H1), and workplace FoMO and motivation to learn (H2). Lastly, another hierarchical multiple regression analysis was performed to determine whether mindfulness moderates the relationship between workplace FoMO and work engagement (H3).

Results**Descriptive Statistics**

Correlational analyses were used to examine the relationship between the variables workplace FoMO, work engagement, motivation to learn and mindfulness. Furthermore, all control variables that showed a significant correlation have been added to Table 1, dichotomous variables were excluded. Results indicate that workplace FoMO and work engagement are not significantly related ($r(166) = -.32, p = .68$). Workplace FoMO and motivation to learn did show a positive significant correlation ($r(166) = .29, p = <.001$). Implying that an increase of workplace FoMO is related to an increase of motivation to learn. In addition, workplace FoMO and mindfulness showed a negative significant correlation ($r(166) = -.35, p = <.001$). Indicating that an increase in one variable predicts a decrease in the other variable, and vice-versa. Furthermore, the results indicate that age is significantly related to work engagement, motivation to learn, mindfulness and workplace FoMO. It is important to consider that a correlation does not imply a causal relation.

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Table 1*Descriptive Statistics and Correlations for Study Variables*

	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. <i>Work Engagement</i>	166	5.39	1.10	-							
2. <i>Motivation to Learn</i>	166	3.87	0.61	.23**	-						
3. <i>Mindfulness</i>	166	3.90	0.70	.32**	-0.02	-					
4. <i>Workplace FoMO</i>	166	2.40	0.91	-.32	.29**	-.35**	-				
5. <i>Age</i>	166	2.90	1.58	.21**	-.36**	.28**	-.36**	-			
6. <i>Educational Level</i>	166	5.61	0.71	.12	.24**	-.04	.08	.05	-		
7. <i>Tenure</i>	166	2.14	1.13	.05	-.17*	.19*	-.28**	.68**	.02	-	
8. <i>Average Weekly Hours</i>	166	3.04	0.77	.14	.07	.11	.09	.21**	.06	.14	-

Note * $p < .05$; ** $p < .01$

Assumptions

Prior to conducting the multiple regressions, the relevant assumptions for multiple regression analyses were tested. Firstly, the assumption of linearity was tested and met, as no nonlinear relationships were visible. Secondly, the assumption of multicollinearity was tested for the variables workplace FoMO, work engagement, motivation to learn, mindfulness, and control variables (*age, gender, tenure, and management position*). Analysis of the collinearity statistics show that this assumption has been met ($r < .85$). Thirdly, the Durbin-Watson statistic showed that the assumption that values of the residuals are independent has been met, as the obtained values were all close to 2. Fourth, the assumption of homoscedasticity was met, as an even spread of values was visible. Fifthly, the normality assumption was tested and met, as a normal distribution of the scores was visible. Lastly, Cook's Distance values were all under 1, suggesting individual cases were not unduly influencing the model.

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Work Engagement

Hierarchical multiple regression was used to test if workplace FoMO significantly predicted work engagement (*Hypothesis 1*). Table 2 shows that in model 1 the control variables age, gender, tenure, and management position were added, and in model 2 the variable workplace FoMO was added. The model shows that age had a significant association with work engagement in both models (model 1: $\beta = .18, p = .023$; model 2: $\beta = .19, p = .020$). The other control variables, gender, tenure and management position, did not have a significant association with work engagement. The table shows that workplace FoMO ($R^2 = .074$) explains 0,2% more variance than only the control variables ($R^2 = .073$), this change is not significant ($p = .586$). In addition, workplace FoMO did not have a significant association with work engagement ($\beta = .07, p = .514$). Resulting in Hypothesis 1 not being supported.

Table 2

Summary of Hierarchical Regression Analyses for Workplace FoMO and Work Engagement (N = 163)

	Work Engagement							
	Model 1			Model 2			ΔR^2	p
	β	t	p	β	t	p		
Model 1							.073	.017
Age	.18	2.30	.023*	.19	2.36	.020*		
Gender	-.11	-.05	.528	-.10	-.58	.564		
Tenure	-.17	-1.68	.094	-.17	-1.65	.101		
Management Position	-.33	-1.58	.115	-.34	-1.62	.107		
Model 2							.002	.586
Workplace FoMO				.06	.55	.586		

Note *P < .05

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Motivation to Learn

Another hierarchical multiple regression was used to test if workplace FoMO was significantly associated with the motivation to learn (*Hypothesis 2*). Table 3 shows that in model 1 the control variables age, gender tenure and management position were added, and in model 2 the variable workplace FoMO. The table shows that workplace FoMO ($R^2 = .178$) explained 2,8% more variance than the first model ($R^2 = .150$) and this change is significant ($p = .022$). Age has shown to have a significant association with the motivation to learn in the first model ($\beta = -.17, p = < .001$) and in the second model ($\beta = -.16, p = < .001$). The other control variables, gender, tenure and management position, did not show a significant association with motivation to learn. In addition, the results show that workplace FoMO has a significant positive association with the motivation to learn ($\beta = .12, p = .022$). In other words, when workplace FoMO increases, so does motivation to learn. Therefore, Hypothesis 2 is supported.

Table 3

Summary of Hierarchical Regression Analyses for Workplace FoMO and Motivation to Learn (N = 163)

	Motivation to Learn							ΔR^2	p
	Model 1			Model 2					
	β	t	p	β	t	p			
Model 1							.150	.000**	
Age	-.17	-4.15	.000**	-.16	-3.70	.000**			
Gender	-.10	-1.11	.271	-.08	-.91	.367			
Tenure	.07	1.33	.185	.08	1.47	.144			
Management Position	-.01	-.05	.963	-.03	-.25	.807			
Model 2							.028	.022*	
Workplace FoMO				.12	2.32	.022*			

Note *P < .05; **P < .001

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Table 4

Summary of Hierarchical Regression Analyses for the Moderating Effect of Mindfulness on Work Engagement (N = 165)

	Work Engagement							
	Model 1			Model 2			ΔR^2	<i>p</i>
	β	<i>t</i>	<i>p</i>	β	<i>t</i>	<i>p</i>		
Model 1							.106	.000**
Workplace FoMO	.11	1.13	.261	.07	.74	.463		
Mindfulness	.55	4.39	.000**	.53	4.26	.000**		
Model 2							.022	.045*
Moderator ^a				-.15	-2.02	.045*		

Note ^aWorkplace FoMO*Mindfulness; **P* < .05; ***P* < .001

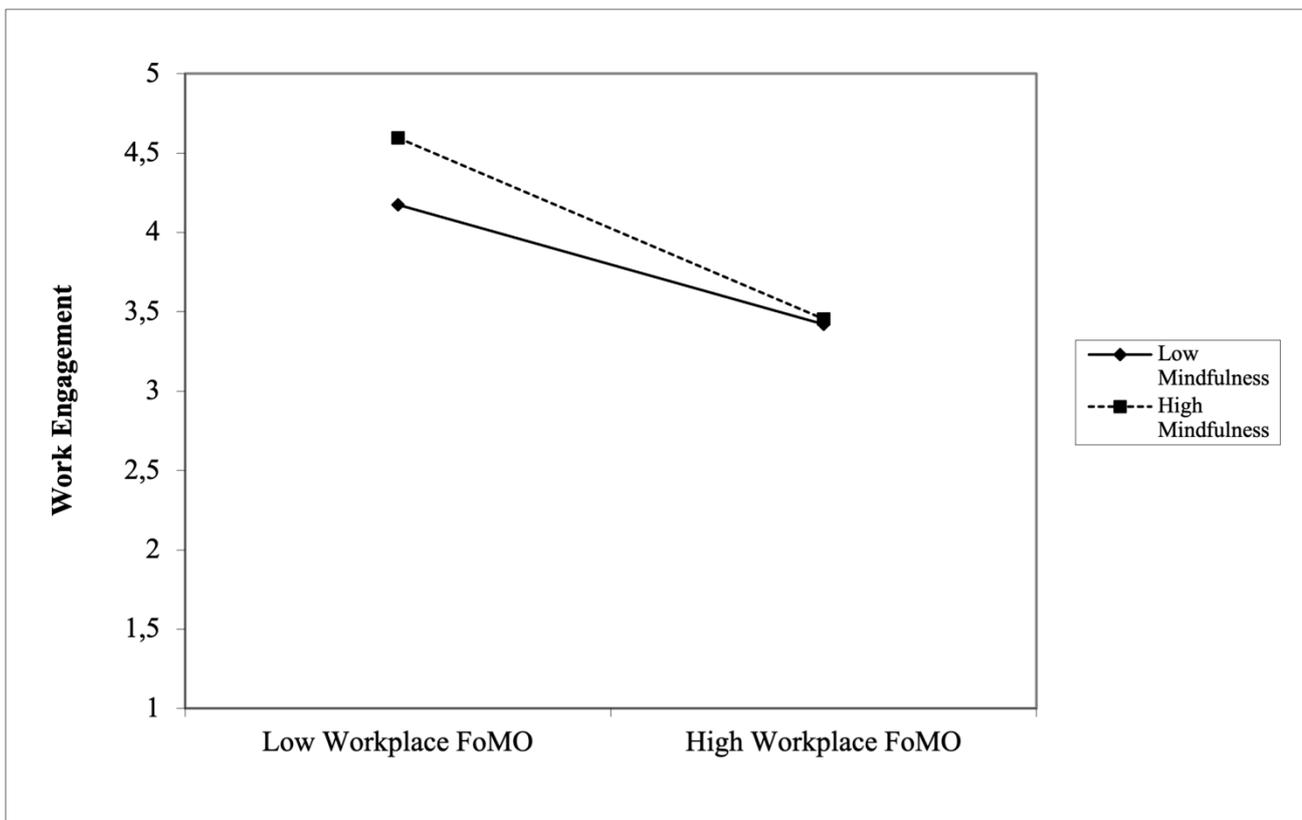
Moderation Mindfulness

To test Hypotheses 3 another hierarchical multiple regression analyses were conducted. It was tested whether mindfulness moderates the relationship between workplace FoMO and work engagement by weakening the negative hypothesized association. Table 4 shows that in the first model workplace FoMO and mindfulness were added. Mindfulness showed to have a significant positive association with work engagement in the first model ($\beta = .55, p = <.001$). Workplace FoMO did not have a significant association with work engagement in the first model ($\beta = .11, p = .261$). The second model ($R^2 = .106$) adds the moderator (*workplace FoMO*mindfulness*), explaining 2,2% more variance than the first model ($R^2 = .128$), this is a significant change ($p = .045$). The second model showed – again – that mindfulness had a significant association with work engagement ($\beta = .53, p = <.001$), and that workplace FoMO did not have a significant association with work engagement ($\beta = .07, p = .463$). Furthermore, model 2 shows a significant interaction effect of workplace FoMO and mindfulness on work engagement ($\beta = -.15, p = .045$). Examination of the interaction plot in figure 2 showed a decreasing interaction effect of workplace FoMO and mindfulness on work engagement. Primarily for employees with high levels of mindfulness, the interaction plot showed that there is a negative effect between workplace FoMO and work engagement. The

higher the level of mindfulness, the more workplace FoMO decreases work engagement. This implies that mindfulness strengthens the association between workplace FoMO and work engagement, instead of weakening this association as hypothesized in Hypothesis 3. Resulting in Hypothesis 3 not being supported.

Figure 1

Interaction Plot of Workplace FoMO and Mindfulness on Work Engagement



To further explore the interaction effect of workplace FoMO and mindfulness, it was tested whether mindfulness also strengthens the relationship between workplace FoMO and motivation to learn. Table 5 shows that in the first model workplace FoMO and mindfulness were added and in the second model the moderator (*workplace FoMO * mindfulness*) was added. The results show that the second model ($R^2 = .111$) explains 1,8% more variance than the first model ($R^2 = .093$), this change is not significant ($p = .075$). Workplace FoMO did show to be a significant predictor in both models (model 1: $\beta = .22, p < .001$; model

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2: $\beta = .20, p = <.001$). Model 2 showed that the moderator had no significant association with the motivation to learn ($\beta = -.08, p = .075$).

Table 5

Summary of Hierarchical Regression Analyses for the Moderating Effect of Mindfulness on Motivation to Learn (N = 165)

	Motivation to Learn						ΔR^2	<i>p</i>
	Model 1			Model 2				
	β	<i>t</i>	<i>p</i>	β	<i>t</i>	<i>p</i>		
Model 1							.093	.000*
Workplace FoMO	.22	4.08	.000*	.20	3.69	.000*		
Mindfulness	.08	1.13	.261	.07	.99	.322		
Model 2							.018	.075
Moderator ^a				-.08	-1.79	.075		

Note ^aWorkplace FoMO*Mindfulness; *P < .05; **P < .001

Discussion

The purpose of this study was to answer the research question: “What is the association between workplace FoMO and work engagement and motivation to learn; and does mindfulness have a moderating effect on the relation between workplace FoMO and work engagement?”. To answer this research question participants were asked to complete a survey with questions related to workplace FoMO, work engagement, motivation to learn and mindfulness.

Workplace FoMO and Work Engagement

Based on literature about workplace FoMO and work engagement (Budnick et al., 2020; Bakker et al., 2020), it was expected that workplace FoMO would decrease work engagement. Contrary to this expectation, the results indicated that workplace FoMO does not decrease work engagement. Neither a negative nor a positive relationship was found between workplace FoMO and work engagement. In other

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words, workplace FoMO did not have any relation with work engagement. This implies that Hypothesis 1 should be rejected.

A possible explanation for why no association was found between workplace FoMO and work engagement could be that workplace FoMO does not reduce all three component of work engagement (*vigor, dedication, absorption*; Bakker et al., 2011). Workplace FoMO may only reduce one – or two – of these components. Resulting to no decrease in work engagement overall. Future research should be done to see if this distinction can indeed be made.

The results support the findings of Budnick and colleagues (2020). Budnick and colleagues (2020) did not find a positive or a negative association between workplace FoMO and work engagement either. A possible explanation could be that although workplace FoMO may create distractions, it may not necessarily lead to lower work engagement because the distraction is only limited (e.g., an employee shortly checking their phone to reduce informational exclusion; Budnick et al., 2020). Because research on the association between workplace FoMO and work engagement is limited, this study adds to research in this scientific field by confirming previous findings.

Workplace FoMO and Motivation to Learn

As expected, a positive association between workplace FoMO and motivation to learn was found. Higher levels of workplace FoMO showed to lead to a higher motivation to learn, supporting Hypothesis 2. This could mean, for example, that employees try to reduce informational exclusion by learning more as this could possibly help close the gap to information missed when not present. The fear of informational exclusion could be reduced by having a higher motivation to learn as this may lead to learning more.

In addition, this might imply that workplace FoMO indeed consists out of a combination of personal and situational characteristics that influence the motivation to learn (Kontoghiorghes, 2002). Workplace FoMO could be seen as a situational characteristic as workplace FoMO may occur in the situation when an employee is away or disconnected from work (Budnick et al., 2020), and as a personal characteristic as

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the level of workplace FoMO differs per individual. Future research should be done to investigate what specific situations trigger workplace FoMO most. Additionally, another recommendations for future research is to investigate a possible relationship of personality traits with workplace FoMO.

Workplace FoMO, Mindfulness and Work Engagement

It was expected that mindfulness would weaken the association between workplace FoMO and work engagement. Despite of finding a significant association of the interaction between workplace FoMO and mindfulness on work engagement, Hypothesis 3 is not supported because the association found is not in the hypothesized direction. It was found that mindfulness strengthens the association between workplace FoMO and work engagement, as a higher level of mindfulness showed a negative association between workplace FoMO and work engagement. This means that mindfulness strengthens the effect of workplace FoMO on work engagement. In other words, when the level of mindfulness increases, workplace FoMO decreases the level of work engagement more.

It is noteworthy that workplace FoMO does not have a negative association – or a positive association – with work engagement on its own. Mindfulness, on the other hand, showed to have a positive relation with work engagement. Meaning that the level of work engagement increases when the level of mindfulness increases. This positive relation between mindfulness and work engagement is in line with previous research from Liu and colleagues (2020). Liu and colleagues (2020) suggested that the positive influence of mindfulness on work engagement was shown by an increase of stable attention, self-awareness, and self-regulation.

The expectation that mindfulness would weaken the association between workplace FoMO and motivation to learn originated from the possibility that more mindfulness would reduce workplace FoMO. Despite correlation analysis suggesting a negative correlation between workplace FoMO and mindfulness (see *Table 1*), this did not lead to the improvement of work engagement. The results suggested a strengthening interaction, which in this case can be described as a violating effect. The effect is labeled as

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violating because a weakening effect was anticipated – as the predictor (workplace FoMO) and moderator (mindfulness) variable have a negative relationship (i.e., one positive and the other negative, positive mindfulness and negative mindfulness) –, but instead the interaction term strengthens the relationship (thus violating basic intuition; Gardner, Harris, Kirkman & Mathieu, 2017). The found result being counterintuitive, might be a possible explanation for not finding the hypothesized association as based on intuition mindfulness was expected to weaken the association between workplace FoMO and work engagement. A recommendation for future research is to examine why the results are counterintuitive.

In addition, exploratory research was conducted to examine whether the interaction between workplace FoMO and mindfulness also had a strengthening effect on the relation between workplace FoMO and motivation to learn. The results showed no significant interaction effect of workplace FoMO and mindfulness on the motivation to learn. Meaning that the interaction between workplace FoMO and mindfulness has no positive or negative relation with work engagement. This adds to the scientific research on workplace FoMO, mindfulness and motivation to learn.

Practical Implications

The results of this study have various practical implications. First, organizations need not to be concerned that the work engagement of its employees will be lowered by workplace FoMO because work engagement was not influenced negatively or positively by workplace FoMO.

In addition, the positive association between workplace FoMO and motivation to learn suggests that a certain level of workplace FoMO could be beneficial for employees and organizations as the motivation to learn increases. However, it should be taken into consideration that higher workplace FoMO is also associated with higher burnout levels among employees (Budnick et al., 2020). Future research will need to investigate where the positive consequences of workplace FoMO (i.e., higher motivation to learn) turn into negative consequences (i.e., work burnout).

Furthermore, the study shows that age may play a crucial role in relation to workplace FoMO. Age showed a negative correlation with workplace FoMO, suggesting that workplace FoMO is higher for

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younger employees. A possible explanation could be that general FoMO is overall negatively related to age (Przybylski et al., 2013). This negative relation may be the same for workplace FoMO since younger people are generally more sensitive to general FoMO. Organizations should take into consideration that their younger employees may experience higher levels of workplace FoMO. Further research should be done to examine the association between workplace FoMO and age.

Limitations

This study has a few limitations that should be discussed. A first limitation is that the suggested number of participants by G-power was not reached. It was suggested that 196 participants should participate, and only 166 participants did. Meaning a shortage of 30 participants, which could have possibly led to less power of the study. Future study should be conducted with more participants.

In line with the above, the educational level and the hours that the participants on average work – according to their contract – were excluded from the analyses. The data on the educational level was excluded because approximately 95% of the participants had a high educational level (HBO and University). The hours that participants work on average were excluded as approximately 87% worked long hours (31-40 hours and 40+ hours). Using this data could have possibly threatened the external validity of the study because the found level of education and hours working on average differs substantially from the population. Despite the fact that not including these data in the analyses was a carefully made choice, it is recommended that future research does include these two variables as control variables. Because they may have an effect on both work engagement and motivation to learn. A larger dataset in future research will potentially help to make the data more similar to reality.

A second limitation of this study is the cross-sectional nature. The results reflect observed relationships and therefore no causal claims can be made. It is recommended that future research uses a longitudinal design to examine whether causal claims can be made.

A last possible limitation that could have affected the results, is that this study took place in the aftermath of the corona pandemic (COVID-19). Due to restrictions of the government during the pandemic, (most) organizations needed to let their employees work from home. Because the data was collected during the aftermath of these restrictions, many organizations were still dealing with employees who are working from home. It is unclear whether the participants were still working from home, at the office or a combination. The level of workplace FoMO is possibly influenced by the place where the participants are working. For example, working from home may cause more workplace FoMO because an employee could possibly fear relational or informational exclusion. A recommendation for future research is that the employee's work location be considered in the analyses.

Conclusion

Employees experience workplace FoMO as they are not present or disconnected from work. The results of this study suggest that workplace FoMO has no association with work engagement. In addition, the results suggest that workplace FoMO has a positive association with the motivation to learn. When employees experience workplace FoMO, it may be beneficial to their motivation to learn. Furthermore, the results suggest that the interaction between workplace FoMO and mindfulness decreases the level of work engagement. Lastly, the results suggest that the interaction between workplace FoMO and mindfulness has no predicting relationship to the level of motivation to learn. Because workplace FoMO is a relatively new concept, future research will need to further clarify the full range of effects of workplace FoMO and the ways in which workplace FoMO itself is affected.

References

- Albers, K. (2020). Always on mentality: The effects of workplace telepressure on health and motivation of the Dutch young workforce examining the moderating role of workplace FoMO and social comparison orientation. *Utrecht University, Master thesis*.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European journal of work and organizational psychology, 20*(1), 4-28.
<https://doi.org/10.1080/1359432X.2010.485352>
- Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822-848.
<https://doi.org/10.1037/0022-3514.84.4.822>
- Budnick, C. J., Rogers, A. P., & Barber, L. K. (2020). The fear of missing out at work: examining costs and benefits to employee health and motivation. *Computers in Human Behavior, 104*, 106161.
<https://doi.org/10.1016/j.chb.2019.106161>
- Cook, D. A., & Artino Jr, A. R. (2016). Motivation to learn: an overview of contemporary theories. *Medical education, 50*(10), 997-1014. <https://doi.org/10.1111/medu.13074>
- Elhai, J. D., Yang, H., & Montag, C. (2021). Fear of missing out (FOMO): overview, theoretical underpinnings, and literature review on relations with severity of negative affectivity and problematic technology use. *Brazilian Journal of Psychiatry, 43*(2), 203-209.
<https://doi.org/10.1590/1516-4446-2020-0870>
- Gardner, R. G., Harris, T. B., Li, N., Kirkman, B. L., & Mathieu, J. E. (2017). Understanding “it depends” in organizational research: A theory-based taxonomy, review, and future research agenda concerning interactive and quadratic relationships. *Organizational Research Methods, 20*(4), 610-638.
<https://doi.org/10.1177%2F1094428117708856>
- Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at work. In A. Joshi, H. Liao &

MOTIVATION TO LEARN AND THE MODERATING ROLE OF MINDFULNESS

J.J. Martocchio (Ed.), *Research in Personnel and Human Resources Management* (pp. 115-157).

Bingley: Emerald Group Publishing Limited. [https://doi.org/10.1108/S0742-7301\(2011\)0000030005](https://doi.org/10.1108/S0742-7301(2011)0000030005)

Kontoghiorghes, C. (2002). Predicting motivation to learn and motivation to transfer learning back to the job in a service organization: A new systemic model for training effectiveness. *Performance Improvement Quarterly*, 15(3), 114-129.

<https://doi.org/10.1111/j.1937-8327.2002.tb00259.x>

Liu, S., Xin, H., Shen, L., He, J., & Liu, J. (2020). The influence of individual and team mindfulness on work engagement. *Frontiers in psychology*, 10, 2928. <https://doi.org/10.3389/fpsyg.2019.02928>

Milyavskaya, M., Saffran, M., Hope, N., & Koestner, R. (2018). Fear of missing out: prevalence, dynamics, and consequences of experiencing FOMO. *Motivation and Emotion*, 42(5), 725-737.

<https://doi.org/10.1007/s11031-018-9683-5>

Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29, 1841–1848.

<https://doi.org/10.1016/j.chb.2013.02.014>

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire a cross-national study. *Educational and Psychological Measurement*, 66(4), 701-716.

<https://doi.org/10.1177%2F0013164405282471>

Sutcliffe, K. M., Vogus, T. J., & Dane, E. (2016). Mindfulness in organizations: A cross-level review. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 55–

81. <https://doi.org/10.1146/annurev-orgpsych-041015-062531>

Tanhan, F., Özok, H. İ., & Tayiz, V. (2022). Fear of missing out (FoMO): A current

review. *Psikiyatriye Guncel Yaklasimlar*, 14(1), 74-85. <https://doi.org/10.18863/pgy.942431>

Taris, T. W., & Feij, J. A. (2004). Learning and strain among newcomers: A three-wave study on the effects of job demands and job control. *The Journal of Psychology*, 138(6), 543-563.

<https://doi.org/10.3200/JRLP.138.6.543-563>

Appendix A

Workplace Fear of Missing Out Measurement Scale (Budnick et al., 2020; Albers, 2020)

Please indicate your agreement with each statement while thinking of how you typically feel or feel on average when away (e.g., off duty) or disconnected (e.g., not available via email, text, or instant messaging devices) from work.

When I am absent or disconnected from work...

1. I worry that I will miss out on networking opportunities that my coworkers will have.
2. I am constantly thinking that I might miss opportunities to make new business contacts.
3. I am constantly thinking that I might miss opportunities to strengthen business contacts.
4. I fear that my coworkers might make business contacts that I won't make.
5. I get anxious that I will miss out on an opportunity to make important business connections.
6. I worry that I might miss out on valuable work-related information.
7. I worry that I will miss out on important information that is relevant to my job.
8. I worry that I might miss important work-related updates.
9. I worry I will not know what is happening at work.
10. I worry that I will miss out on important work-related news.
11. I am worried that I will miss on an opportunity to move up.
12. I am worried that my colleagues will get career opportunities that I will not get.
13. I worry that I will be judged for my absence.
14. I worry that my colleagues are having fun without me.
15. I am worried that I am missing out on opportunities to bond with my colleagues.
16. I worry that I miss out on valuable career opportunities.

Items had to be rated on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.

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Utrecht Work Engagement Scale (Schaufeli et al., 2006)

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you felt it by crossing the number (from 1 to 6) that describes how frequently you feel that way.

1. At my work, I feel bursting with energy.
2. At my job, I feel strong and vigorous.
3. I am enthusiastic about my job.
4. My job inspires me.
5. When I get up in the morning, I feel like going to work.
6. I feel happy when I am working intensely.
7. I am proud of the work that I do.
8. I am immersed in my work.
9. I get carried away when I am working.

Items had to be rated on a seven-point Likert scale ranging from 'never' to 'every day'.

Motivation to learn scale (Taris & Feij, 2004)

Please indicate to what extent you agree with the following statements, using the following answering categories: 1=strongly disagree, 2=disagree, 3=neutral (neither agree, nor disagree), 4=agree, and 5=strongly agree.

1. I have recently sought advice from my co-workers, family or other people about additional training or experience I need to improve my future work prospects.
2. Since I have worked here I have initiated talks with my supervisor about training of work assignments I need to develop skills that will help my future work chances.
3. I have made my supervisor aware of my work aspirations and goals.
4. I have developed skills which may be needed in future positions.
5. I have gained experience in a variety of work assignments to increase my knowledge and skills.
6. I have developed more knowledge and skills critical to my work unit's operation.

Items had to be rated on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.

Mindfulness Attention Awareness Scale (Brown & Ryan, 2003)

Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1. I could be experiencing some emotion and not be conscious of it until some time later.
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.
3. I find it difficult to stay focused on what's happening in the present.
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
6. I forget a person's name almost as soon as I've been told it for the first time.
7. It seems I am "running on automatic," without much awareness of what I'm doing.
8. I rush through activities without being really attentive to them.
9. I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.
10. I do jobs or tasks automatically, without being aware of what I'm doing.
11. I find myself listening to someone with one ear, doing something else at the same time.
12. I drive places on 'automatic pilot' and then wonder why I went there.
13. I find myself preoccupied with the future or the past.
14. I find myself doing things without paying attention.
15. I snack without being aware that I'm eating.

Items had to be rated on a six-point Likert scale ranging from 'almost always' to 'almost never'.