

The potential role of self-control and psychological flexibility for job satisfaction among working people

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Abstract

Job satisfaction is an important part of quality of life and contributes to organizational success. The current study investigated the potential role of self-control and psychological flexibility as personal resources for job satisfaction. Both their independent role as well as the combination of self-control and psychological flexibility with regard to job-satisfaction were examined. Participants completed an online questionnaire. Only working people were included in this study ($N = 235$). Hierarchical regression analyses showed that neither self-control nor the interaction of self-control and psychological flexibility were associated with job satisfaction. Higher scores on psychological flexibility were significantly associated to job satisfaction. This finding is promising for using psychological flexibility to promote job satisfaction within organizations.

Keywords: job satisfaction; psychological flexibility; self-control

Introduction

Since many people spend an extensive part of their waking hours working, work is considered to be an important aspect in one's life. Work delivers the basic needs of economic substances and contributes to a sense of social identity and utility (Faragher, Cass, & Cooper, 2005). A desired result of working is to feel satisfied within one's job. Job satisfaction refers to a positive emotional state that results from the appraisal of one's experiences at work (Ellemers, Kingma, van de Burgt, & Barreto, 2011). Job satisfaction provides various beneficial outcomes for both individuals and organizations; it has been related to happiness, health and fulfilled feelings (Faragher et al., 2005). Furthermore, it has been related to less sickness absence and to employee motivation, which is crucial to organizational success and organizational commitment, that in turn leads to lower levels of turnover intent (Ellemers et al., 2011; Lambert & Hogan, 2009; Roelen, Koopmans, Notenbomer, & Groothoff, 2008). The happy-productive worker hypothesis also emphasizes the importance of satisfied employees. It states that job-satisfaction is related to achievement and productivity (Lucas & Diener, 2004). It can be assumed that job satisfaction is a desired outcome of work, where both individual and organization will stand for. Therefore, it remains important to picture which factors can contribute to higher levels of job satisfaction.

One influential model that is concerned with possible positive and negative outcomes of work, is the Job demands-resources model. According to the job demands-resources model (Demerouti, Bakker, Nachreiner, & Schaufelli, 2001), there are two general different categories of work characteristics; job demands and job resources. Job demands are associated to health impairment, while job resources are associated to work engagement (Bakker & Demerouti, 2007). In addition, personal characteristics also play an important role in this model and can be considered as resources as well. They help employees achieve work goals and stimulate personal growth and development (Schaufelli & Taris, 2014). Personal resources can be defined as individuals' awareness of their abilities to successfully control and influence their environment, especially during challenging conditions (Hobfoll, Johnson, Ennis, & Jackson, 2003). Self-efficacy, optimism and organization-based self-esteem are examples of personal resources, which seem to be predictors of work engagement (Xanthopoulou, Bakker, Demerouti, &

Schaufeli, 2009). To investigate whether two valuable human skills can contribute as personal resources to achieve higher levels of job satisfaction, this thesis focuses on self-control and psychological flexibility as personal resources that may contribute to job satisfaction.

Self-control is an often investigated construct which is rooted in the cognitive-behavioral paradigm. It involves the ability to change or eliminate one's inner responses, as well as to interrupt undesired behavioral tendencies and refrain from acting on them (Tangney, Baumeister & Boone, 2004). Successful self-control is associated to a large number of positive outcomes in life, such as less impulse control problems (e.g. alcohol abuse), a better psychological adjustment, good interpersonal relationships, moral emotions and life-satisfaction (Cheung, Gillebaart, Kroese, & De Ridder, 2014; Dou, Nie, Wang, & Liu, 2016; Tangney et al., 2004). These findings suggest that a high self-control is not only an indicator of important consequences for individuals, but also for society as a whole (Friese, Frankenbach, Joh, & Loschelder, 2017). Self-control can therefore be announced as a personality trait that produces an optimal fit between a person and the environment (Baumeister, Vohs, & Tice, 2007; Cheung et al., 2014; Rothbaum, Weisz & Snyder, 1982). In the context of work, self-control is associated to higher levels of achievement and task performance (Tangney et al., 2004). Therefore, it is expected that self-control will also enhance the levels of job satisfaction among employees. In the current thesis, it was hypothesized that self-control is associated to higher levels of job satisfaction.

Where self-control helps people with situations that can be changed, psychological flexibility is another human skill that helps people dealing with situations that cannot be changed. Psychological flexibility is a construct that is emphasized within the Acceptance and Commitment Therapy (ACT; Hayes, Luoma, Bond, Masuda, & Lillis, 2006) paradigm. It can be defined as having contact with the present moment as a conscious human being and acting in accordance with one's chosen values based on what the situation allows (Hayes, 2004). Psychological flexibility consists of six components; cognitive defusion (learning to reduce reification: to over-identify a belief as it is a real event, acceptance (letting thoughts come and leave without wrestling with him), having contact with the present moment (to be aware of the here and now), observing the self (having access to a conscious and continuity sense of self), values (being aware of what values are important for the self) and committed action (setting

goals according to values and carrying them out). Human effectiveness should occur if these principles are pursued. The principles are shown in figure 1 that displays the Hexaflex model (Hayes et al., 2006). Although Acceptance and Commitment therapy is often used within clinical settings, it has also led to new interventions that can increase psychological flexibility in work settings. Increasing psychological flexibility of employees seems to be beneficial for positive organizational behavior; it increases employees' mental health, job performance and the ability to learn new skills at work and therefore doing their job more effectively (Bond & Hayes, 2002; Bond, Hayes, & Barnes-Holmes, 2006). Based on these outcomes, it was expected that psychological flexibility would also enhance the degree of job satisfaction. To investigate this, it was hypothesized that psychological flexibility is positively associated to job satisfaction.



Figure 1. Hexaflex model (Hayes et al., 2006).

Despite the fact that self-control and psychological flexibility are different in nature, it seems that they can possibly complement each other. People with a higher degree of psychological flexibility have a better capability to appraise where, when and to what extent they have control over situations and recognize target-related possibilities to use control effectively (Bond, Lloyd & Guenole, 2013). By choosing a mindfulness approach to their internal experiences, people are less focused on controlling undesired or complex experiences. Therefore, flexible people will have more attentional resources to observe goal-related opportunities in the current situation since limited cognitive resources on the task to control and regulate their psychological experiences are not expended (Bond et al., 2013). Moreover, mindfulness approaches are associated to less impulsiveness and greater levels of self-regulation (Flook, Goldberg, Pinger, & Davidson, 2015; Wittmann et al., 2014). In the other direction, psychologically flexible people base their decisions on how to act on their own values and goals. This can result in refraining from taking action if the desired behavior is not equal to someone's own values and goals (Bond et al., 2013), while acting against one's own values and goals can occasionally be required in a work environment. This all suggests that a balance between the degree of self-control and the degree of psychological flexibility is desirable in a work context. To investigate whether this combination makes a greater contribution to job satisfaction than the separate skills, the hypothesis was examined that the combination of self-control and psychological flexibility is positively associated to job satisfaction over and above the prediction of the two separate variables.

Therefore, the aim of this thesis was to examine whether self-control and psychological flexibility are associated to job satisfaction and whether the combination of those two skills is associated to job satisfaction over and above the additive prediction of the two separate factors. It is expected that self-control is positively associated to job satisfaction (hypothesis 1), that psychological flexibility is positively associated to job satisfaction (hypothesis 2) and that the combination of these two skills was positively associated to job satisfaction over and above the additive prediction of the two separate variables (hypothesis 3).

Methods

Procedure and participants

This study is part of a larger study examining the significance of psychological flexibility in various areas. The study is done by the Department of Psychology at Utrecht University. Participants were invited to take part in an online questionnaire study through a recruitment text via social media (Facebook, Linked-in) and via other online pages, websites and via email. The recruitment text consisted of information about the purpose of the study, the content of the study, an indication of the duration of participation (20-40 minutes) and a hyperlink to the questionnaire. In addition, it was mentioned that personal results are treated confidentially. Subsequently, informed consent was needed to be able to participate. Participants could thereby consciously decide to participate and they were given the ability to stop at any moment during the questionnaire. The study was approved by the ethical committee of the faculty of Social Sciences (FETC17-120). In total, 570 participants completed the questionnaire. Excluded were participants who did not have a job, leaving a sample of 239 participants. Characteristics of the included participants are shown in table 1. Most participants were female and high educated.

Instruments and operationalizing

Self-control

The Brief Self-control scale (Tangney et al., 2004) was used to measure the trait self-control. The questionnaire consists of 13 items, of which 9 items are reversed items. The items were answered on a 5-point Likert scale, ranging from 'Not all like me' (1) to 'Very much like me' (5). An example item is: 'I am good in resisting temptation'. An example of a reversed item of the self-control scale is: 'I say inappropriate things'. The internal consistency for the Brief Self-control scale was high in the current thesis ($\alpha = .809$).

Psychological Flexibility

The Flexibility Index Test (FIT-60) (Batink, Jansen, & De Mey, 2012) was used to measure psychological flexibility. The scale consists of 60 items, including the following six subscales; acceptance, cognitive defusion, self as context, present moment, values and committed action. Items are based on a 7-point Likert scale, ranging from (0) 'Totally agree' to (6) 'Totally disagree'. An example item is: 'I observe my feelings without losing myself'. However, due to an error during the entry, the fit 60 questionnaire was filled in with a 5 point scale instead of a 7 point scale. For this reason, the items were reversed in SPSS from 0-4 into 0-6. The internal consistency for the six components of the FIT-60 scale in the current thesis was high for acceptance ($a = .864$), cognitive defusion ($a = .812$), present moment ($a = .821$), committed action ($a = .806$) and acceptable for values ($a = .709$). The component 'self as context' had a lower internal consistency ($a = .575$). The internal consistency for the FIT-60 scale was high in the current thesis ($a = .943$).

Job satisfaction

To measure job satisfaction, the following item was used: 'All things considered (content work, salary, stress, management, colleagues), how satisfied are you with your current job'? The item was answered on a 7-point Likert scale, ranging from (1) 'Very dissatisfied' to 7 'Very satisfied'. This item was created based on the Job Satisfaction Questionnaire (Roelen et al., 2008) after consultation with prof.dr. Toon W. Taris.

Demographic variables

The demographic variables age and level of education were recoded into dichotomous variables. Gender was measured by three answer options (man, women, other). At the end, gender was recoded into two categories (0=male or other, 1=woman) since there was only one respondent who answered 'other'. Education level was measured by three Dutch categories: Primary education (primary, lower vocational and secondary general and vocational education),

secondary education (secondary general education and secondary vocational education) and high educated (applied scientific education, scientific education). It was finally recoded into two categories; high (applied scientific education and scientific education) and other, because only few people with less education than the university of applied sciences were included in the study.

Statistical analyses

SPSS (Statistical Package for Social Sciences) version 21.0 was used to realize various statistical analyses. Significance levels were set at $p < 0.05$ (two tailed). Residual plots in the hierarchical regression analyses showed that the variables are normally distributed. To test the hypotheses that self-control, flexibility and the interaction of self-control and flexibility were positively related to job satisfaction, multiple analyses were done. First of all, a Pearson correlation was calculated to see to what extent the main and demographic variables were interrelated.

Subsequently, a hierarchical regression analysis was performed to test whether self-control, psychological flexibility and the combination of those two variables were associated to job satisfaction. Effect sizes were calculated with Cohen's f^2 ($f^2 = R^2 / 1 - R^2$). R squares of the total models were used. An f^2 of .02 is considered as a small effect, an f^2 of .15 is considered as a medium effect and an f^2 of .26 is considered as a large effect (Cohen, 1988). To interpret significant interactions, regression lines for individuals with low (-1 S.D.) and high (+1 S.D.) levels of psychological flexibility were plotted for low (-1 S.D.) and high (+1 S.D.) levels of self-control (Aiken & West, 1991). Furthermore, additional post hoc hierarchical regression analyses were done to see which component of psychological flexibility was most strongly associated to job satisfaction.

Table 1

Characteristics of Participants (N = 239)

Measure	Description	<i>n</i>	%	<i>Median</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
Gender								
female		173	72.4					
male		65	27.2					
Age (years)				46.00	19	75	43.51	14.97
Education		192	81.7					
high								
other		43	18.3					
Self-control	1-5 item index			3.23	1.69	4.77	3.22	.61
Psychological flexibility	0-6 item index			4.05	2.05	5.38	3.96	.73
Job satisfaction	1-7 item index			6.00	1.00	7.00	5.66	1.26

Note. *min* = minimum value; *max*= maximum value; *M* = mean; *SD* = standard deviation; high education = applied scientific education and scientific education. Missing values provide a smaller sample for the variable education (N=235)

Results

Table 2 presents the results of the Pearson correlation test examining whether the main variables and the demographic variables were significantly associated. First of all, there was no significant correlation found between self-control and job satisfaction. There was a positive significant correlation of job satisfaction with psychological flexibility but not with self-control.

Furthermore, of the demographic variables a higher age was correlated with self-control, psychological flexibility and gender and a higher education was correlated with a higher age.

Table 2

Pearson's correlation for main variables and demographic variables (N=239)

	Job-satisfaction	Self-control	Psychological flexibility	Gender	Age	Education level
Job satisfaction	-	.118	.281**	-.102	.083	-.089
Self-control		-	.351**	.032	.207**	-.057
Psychological flexibility			-	-.049	.267**	-.037
Gender				-	-.131*	.066
Age					-	.204**
Education level						-

Note. (* = < 0.05, ** = < 0.01); Gender: dummy variable with 0=male or other and 1=female. Education: 0= high, 1= other; Due to missing values the sample size is smaller for the variable Education (N=235)

Hierarchical regression analyses

Table 3 presents the results of the hierarchical regression analyses examining whether self-control and psychological flexibility and their interaction were associated with job satisfaction. Furthermore, it shows whether gender, age and education level were associated with job-satisfaction. The regression analyses showed that in block 1, gender, age and education were not associated with job satisfaction. In block 2, self-control was not significantly associated with job satisfaction ($p > .05$). In block 2, psychological flexibility was significantly associated to job satisfaction ($t = 4.074, p < .001$). The score on job satisfaction will increase by .463 per 1 point higher on the scale of psychological flexibility. The effect size of the explained variance was small ($f^2 = 0.1$). In block 3, the interaction between self-control and psychological flexibility had no significant association with job satisfaction ($t = 1.057, p = .292$). Figure 1 displays the relation of self-control and psychological flexibility with job satisfaction. It shows that the association between psychological flexibility and job satisfaction is most pronounced.

Table 3

Hierarchical regression analyses predicting job satisfaction from demographic variables, self-control and psychological flexibility in 235 working people.

	<i>b</i>	β	<i>Adj.R</i> ²
Block 1			.012
Gender	-.203	-.073	
Age	.008	.098	
Education	-.337	-.104	
Block 2			.074**
Gender	-.205	-.073	
Age	.001	.007	
Education	-.178	-.055	
Self-control	.082	.039	
Psychological flexibility	.453**	.263	
Block 3			.072
Gender	-.206	-.074	
Age	.000	.005	
Education	-.165	-.051	
Self-control	.087	.042	
Psychological flexibility	.463**	.269	
Self-control x Psychological flexibility	.111	.043	

Note. (* = <0.05, ** = <0.01); Dependent variable: job satisfaction

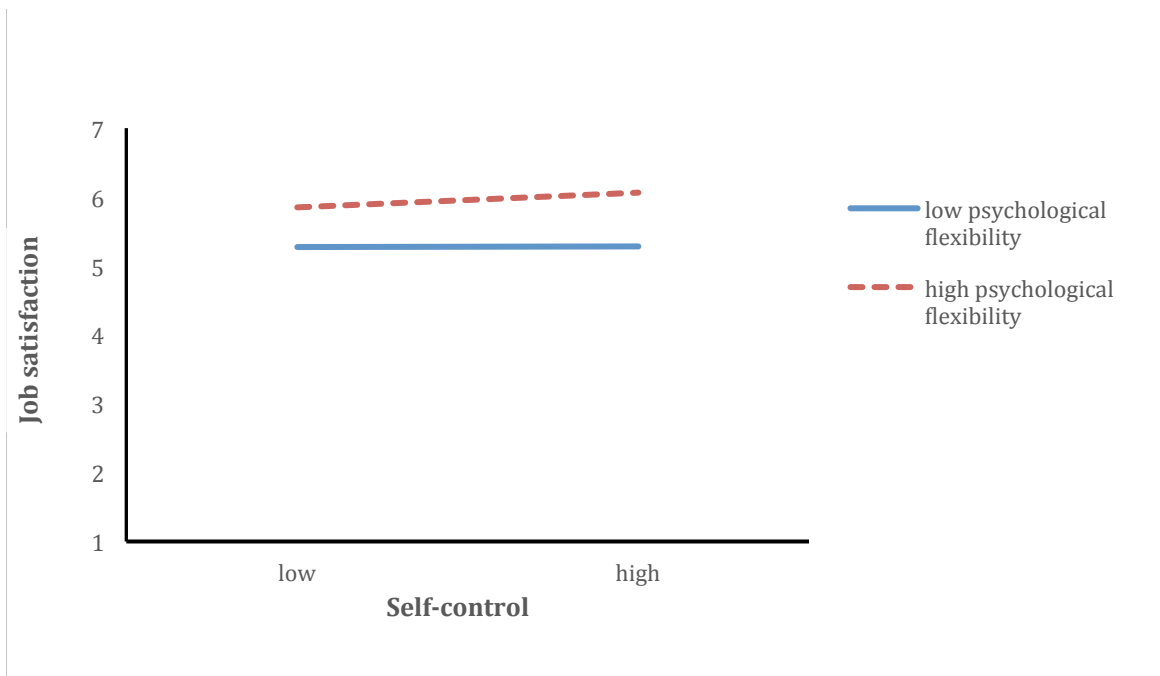


Figure 2. Job satisfaction associated with psychological flexibility and self-control

Post hoc regression analyses

Given the significant correlation between psychological flexibility and job satisfaction, post hoc regression analyses were conducted to examine which components of psychological flexibility were especially associated with job satisfaction. Similar regression analyses were done as in table 2. Table 3 shows the results of the six additional regression analyses examining whether the association between psychological flexibility and job satisfaction (table 2) was specifically explained by one or more subscales of the FIT-60 scale, corrected for all variables. The regression analyses showed that all six components were significantly associated with job satisfaction ($p < 0.05$). The subscale 'values' has the largest association with job satisfaction ($\beta = .296$) with a small effect size of the explained variance ($f^2 = 0.13$).

Table 4

Post hoc Hierarchical Regression Analyses predicting job satisfaction from the six components of Psychological Flexibility with Cohen's f^2 effect sizes for the six components of Psychological Flexibility.

Variable	<i>b</i>	β	f^2
Acceptance	.238*	.198	.07
Cognitive defusion	.188*	.182	.05
Self	.333**	.200	.07
Present moment	.243**	.191	.07
Values	.582**	.296	.13
Committed action	.331*	.204	.08

Note. (* = < 0.05, ** = < 0.01); dependent variable: job satisfaction; variables were corrected for other variables (see table 2).

Discussion

The aim of the current study was to investigate the potential role of self-control and psychological flexibility as two personal skills to job satisfaction and to investigate whether the combination of these two skills was associated to job satisfaction, over and above the two separate skills. The findings show that neither self-control nor the interaction of self-control and psychological flexibility were associated with job satisfaction. Furthermore, the findings show that psychological flexibility was significantly associated with job satisfaction.

Hypothesis 1, self-control is positively associated with job satisfaction, cannot be confirmed through the current study. This seems not in line with existing literature, which shows that self-control is related to various positive outcomes in life (Tangney et al., 2004). However, in the context of work there is also another view on self-control. This view emphasizes the existence of self-control demands (e.g. impulse control and resisting distractions) as an often-neglected source of strain at work (Schmidt & Diestel, 2015). In line with the job demands-resources model (Demerouti et al., 2001), this would suggest that self-control could be regarded as a demand instead of a resource. This consideration would mean that self-control could impede levels of job satisfaction, which was also not found in the current study. Thereby, self-control in work settings is mainly emphasized as a predictor of outcomes such as achievement and task performance (Tangney et al., 2004), not specifically to positive subjective experiences of work. Despite the fact that the current thesis does not allow causality, the results may reflect that self-control is important for performance at the workplace, but not necessarily for feelings of job satisfaction. However, a methodological limitation can also be an explanation for the current result. The majority of the participants in the current thesis were high-educated woman. This unrepresentative sample does not provide insight into the levels of self-control among the general, working population in the Netherlands.

Hypothesis 2, psychological flexibility is positively associated to job satisfaction, can be confirmed through the current study. This is in line with discussed studies that emphasized the beneficial outcomes of this human skill (Bond et al., 2003; Bond et al., 2006).

This result may, among other explanations, reflect that employees with a high psychological flexibility are able to better process possible negative situations at work because of their ability

to accept situations the way they are, resulting in a more positive subjective experience of work than people with lower levels of psychological flexibility. Furthermore, the component ‘values’ was most strongly associated to job satisfaction. This is in line with the view that people benefit from acting based upon their own values because this empowers what they find important in life (Bond et al., 2013). Therefore, the current result might indicate that flexible people who act upon their own, free chosen values feel happier within their job and that acting upon these values is even more important to enhance levels of job satisfaction than the other components of psychological flexibility.

Despite the fact that there was only a small effect found and that no causality can be inferred through the current thesis, it is a promising outcome that psychological flexibility is associated to job satisfaction. In line with the current results, it is promising to increase levels of psychological flexibility in the workplace since it is associated to job satisfaction. Acceptance and Commitment therapy in the workplace (Bond & Hayes, 2002) has already been successfully applied to enhance levels of psychological flexibility among employees and is aiming to teach people several strategies as part of the components of psychological flexibility in the context of work (e.g. the acceptance of challenging work events, the ability to define values and act upon these values in their jobs) (Bond, Hayes, & Barnes-Holmes, 2006). This might be a suitable approach to achieve higher levels of job satisfaction within organizations. Furthermore, psychological flexibility might also be a valuable personal characteristic to take into account during selection processes or assessments by having applicants fill in the FIT-60 questionnaire.

Hypothesis 3, the combination of self-control and psychological flexibility is positively associated to job satisfaction over and above the prediction of the two separate variables, cannot be confirmed in the current thesis. The interaction between self-control and psychological flexibility on job satisfaction was not significant. This could possibly indicate that these two human skills are too different in nature to complement each other, since the skills are rooted in different paradigms. It could also reflect that psychological flexibility is more important to achieve higher levels of job satisfaction than self-control. This is in line with the developmental change in behavioural paradigms, which shows that the focus in behavioural therapies has shifted from changing psychological internal events directly, towards an approach that is aimed to

change an individual's relationship with one's psychological events through acceptance and mindfulness based interventions (Bond et al., 2008; Wilson, Sandoz, Kitchens, & Roberts, 2010).

Although no causality can be inferred, the present thesis study has yielded an interesting result. The association of psychological flexibility with job satisfaction is a promising outcome and may contribute to achieve higher levels of job satisfaction within organizations. However, the study has also a number of methodological limitations. First of all, no causality can be inferred from the correlational observations. Experimental studies are needed to clarify causal relations. Furthermore, although the intention was to acquire a sample from the general population, the analyses were done in a sample not representative of the general working population including mainly high-educated women. In addition, no distinction has been made between different professional practices. Therefore, future studies could focus on a representative sample to compare with the working, Dutch population. For example, by purchasing the questionnaire in public areas. Furthermore, it would be interesting to include respondents with various professions.

The current study shows that psychological flexibility is associated with higher levels of job satisfaction, which is a promising result. Since psychological flexibility is associated with job satisfaction and job satisfaction in turn enhances organizational success (Ellemers et al., 2011; Lambert & Hogan, 2009; Roelen et al., 2008), it appears valuable for organizations to actively encourage the amount of satisfied employees. Moreover, since psychological flexibility has already been successfully promoted through Acceptance and Commitment therapy in the workplace (Hayes et al., 2006), this might be a fruitful approach to increase job satisfaction within organizations.

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