

# Predicting Organizational Citizenship Behavior: A Closer Look at the Antecedent Job Autonomy and Possible Mediators of the Relationship

Anjana Löhden

Master Thesis – Work, Organizational, and Personnel Psychology

S3170527
December 2021
Department of Psychology
University of Groningen
Examiner/Daily supervisor:
Dr. Bibiana M. Armenta Gutierrez

A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.

#### Abstract

Organizational citizenship behavior has many benefits such as better organizational performance and is therefore sought after. In an increasingly competitive work field, it is of interest which factors could potentially influence it. Job autonomy has been found to be a potential predictor of it. In this study, we examine how this relationship works and what are the mechanisms behind it. For our hypotheses, we postulated that, first of all, there is a direct relationship between job autonomy and organizational citizenship behavior. Secondly, this relationship is mediated by job satisfaction, and thirdly that this relationship of job autonomy and organizational citizenship behavior is mediated by self-efficacy. We are therefore investigating two mediational models. In a cross-sectional study, we investigated the mediating role of job satisfaction and self-efficacy on the relationship between job autonomy and organizational citizenship behavior. We ran a simple mediational analysis (N= 155) with PROCESS by Hayes. Conflicting with the assumptions we made the results showed no direct effect of job autonomy on organizational citizenship behavior. But there was a significant mediational effect of job satisfaction for this relationship. The data could not support the mediational effect of self-efficacy. This study concludes that more autonomous jobs can influence organizational citizenship behavior through the mediational mechanism. Theoretical and practical implications of these results are discussed. Since managers can control job autonomy, this is an important tool for their practice to have more organizational citizenship behavior amongst employees.

*Keywords:* job autonomy, organizational citizenship behavior, organizational psychology, job design, mediation

# Predicting Organizational Citizenship Behavior: A Closer Look at the Antecedent Job Autonomy and Possible Mediators of the Relationship

When you think about your favorite co-workers, what sets them apart from the others? Most likely, they are the ones that help you when you need a helping hand. Or the ones that go the extra mile for the team to ensure that the outcome will be great for everyone and the organization. But what is this behavior, and is there a way to enhance it to make work more pleasant and fruitful for everyone? These behaviors are examples of a wide range of behaviors called organizational citizenship behaviors (OCB). Since these behaviors can significantly impact how we interact with our co-workers, it is important to delve deeper into the topic.

To begin with, when employees have adequate autonomy, this can enhance their performance and OCB (Park, 2016). But why is that the case? In this study, we want to investigate further the relationship between job autonomy and OCB and how it is affected by other determinants. Since increasing organizational performance is a sought-after goal, it is essential to investigate the antecedents of OCB and the underlying mechanisms of this behavior more closely. By doing so, organizational performance and competitiveness can be improved (Rioux & Penner, 2001). OCB can be described as voluntarily displaying behaviors that are not recognized by the company's reward system such as, e.g., support and cooperation with co-workers and giving helpful feedback to superiors (Kim & Gong, 2017; Foote & Li-Ping Tang, 2008). The benefits of OCB include customer satisfaction, performance at the group level, and lower turnover, which are desirable outcomes for organizations (Podsakoff et al., 2009; Organ et al., 2006). In addition to that, Kim and Gong (2017) stated that individuals who engage in OCB more often are also more helpful towards their co-workers by, e.g., sharing their expertise or offering beneficial suggestions to their managers. If the antecedents of OCB are known, managers can promote these behaviors in their employees, which leads to higher organizational performance.

We focus on job autonomy as an antecedent of OCB because job autonomy is the ability of the employee to make their own decisions about their tasks. Hence this antecedent is interesting as managers can potentially influence it and thus impact OCB (Bailien et al., 2011). Multiple studies found that core job characteristics (e.g., job autonomy) are essential antecedents of OCB, yet few studies have explicitly investigated the relationship between autonomy and OCB (Park, 2016). Lastly, some studies have found a relationship between job autonomy and performance. Overall, this makes job autonomy an antecedent even more interesting for organizations, as a better performance of employees is desirable for them (Fried & Ferris, 1987; Liden et al., 2000).

This research focuses on potential factors that explain why job autonomy influences OCB. For this study, we assume that the logical mechanism that could explain this direct effect of job autonomy on OCB is through self-efficacy and job satisfaction. We chose these mediators as it has been found in previous research that individuals that are higher in self-efficacy also have a higher display of OCB (Bogler & Somech, 2004). Job satisfaction has been chosen as it is found to be a good predictor of OCB (Bateman & Organ, 1983). Therefore, the research model of this study is the direct effect of job autonomy on OCB and the two mediational effects of self-efficacy and job satisfaction (see Appendix A).

Consequently, the results of this research could be helpful for managerial practice, as it could help managers to understand better which interventions could improve OCB and how they could enhance job design to have a more frequent display of OCB by employees. In sum, this research is expected to help the research body in the following manner: This study looks at the relationship of job autonomy and OCB, including job satisfaction and self-efficacy as mediators that account for the mechanism behind this relationship. Further, if the research model proves to be significant, this research would also reinforce the social exchange theory by Blau (1964) as the theory is used as theoretical background for this study.

6

#### The effect of job autonomy on OCB

The positive relationship between job autonomy and OCB has already been proposed in the existing literature; for example, Capelli & Rogovsky (1998) found a strong causal relationship when measuring job design characteristics (one of the more significant ones being autonomy) and OCB. In a meta-analysis on OCB, Podsakoff and colleagues (2000) found that job tasks that motivate and create a sense of meaning in employees may be predictors of OCB. Research by Farh and colleagues (1990) found evidence for job characteristics such as job autonomy being essential predictors of OCB in their correlational study. Via a hierarchical regression analysis, they further found that task characteristics, such as job autonomy, can evoke a feeling of personal efficacy making employees more sensitive to discretionary behavior and responsibility. Job autonomy itself is defined as the amount a job grants an employee the opportunity to schedule their work and freely decide how to carry out their tasks (Hackman & Oldham, 1980). So far, job autonomy has been associated with positive outcomes. Consequently, we are also assuming that job autonomy is generally perceived as positive by employees and is valued by them (Alpkan et al., 2010; Bailien et al., 2011; Hennessey & Amabile, 2010).

In line with the previous findings, the more autonomy employees are provided with, the more discretion they have to decide how they want to perform their work. The increased discretion, in turn, will increase the display of citizenship behavior by the employees (Troyer et al., 2000; Morgeson et al., 2005). Based on this, one can thus derive that job autonomy may be a potential predictor of OCB. This would mean that the more autonomy employees are given by their manager, the more likely they would be to provide the manager, for example, helpful feedback or help other coworkers with work-related problems. These behaviors fall under the reciprocity norm. The norm states that individuals ought to repay the acts of kindness and support they have received from others (Burger et al., 2008; Yao & Wang,

2008). Therefore, most individuals will agree to do others a favor when they have received a favor from other individuals before. For example, an employee will be more likely to help their co-worker by explaining how a program works when the co-worker had helped them finish a task on time last month. This is not only necessary behavior for the organization, as this enhances overall organizational performance, but it is also another argument that job autonomy may directly affect OCB (Rioux & Penner, 2001). The above mentioned supports the claim that this relationship has a positive direct effect.

Lastly, this claim can be supported by the social exchange theory by Blau (1964). This theory states that individuals receiving favorable initial treatment from others will often behave the same way towards them afterward. This theory will lay the theoretical foundation for this study. An example of this theory in this relationship of OCB and job autonomy is that employees with highly autonomous jobs have more freedom to decide how and when to do their jobs. This, according to the theory by Blau, would lead them to reciprocate with more positive behaviors at work, such as OCB (Organ, 1997). A study by Farh and colleagues (1990) found support for this as their findings also suggested that autonomous jobs would enhance the desire of the employee to reciprocate the organization's support. One way to return this support would be engaging in more OCB (Park, 2016). Therefore, Blau's theory can be successfully used to claim that there may be a higher display of OCB if the task characteristic job autonomy is high. Our first hypothesis suggests that job autonomy is an antecedent of OCB.

**Hypothesis 1.** Perceived job autonomy is positively associated with the display of OCB by employees.

#### The mediating role of job satisfaction

Job autonomy is positively related to overall job satisfaction (DeCarlo & Agarwarl, 1999; Iliopoulou & While, 2010). DeCarlo and colleagues (1999) argued for this relationship

8

as they found support in their data that feelings of job autonomy can reinforce the feelings of job satisfaction. Hence, higher job autonomy gives the employees the sense that their job outcomes result from their efforts. Feelings of personal responsibility can cause the employees to have a more favorable affective and behavioral attitude towards their jobs (DeCarlo & Agarwarl, 1999). Therefore, previous research suggests that employees' feelings of support by their manager created by higher job autonomy have a positive relationship with them having higher job satisfaction. Thus, them being more content with various aspects of their job such as workload, supervision, or pay (Curry et al., 1986).

In alignment with this, Langfred and Moye (2004) mentioned in their study that more autonomy often goes hand in hand with more responsibility for the outcomes of one's work. This, in turn, can result in higher work efficiency and heightened levels of intrinsic motivation. Similarly, other studies have stated that the amount that an employee perceives their job as stimulating or challenging, which can be affected through job autonomy, positively affects job satisfaction (Roos & Van Eeden, 2008). Therefore, we conclude that job autonomy positively impacts job satisfaction.

Job satisfaction is also positively related to OCB due to their reciprocal relationship (Foote & Li-Ping Tang, 2008). To be more exact is job satisfaction among the most robust attitudinal predictors of OCB (Bateman & Organ 1983). For example, Fassina and colleagues (2008) argued that employees who experience higher job satisfaction have a greater inclination to display extra-role behavior since they experience positive moods more often. These positive moods are connected with helpful behaviors, such as OCB (George, 1991). Thus, the existing literature seems to support our claim that job satisfaction has a positive relationship with OCB.

Another possible connection between Job satisfaction and OCB may be that to keep a job that satisfies them, employees may be willing to put in the extra work to ensure they will

stay in this job (Fassina et al., 2008). This can be done via displaying OCB, such as giving the manager helpful feedback on improving something in the workplace or job design. This further proves that employees who are satisfied with their job will be more likely to display OCB. In conclusion, we thus hypothesize that job autonomy increases job satisfaction, and job satisfaction, in turn, increases OCB.

**Hypothesis 2.** The relationship between autonomy and OCB is mediated by job satisfaction.

#### The mediating role of employee's self-efficacy

Employees can perceive a higher level of autonomy as a sign that their employer is confident in their skills and because of this gives them more freedom to perform their tasks (Saragih, 2011). These signs have a reinforcing effect on the employee's self-efficacy.

Bandura (1997) stated that self-efficacy conceptualizes the ability to successfully estimate one's potential to deal with unforeseen events in life. Those high in self-efficacy are not as easily influenced by such happenings and successfully engage in behaviors that lead them to reach their wanted outcomes (Bandura, 1977). In line with this, Wang and Netemeyer (2002) found a positive relationship between job autonomy and self-efficacy when studying employees. They hypothesize the relationship is explained by elevated levels of autonomy that can show the employee that their supervisor is satisfied with their accomplishments and confident in their capabilities. This could lead to a heightened sense of self-efficacy. The positive relationship of job autonomy on self-efficacy has thus been shown in previous research.

Further, self-efficacy has been found to predict OCB (Bogler & Somech 2004). Bogler and Somech (2004) found that teachers who are higher in self-efficacy will carry out more tasks beyond the contractually assigned ones. Earlier findings align with Beauregard's (2012), who argued that individuals who are high in self-efficacy are more likely to display

supportive behaviors towards their coworkers. They do so because it is more likely that they know when OCBs are more fitting and how to execute these behaviors (Beauregard, 2012). For example, it might be more likely that an individual that has high self-efficacy attends a meeting that is not mandatory because they organize their schedule accordingly and can better plan for it. This goes along with the findings from Speier and Frese (1997) that self-efficacy can anticipate an individual's likelihood to take initiative, which can be seen as part of the wide range of behaviors that belong to OCB. This, therefore, is a support for the claim that there is a higher display of OCB in individuals that are higher in self-efficacy.

10

Combining these argumentations into one statement, we argue that self-efficacy is an essential mechanism in how job autonomy positively reinforces OCB. When establishing our hypothesis, we are thus predicting that autonomy increases self-efficacy, and self-efficacy, in turn, increases OCB.

**Hypothesis 3.** The relationship between employee job autonomy and OCB is mediated by employee self-efficacy.

#### **Present Research**

In sum, this study hypothesizes that job autonomy positively affects OCB. We further postulate that this relationship may be influenced by job satisfaction and self-efficacy in an enhancing manner. The hypotheses will be tested with data collected with an online survey from employees. To make sure the participants in the study appreciate a high amount of autonomy in their job (as we are assuming in our hypotheses), we measured the need for autonomy and employees' perception of autonomy to control for this in our data analysis.

#### Method

#### Sample and Design

The study at hand is a cross-sectional field study in which data was collected in Germany. The total number of participants was 186 and 31 employees had been removed

because of incomplete data sets. This left us with a final number of 155 participants. Doing an apriori power analysis we determined that the minimum sample size for this study must be at least 155 participants to reach the desired power of .08 with an alpha of .05 and four predictors.

The participants (62 females, 93 males) had a choice whether they wanted to indicate their age and 129 participants shared their age. The mean age among those participants was 42.03 years (SD = 12,08). Out of all the participants 73 (47.1%) had a higher educational degree (Bachelor's or higher). Most participants work in the chemical industry (56.1%) and the educational sector (11%). Overall, 81.9% of the participants are working in a service-oriented organization. Further, 29% had managerial responsibilities and most of the participants work about 35 - 40 hours a week (66.5%). Working partially from home is an option for most (50.3%) and for 16.9% it only has been an option throughout the COVID-19 pandemic.

We have conducted this study in the form of an online survey addressed towards employees. Two master students of the University of Groningen have recruited the participants. A link to the survey has been sent via email in a company and has also been distributed amongst the social circles of the researchers and even further than that via the snowball technique. Also, to recruit more participants beyond their social circles, postings on LinkedIn have been made and shared. This makes the sample of this study a convenience sample.

Participants did not receive any incentive or compensation for participation in this study. They had been informed at the beginning of the survey that it would investigate the influence of several factors on people's behavior at the workplace and that the survey would take about 15 minutes. The software used for the survey was Qualtrics and this study did

receive approval from the Ethical Committee of Psychology (ECP). This study was conducted in German.

#### **Procedure**

Participants were made aware that their participation was voluntary at the beginning of the study, and their answers will be saved anonymously. They further could indicate at the end of the study if they did not want their data to be used or had other remarks. Explicit consent by the participants was needed to start the actual survey.

Instructions were given before each scale and there were various scales in the survey, but this study will only focus on a part of them for its analysis. The scales used in this study were the following: Emotional Intelligence, Mastery Approach, OCB Change, Self-Efficacy, Job Autonomy, Job Satisfaction, OCB (including the five subscales for Conscientiousness, Sportsmanship, Civic Virtue, Courtesy, and Altruism), Perception of Autonomy, and Need for Autonomy. The scales are mentioned in the order that they appear in the questionnaire. The scales used in this study will be mentioned in more detail in the Measures part of the Method section. At the end of the questionnaire, the participants received a debriefing about the study.

#### Measures

Besides the self-developed Perception of Autonomy, the researchers have back-translated all the following questionnaires from English to German. The complete scales are presented in Appendix B. The means of the scales used in this study were aggregated by averaging the items.

#### Job Autonomy

Job autonomy was measured on a nine-item five-point Likert scale by Morgeson and Humphrey (2006), ranging from 1 = "fully disagree" to 5 = "fully agree". Therefore, a higher score on these scales means higher job autonomy. An example item of the scale was "The job

allows me to make a lot of decisions on my own.". The Cronbach's alpha was .93, indicating that the concept has been measured reliably by the scale.

#### OCB

The organizational citizenship behavior of participants was measured with an OCB 24-item five-point Likert scale by Podsakoff and colleagues (1990). All five subscales were used in this study, namely conscientiousness, sportsmanship, civic virtue, courtesy, and altruism. The scales ranged from 1 = "fully disagree" to 5 = "fully agree". An example item for conscientiousness would be "My attendance at work is above the norm." and conscientiousness' alpha was .64. Therefore, it seems that the conscientiousness scale was not measuring its concept well and thus lowered the overall alpha. An example item for sportsmanship would be "I spend a lot of time complaining about trivial things" and the alpha of this scale was .83. An example item for civic virtue would be "I attend meetings that are not mandatory but are considered important" and its alpha was .73. For courtesy, an example item is "I pay attention to how my behavior affects the work of others" and courtesy had an alpha of .75. The Altruism example item was "I help colleagues who were absent" and its alpha was .79.

A Factor Analysis of the subscales was conducted on the correlations of the five subscales. One factor was extracted because of an Eigenvalue of 1.95, which is greater than 1.00. This factor accounted for 39.06% of the variance. This factor included all subscales of the scale. Civic Virtue (.74) and Courtesy (.70) had the highest correlations in this factor. The complete component matrix can be found in Appendix C. We decided to use the whole scale in an aggregated way based on this result.

#### Self-efficacy

The New General Self-Efficacy (Chen et al., 2001) was used to measure Self-efficacy. The scale had eight items and was scored on a five-point Likert scale, which ranged

from 1 = "fully disagree" to 5 = "fully agree". An example item would be "When facing difficult tasks, I am certain that I will accomplish them.". The Cronbach's alpha for this scale was .87, indicating that the scale measured the concept well.

#### Job Satisfaction

The job satisfaction scale combined two separate job satisfaction scales (DeCarlo and Agarwal, 1999; Foote & Li-Ping Tang, 2008) and had five items in total. We chose to combine two scales as both scales have few items and overall scales with few items are associated with lower reliability. The scale was measured on a five-point Likert scale, ranging from 1 = "fully disagree" to 5 = "fully agree". An example item of this scale would be "My job has opportunity for personal growth and development.". This scale has a Cronbach's alpha of .81, which signifies that the scale measures the concept reliably. The three-item scale by DeCarlo and Agarwal (1999) had an alpha of .679, and the two-item scale by Foote & Li-Ping Tang (2008) had an alpha of .73, this suggested that an aggregated scale that combines the two scales is more reliable than the two separate scales.

#### **Need for Autonomy**

The need for autonomy has been measured by a scale from Van Yperen, Rietzschel, & De Jonge (2014), which has four items and is scored on a five-point Likert scale ranging from  $1 = "fully \ disagree"$  to  $5 = "fully \ agree"$ . An example item from this scale would be "At work I have the need to decide on my own how to go about getting my job done.". This scale's Cronbach alpha was .87, which signifies that the scale measures the concept reliably.

#### Perception of Autonomy

The scale for the perception of autonomy was self-constructed and had three items. We constructed it as we could not find a fitting scale, but the construct of how autonomy is perceived is important to this study. This is the case because we assumed that employees perceive autonomy as positive for this study, but this may not always be the case. Therefore,

this aspect needed to be controlled for in the data analysis. Perception of autonomy was measured on a five-point Likert scale ranging from 1 = "fully disagree" to 5 = "fully agree". The three items of this scale were the following: "Being left with a lot of freedom to choose when and how to do my tasks makes me feel less supported by my superior", "I feel trusted by my superior when I am allowed to manage my own time that I spent working on my tasks", and "When my superior does not control how I am doing my tasks and leaves some decisions up to me I feel supported by them". The Cronbach's alpha for this scale was .57, which indicated a low reliability of the scale measuring the wanted construct. When removing this scale, the pattern of results remained the same, so we decided to retain this variable as a covariate.

#### **Data Analysis**

The Data will be analyzed via a simple mediational analysis done with Hayes PROCESS v4.0 for SPSS version 27. Gender was considered to be a potential control variable, as mentioned in earlier research (Beauregard, 2012). Further, the need for autonomy and the perception of autonomy were also considered as control variables since not every person has the same needs and perception of autonomy. These differences could potentially impact the results. Hence, scales to measure these concepts were included in the questionnaire.

#### **Results**

#### **Preliminary Analysis**

As the first step of the analysis, the correlations between the variables were calculated (see Table 1). All variables of the research model were significantly positively correlated, besides self-efficacy and job autonomy which were not significantly correlated with each other. The need for autonomy was significantly correlated with OCB, self-efficacy, and the perception of autonomy. The perception of autonomy was strongly positively correlated with

all other variables in the research model, which indicated that it could be an important control variable. Since the means for both need of autonomy and perception of autonomy were high in this sample, this indicated that the participants in this study did indeed value having a job with high autonomy (Table 1).

**Table 1.** *Means, Standard Deviations, and Intercorrelations* 

	M	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Job Autonomy	4.17	.77							
(2) OCB	4.14	.40	.24**						
(3) Job Satisfaction	3.77	.83	.48**	.40**					
(4) Self-Efficacy	4.23	.53	.10	.37**	.23**				
(5) Need for Autonomy	4.42	.65	.20*	.10	.05	.18*			
(6) Perception of Autonomy	4.30	.66	.33**	.41**	.37**	.33**	.35**		
(7) Gender			21**	.08	07	07	01	10	

*Note.* N = 155. \* \* p < .01; \* p < .05. All ratings were on a 5-point scale ranging from 1 = *fully disagree* to 5 = *fully agree*.

Afterward, we tested the four linear assumptions. The assumption of independence was fulfilled since this study was not using repeated measures and all of the observations are independent. When testing for linearity, there was no bow pattern in the scatterplot; hence this assumption was fulfilled as well. The P-P plot revealed that normality of the data was given as well since the data plots were following the diagonal line in the plot. Since there was no clear pattern in the scatterplot the data was also not homoscedastic, which fulfilled the assumption of homoscedasticity. Lastly, since all VIF values were below 3, multicollinearity in the data was low, fulfilling the multicollinearity assumption.

#### **Testing Hypotheses**

The hypotheses were tested with Hayes PROCESS model 4 via SPSS, in which two models were run independently. In these models, job autonomy predicted OCB, and the relationship was mediated by job satisfaction in the first model and self-efficacy in the second model. We ran two different models to control for collinearity since the two mediators are correlated. But when including them in a single model, the pattern of effects was the same.

The need for autonomy, perception of autonomy, and gender were used as covariates. In the first model, job autonomy was entered as a predictor of OCB and job satisfaction was entered as a mediator of this relationship (see Appendix A). In the second model, job autonomy was again entered to predict OCB and self-efficacy was entered as a mediator of the relationship. (see Appendix A). In both models, the covariates need for autonomy, self-efficacy, and gender were controlled for.

#### The main effect of the research model

The main effect of the research model of this study is the total effect of the model (C path), which means the effect of job autonomy on OCB including the possible indirect effects of the two mediators job autonomy and self-efficacy on this relationship. Thus, the main effect was the same for both models and presents our first hypothesis.

#### Correlations of job autonomy and the OCB scales

Since the scale measuring OCB has five different subscales, we decided to correlate job autonomy with every scale individually to see if there are differences amongst the scales. The analysis showed that job autonomy only correlated significantly with sportsmanship (r = .33) and civic virtue (r = .26) subscales of OCB (see Table 2). The other three subscales of the OCB scale were all non-significantly correlated to job autonomy. This indicates that sportsmanship and civic virtue are possibly more associated with job autonomy than the other subscales.

**Table 2.** *Correlations* 

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Job Autonomy						
(2) OCB Conscientious	07					
(3) OCB Sportsmanship	.33**	.13				
(4) OCB Civic Virtue	.26**	.14	.30**			
(5) OCB Courtesy	.06	.23**	.20*	.36**		
(6) OCB Altruism	.12	.14	.18*	.35**	.30**	

*Note*. N = 155. \* \* p < .01; \* p < .05.

#### The total effect of the research model

The total effect of the model was not significant (p = .05) in our data. Therefore, our data could not support the hypothesized positive effect of job autonomy on OCB and the first hypothesis (see Table 3). This means when there is no control for the two mediator variables and job autonomy changes one unit there is no significant change in OCB.

#### The role of Job satisfaction

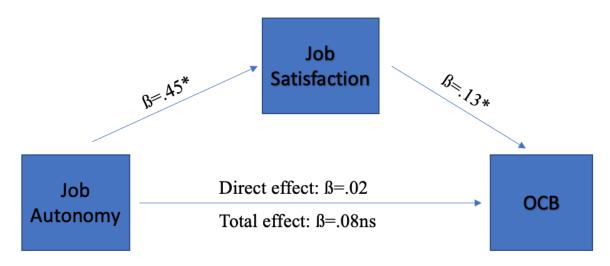
The results for this mediation model, including job satisfaction (Figure 1), explained about 25,83% of the total variance in OCB. The path from job autonomy to job satisfaction (A path) is positive but not significant (b= .02; SE= .04, CI [-.07;.11]). This indicates that individuals that score higher on job autonomy are likely to score higher on job satisfaction, but not significantly more than those that do not score high. The path from job satisfaction to OCB (B path) is positive and significant (b= .13; SE= .04, CI [.05;.21]). Therefore, this indicates that an individual who scores higher on job satisfaction will likely have a more frequent display of OCB. The model's direct effect (this is when controlling for the mediator job satisfaction) was not significant (Table 3). This means that there would be no significant changes in OCB if job autonomy changed by one unit, but job satisfaction stayed the same. The indirect effect of this model was significant, (b= .06; SE= .03, CI [.02;.12]). Therefore, we could conclude that the mediational effect of job satisfaction was indeed significant, which supported our second hypothesis. This result meant that job satisfaction was a mechanism by which job autonomy could produce changes in OCB. The results are visualized in Figure 1.

**Table 3.** *Coefficients*<sup>a</sup>

		Unstandardized Coefficients			95% Confidence Interval for B		
Model	В	Std. Error	t	Sig.	Lower Bound	Upper Bound	
1 (Constant)	2.68	.27	9.83	.00	2.14	3.22	
Job Autonomy	.02	.04	.47	.64	07	.11	
Job Satisfaction	.13	.04	3.25	.00	.05	.21	
Need for Autonomy	03	.05	54	.59	12	.07	
Perception of Autonomy	.20	.05	3.93	.00	.10	.30	
Gender	.11	.06	1.85	.07	01	.23	
Indirect Effect	.06	.03			.02	.12	

a. Dependent Variable: OCB; N = 155

**Figure 1.** *Results of the mediation analysis with job satisfaction.* 



*Note.*\* p < .05, ns = non-significant, Indirect Effect = .06

#### The role of self-efficacy

This mediation model, including self-efficacy (Figure 2), explained 27.5% of the total variance in OCB. The path from job autonomy to self-efficacy (A path) is positive and significant (b= -.01; SE= .06, CI [-.13;.10]). This means that individuals who score higher on job autonomy are also more likely to score higher in self-efficacy than those scoring lower on job autonomy. The effect of self-efficacy on OCB (B path) is positive but non-significant (b=.21; SE= .06, CI [.10;.32]). This indicates that individuals that are higher in self-efficacy

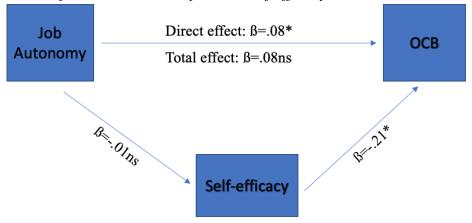
also have a more frequent display in OCB, but not significantly more. The direct effect of this model, this is when controlling for the mediator self-efficacy, was significant (Table 4). This means that when job autonomy would change by one unit, there would be significant changes in OCB, even if self-efficacy was kept unaltered. The indirect effect of this model was insignificant, which means that there was no support in our data that self-efficacy had a mediational effect on the relationship of job autonomy and OCB. Therefore, the data did not support the third hypothesis that self-efficacy mediated the relationship between job autonomy and OCB (see Figure 2.).

**Table 4.** *Coefficients*<sup>a</sup>

		Unstandardized				95% Confidence Interval for		
	Co	Coefficients				В		
Model	В	Std. Error	t	Sig.	Lower Bound	Upper Bound		
2 (Constant)	2.17	.32	6.85	.00	1.54	2.80		
Job Autonomy	.08	.04	2.11	.36	.01	.16		
Self-Efficacy	.21	.06	3.78	.00	.10	.32		
Need for Autonomy	06	.05	-1.31	.19	15	.03		
Perception of Autonomy	.20	.05	3.92	.00	.09	.29		
Gender	.13	.06	2.22	.03	.01	.24		
Indirect Effect	00	.01			03	.02		

a. Dependent Variable: OCB; N = 155

**Figure 2**. *Results of the mediation analysis with self-efficacy.* 



*Note*.\* p < .05, ns = non-significant, Indirect Effect = -.00

#### **Discussion**

How can companies and managers influence the display of OCB by their employees? And what are potential factors affecting it? These were some of the questions raised when initially setting up this research. Hence this study aimed to not only add to existing research of OCB, but more specifically, we wanted to investigate if job autonomy indeed has a positive relationship with OCB. We further hypothesized that job satisfaction and self-efficacy might be two separate mechanisms through which job autonomy can produce changes in the display of OCB.

Unexpectedly, we did not find support for the hypothesis predicting a positive relationship between job autonomy and OCB. The first hypothesis was thus not supported by the data. This suggests that job autonomy alone cannot produce a meaningful change in OCB. The second hypothesis, suggesting a mediating role of job satisfaction in the relationship between job autonomy and OCB was supported by the data. As a result, job satisfaction is a mechanism through which job autonomy can create changes in OCB. This means that employees who are more autonomous in their jobs will be more satisfied with their jobs. In turn, more satisfied employees will be more likely to display OCB at the workplace. Lastly, the proposed mechanism of self-efficacy on the relationship of job autonomy and OCB could not be supported by the data. Thus, contrary to our beliefs, the third hypothesis cannot be supported. In sum, by supporting the second hypothesis, our study extends previous research in this field.

#### Job autonomy and OCB

Previous research has not focused as much on the relationship between job autonomy and OCB explicitly, so we wanted to add more insight to this specific topic (Park, 2016).

Most studies previously included job autonomy under the bigger variable of job characteristics and found positive results. Hence, we wanted to find further proof for the

direct relationship but failed to achieve that for the direct relationship. Our study was unable to find evidence that job autonomy has a positive relationship with OCB can potentially be explained by the effects that job autonomy has on the individual's job and their dependence on others. We hypothesize that increased autonomy can also come with a decreased reliance on others, such as coworkers. This could mean that employees have fewer chances to depend on others. Therefore, they also will be less likely to help others or display OCB towards them as they do not have to reciprocate the favor like Blau's theory (1964) would suggest. This goes along with the data in this study. The mean for job autonomy is high in our sample, and when we look closer that the correlation of job autonomy and the subscales of OCB it becomes clear that job autonomy only significantly correlates with civic virtue and sportsmanship. These are both not the helping facets of OCB, which could indicate that maybe in our sample the decrease of reliance on others already has an influence on the individuals in our sample and they have fewer chances to display OCB in their daily activities at work. The helping scales of OCB, such as altruism and courtesy are not significantly correlated with job autonomy in this sample, which agrees with our argumentation.

Additionally, past research may have failed to realize that there are mediators needed to facilitate this relationship, as most studies did not focus on job autonomy specifically, as it was often a subscale of, for example, job characteristics (Capelli & Rogovsky, 1998; Chen & Chiu, 2009).

#### The effect of job satisfaction on the relationship between job autonomy and OCB

Supporting our second hypothesis that job satisfaction is the mechanism behind the relationship of job autonomy and OCB is in line with earlier research and adds further validation to it. This study thus can give additional validation to this theory and previous research that found a significant relationship between job autonomy and OCB (Farh, Podsakoff, & Organ, 1990; Capelli & Rogovsky, 1998; Chen & Chiu, 2009). The findings

thus enhance future research designs and create a better understanding of the antecedents and mechanisms that influence the employees' OCB. With this, our study also finds support for Blau's social exchange theory (1964) as we could find evidence in the data that more autonomy can lead to an enhanced display of OCB, even if it is only when the relationship is mediated by job satisfaction. If job satisfaction is high, employees will probably want to reciprocate the perceived favorable treatment they are receiving from the organization more. This can positively impact the work environment and the organization's overall performance and is, therefore, an essential mechanism for influencing employees' behavior at work.

#### The effect of self-efficacy on the relationship of job autonomy and OCB

Even though we postulated self-efficacy would be a mediating mechanism of the relationship between job autonomy and OCB, we failed to support this claim in our data. Generally, job autonomy strengthens the employee's conclusion that the supervisor believes in their skills. Studies found that a higher level of self-efficacy in teachers leads to more OCB (Bogler & Somech, 2004; Wang and Netemeyer, 2002). But for example, when taking into account the study by Bogler and Somech (2004), middle and high school teachers may be more likely to display OCB as they chose a social job where they help others every day to learn and develop. So, their OCB baseline and prosocial behavior may be higher than average in the population. In comparison more than half of our sample is working in the chemical industry where the emphasis is on social behaviors may not be as high. We are assuming thus, that the baseline of prosocial behavior may be more around the average amount of the overall population. Therefore, they may not display as much OCB even though they have high selfefficacy since their baseline might be lower than what Bogler and Somech's (2002) found in their study that researched this relationship with teachers as participants. The question of whether this may be affected by employees working in a more or less social job may be something that would be interesting for future research to look into.

#### **Strengths and Limitations**

As with any other study, this study has its strengths and weaknesses that will be elaborated on in the following paragraph, starting with the strengths. The first strength is that we did control for the impact of the covariate gender in this study, as existing research suggested. This is important since OCB behaviors may partially be influenced by role expectations of the different genders of the employees (Beauregard, 2012). Due to these expectations, females are more expected to display OCBs as part of their job while men are not. Hence this is an influential factor that this study controlled for. This is supported by the fact that the explained variance and effect sizes go down, and the p-values increase in both models when gender is not included as a covariate.

We also included the need of autonomy and the perception of autonomy as covariates to ensure that different needs and views of autonomy amongst the participants are not influencing the results of this study. When excluding those two covariates from the analysis the total effect becomes significant. This could be the result of random error causing the significance by chance and in the model including the covariates this random effect is controlled for. Thus, it is not significant anymore. This random error could be the random differences that individuals have in their need and perception of autonomy. Therefore, it is important that we have controlled for this in our model. Further, since our participants were from different industries and educational backgrounds, the results of this study are generalizable across various sectors and backgrounds within the WEIRD (Western, educated, industrialized, rich, and democratic) hemisphere (Henrich et al., 2010).

With regards to limitations, one of them is that there is a possibility of socially desirable answering. This could affect the results of the OCB scale since these are behaviors that are positively perceived by others. Participants thus may be answering the scale in a socially more desirable way than what their actual answers would be to present themselves

more desirably. Another limitation could be that the OCB scale was filled out by employees themselves and not, as in the original version, by their supervisor. Having supervisors fill out the OCB scale for their employees may be more complex and costly, but it may have led to more objective results.

Another limitation would be, that our self-developed scale for the perception of autonomy had a rather low Cronbach's alpha. Hence the scale was not measuring the concept very reliably and therefore, the reader is advised to take these results into account when forming an opinion about the results of this study.

Further, there is the limitation of the self-selection of the respondents taking part in the study. It was out of the control of the researchers to create a truly random sample as most respondents are from the social circle of the respondents. This self-selection may influence the demographic ratios, such as age and gender, and scores on the scales. For example, people who score higher on altruism and civic virtue are more likely to participate in a study without any incentives like this study. But this, in turn, may also influence the scores on the OCB scale, as altruism and civic virtue are part of the scale, which may skew the answers in one direction.

The fact that this study has been conducted with the minimal number of participants in order to fulfill the requirements of the power calculations that have been done apriori may also be impacting the results and their significance. This may be because small samples and self-report measurement can inflate the relations between variables through response bias or common source bias. This can be partially avoided by incorporating different measurements of OCB such as subordinates, supervisors, etc., which can bypass the threat of common source bias.

Lastly, this is a correlational study; therefore, no inferences about the causal order of the effects can be made for any effects found in this study. In order to do so, future research should implement an experimental design into their research so that the causal order of job autonomy and OCB, as well as their mediators job satisfaction and self-efficacy, can be established.

#### **Practical Implications**

The results of this study may help improve job design. For example, to create more autonomous jobs to enhance the display of OCB. It can influence managerial practice as managers can directly influence the subordinates' jobs. Managers could, for example, let their employees fill out questionnaires to estimate how satisfied they are with their job since job satisfaction was a mediator of the relationship of job autonomy and OCB and had an impact on OCB in this study. If needed, managers could take action to increase subordinates' job satisfaction. Examples could be to inquire feedback from the employees. This could include what they would want to change to be more satisfied with their job or what changes would make them feel more valued and appreciated by the supervisor and organization. Further, before hiring or promoting people to jobs with high autonomy, managers can assess whether the person has a favorable perception of autonomy to see if a highly autonomous job will work well for that person. This could also increase the amount of OCB as perception of autonomy has been found to be a significant covariate of the research model. Therefore, it is important to make sure that people perceive autonomy as something positive since a high amount of autonomy will not enhance their display of OCB if this is not the case.

Knowing how much autonomy people perceive as positive can also be helpful to know which leadership style will work the best to have the employees display the most OCB. Some may appreciate a leadership style with more autonomy and display more OCB under these circumstances. In comparison, others may prefer less job autonomy to feel valued and satisfied to display OCB. Therefore, the awareness of this can help managers to adapt their behavior accordingly.

#### **Future research**

Interesting approaches for future research may be to investigate closer how to maximize the effects of job autonomy on OCB. This could be done by investigating the role of potential mediators of this relationship. For example, other specific job characteristics like job variety and job significance could be explored. This study has found a non-significant effect for the relationship of job autonomy and OCB in this research model. Therefore, understanding this relationship better would make sense to look into other potential mediators and covariates, as other studies have found significant direct relationships. It is further interesting to see if it makes a difference how job autonomy affects the different subscales of OCB and if that can enhance the effects of this study for specific subscales.

Looking further into job satisfaction and which antecedents can enhance it would also be an interesting route due to its mediational effect on job autonomy and OCB. More specifically, which variables that managers can easily impact can influence job satisfaction is an important question to be solved. This could also help to understand more clearly how OCB may be enhanced and how this mediational relationship works. Further studies of how people differ in their perception of autonomy also seem to be a field of research that is interesting but also of significance for the relationships of this research model as it correlated with all variables and is a significant covariate. Therefore, it would be important to develop a scale to measure this variable more reliably than ours. More understanding of this variable could be helpful in future research and be of immense value to practice, as mentioned before in the practical implications. The results of future research could be used to create interventions and trainings for managers to implement the practical implications mentioned earlier even more successfully, as well as to know when to do so.

#### Conclusion

In sum, having a job with more autonomy can lead to a more frequent display of OCB by employees under certain circumstances, such as when they are satisfied with their job.

Having a very autonomous job itself does not influence employees' display of OCB by itself in a meaningful manner. More research on this is crucial as previous research also disagrees whether there is a significant relationship between job autonomy. This study found support for the claim that job autonomy is the mechanism behind the relationship between job autonomy and OCB; thus, maybe this relationship only exists through mediational variables.

Our data could not support the claim that self-efficacy is the mechanism behind the relationship between job autonomy and OCB. Nonetheless, job autonomy is an important topic, as it can influence employees' OCB, even if that is only through mediators. Since managers control how much job autonomy their subordinates have, they can influence OCB by adjusting it accordingly, making it a valuable managerial practice tool. Finally, this study hopes to stimulate further research in this field on enhancing employees' display of OCB overall, but also on the relationship of job autonomy and OCB and potential influences on this relation.

#### References

- Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G. and Kilic, K. (2010). Organisational support for entrepreneurship and its interaction with human capital to enhance innovative performance, *Journal of Management*, Vol. 29 No. 1, pp. 99-118.
- Bandura, A. (1997), Self-efficacy: The Exercise of Control, Freeman.
- Beauregard. A.T. (2012). Perfectionism, self-efficacy and OCB: the moderating role of gender. *Personnel Review*, 41(5), 590–608. https/:doi.org/10.1108/00483481211249120
- Blau, P. (1964). Exchange and Power in Social Life, Wiley.
- Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and Teacher Education*, 20(3), 277-289. <a href="https://doi.org/https://doi.org/10.1016/j.tate.2004.02.003">https://doi.org/https://doi.org/10.1016/j.tate.2004.02.003</a>
- Burger, J.M., Sanchez, J., Imberi, J.E., & Grande, L.R. (2009). The norm of reciprocity as an internalized social norm: Returning favors even when no one finds out, *Social Influence*, 4:1, 11-17. https://doi.org/10.1080/15534510802131004
- Cappelli, P., & Rogovsky, N. (1998). Employee Involvement and Organizational Citizenship:

  Implications for Labor Law Reform and Lean Production. *Industrial and Labor Relations Review*, *51*, 633-653.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale.

  Organizational Research Methods, 4(1), 62–83.
- Chiu, S. F., & Chen, H. L. (2005). Relationship between job characteristics and organizational citizenship behavior: The mediational role of job satisfaction. *Social Behavior and Personality: an International Journal*, *33*, 523-540.

- Cook, K. S., Cheshire, C., Rice, E. R. W., & Nakagawa, S. (2013). Social Exchange Theory.

  Handbooks of Sociology and Social Research, 61–88. https://doi.org/10.1007/978-94-007-6772-0\_3
- Curry, J. P., Wakefield, D. S., Price, J. L., & Mueller, C. W. (1986). ON THE CAUSAL

  ORDERING OF JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT.

  Academy of Management Journal, 29(4), 847–858. https://doi.org/10.2307/255951
- DeCarlo, T. E., & Agarwal, S. (1999). Influence of managerial behaviors and job autonomy on job satisfaction of industrial salespersons: A cross-cultural study. *Industrial Marketing Management*, 28(1), 51-62. <a href="https://doi.org/10.1016/S0019-8501(98)00022-4">https://doi.org/10.1016/S0019-8501(98)00022-4</a>
- Farh, J.-L., Podsakoff, P. M., & Organ, D. W. (1990). Accounting for Organizational

  Citizenship Behavior: Leader Fairness and Task Scope versus Satisfaction. *Journal of Management*, 16(4), 705–721. https://doi.org/10.1177/014920639001600404
- Fassina, N. E., Jones, D. A., & Uggerslev, K. L. (2008). Meta-analytic tests of relationships between organizational justice and citizenship behavior: Testing agent-system and shared-variance models. *Journal of Organizational Behavior*, 29(6), 805–828. <a href="https://doi.org/10.1002/job.494">https://doi.org/10.1002/job.494</a>
- Foote, D. A., & Tang, T. L.-P. (2008). Job satisfaction and organizational citizenship behavior (ocb): does team commitment make a difference in self-directed teams? *Management Decision*, 46(6), 933–947.
- Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, 40, 287-322.
- Hackman, J.R. & Oldham, G.R. (1980). Work Redesign, Addison Wesley.
- Hennessey, B.A. & Amabile, T.M. (2010). Creativity, *Annual Review of Psychology*, Vol. 61 No. 1, pp. 569-598.

- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature*, 466(7302), 29.
- Langfred, C. W., & Moye, N. A. (2004). Effects of task autonomy on performance: An extended model considering motivational, informational and structural mechanisms.

  \*Journal of Applied Psychology, 89(6), 934-945.
- Liden, R.C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85, 407-416.
- Morgeson, F.P., Delaney-Klinger, K., & Hemingway, M.A. (2005). The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance. *Journal of Applied Psychology*, 90, 399-406.
- Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (wdq): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, *91*(6), 1321–1339.
- Organ, D.W. (1988). Organizational Citizenship Behavior: The Good Soldier Syndrome, Lexington Books.
- Organ, D.W. (1997). "Organizational citizenship behavior: it's construct clean-up time", *Human Performance*, Vol. 10 No. 2, pp. 85-97.
- Organ, D. W. (2018). Organizational citizenship behavior: Recent trends and developments. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*(1), 295-306. https://doi.org/10.1146/annurev-orgpsych-032117-104536
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship* behavior: its nature, antecedents, and consequences (Ser. Foundations for organizational science). SAGE Publications.

- Park, R. (2018). The roles of ocb and automation in the relationship between job autonomy and organizational performance: a moderated mediation model. *The International Journal of Human Resource Management*, 29(6), 1139–1156.

  https://doi.org/10.1080/09585192.2016.1180315
- Parker, S. K., Axtell, C. M., & Turner, N. (2001). Designing a safer workplace: Importance of job autonomy, communication quality, and supportive supervisors. *Journal of Occupational Health Psychology*, 6(3), 211–228. <a href="https://doi.org/10.1037/1076-8998.6.3.211">https://doi.org/10.1037/1076-8998.6.3.211</a>
- Pattnaik, S. C., & Sahoo, R. (2021). Transformational leadership and organizational citizenship behaviour: the role of job autonomy and supportive management.

  \*Management Research Review, 44(10), 1409–1426. <a href="https://doi.org/10.1108/MRR-06-2020-0371">https://doi.org/10.1108/MRR-06-2020-0371</a>
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, *1*(2), 107–142. https://doi.org/10.1016/1048-9843(90)90009-7
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational Citizenship Behaviors: A Critical Review of the Theoretical and Empirical Literature and Suggestions for Future Research. *Journal of Management*, 26(3), 513-563. http://dx.doi.org/10.1177/014920630002600307
- Podsakoff, N.P., Whiting, S.W., Podsakoff, P.M., and Blume, B.D. (2009). "Individua- and organizational-level consequences of organizational citizenship behaviors, a meta-analysis", *Journal of Applied Psychology*, Vol. 94 No. 1.

- Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: a motivational analysis. *Journal of Applied Psychology*, 86(6), 1306–1314. https://doi.org/10.1037/0021-9010.86.6.1306
- Saragih, S. (2011). The Effects of Job Autonomy on Work Outcomes: Self Efficacy as an Intervening Variable. *International Research Journal of Business Studies*, 4(3), 203-215.
- Speier, C. and Frese, M. (1997). "Generalized self-efficacy as a mediator and moderator between control and complexity at work and personal initiative: a longitudinal field study in East Germany", *Human Performance*, Vol. 10 No. 2, pp. 171-92.
- Roos, W., & Van Eeden, R. (2008). The relationship between employee motivation, job satisfaction and corporate culture. *SA Journal of Industrial Psychology*, *34*(1). <a href="https://doi.org/10.4102/sajip.v34i1.420">https://doi.org/10.4102/sajip.v34i1.420</a>
- Todd, S. Y., & Kent, A. (2006). Direct and Indirect Effects of Task Characteristics on Organizational Citizenship Behavior. North American Journal of Psychology, 8: 253-268.
- Troyer, L., Mueller, C. W., & Osinsky, P.I. (2000). Who's the boss? A role-theoretic analysis of customer work. *Work and Occupations*, *27*, 406-427.
- van Mierlo, H., Rutte, C. G., Vermunt, J. K., Kompier, M. A. J., & Doorewaard, J. A. M. C. (2006). Individual autonomy in work teams: The role of team autonomy, self-efficacy, and social support. *Null*, *15*(3), 281-299. <a href="https://doi.org/10.1080/13594320500412249">https://doi.org/10.1080/13594320500412249</a>
- Van Yperen, N, W., Rietzschel, E. F., & De Jonge, K. M. M. (2014). Blended working: for whom it may (not) work. *PLoS One*, 9. <a href="http://journals.plos.org/plosone/">http://journals.plos.org/plosone/</a> article?id1/410.1371/journal.pone.0102921.

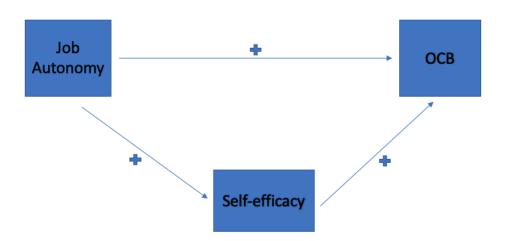
Yao, X., & Wang, L. (2008). Socially oriented values and reciprocity norm predict organizational commitment. *Asian Journal of Social Psychology*, 11(3), 247–252. https://doi.org/10.1111/j.1467-839x.2008.00264.

# Appendix A

Figure 1.
Research model



*Note*. Hypothesis 1 – Model 1



*Note*. Hypothesis 2 – Model 2

#### Appendix B

#### **Questionnaires**

#### Self-efficacy Chen, Gully, & Eden, 2001

Please indicate to what extent the following statements apply to you.

- 1. I will be able to achieve most of the goals I set for myself.
- 2. When I am faced with difficult tasks, I am sure that I will be able to master them.
- 3. In general, I believe that I can achieve the goals that are important to me.
- 4. I believe that I can be successful in almost any endeavor I set my mind to.
- 5. I will be able to successfully overcome many challenges.
- 6. I am confident that I will be able to accomplish many different tasks effectively.
- 7. Compared to other people, I can do most tasks very well.
- 8. Even when things are difficult, I can perform well.

#### **Job Autonomy** Morgeson and Humphrey (2006)

Please indicate to what extent the following statements apply to you.

- 1. My job allows me to decide for myself how I schedule my work.
- 2. My job allows me to determine the order in which the work is done.
- 3. My job allows me to plan my work.
- 4. My job gives me the opportunity to use my initiative or judgment when performing my job.
- 5. My job allows me to make many decisions on my own.
- 6. My job gives me a great deal of freedom to make decisions.
- 7. My position allows me to decide for myself the methods I use to perform my job.
- 8. My position provides me with a high degree of independence and freedom in performing my work.
- 9. My position allows me to decide for myself how to do my work.

### Job Satisfaction DeCarlo and Agarwal, 1999; Foote & Li-Ping Tang, 2008

Please indicate to what extent the following statements apply to you.

- 1. My position offers me the opportunity for personal development and growth.
- 2. Most of the time I am dissatisfied with my work.
- 3. My job does not give me the feeling of accomplishment.
- 4. My job gives me a sense of self-actualization (i.e., a sense of being able to use my own unique skills and realize my own potential).
- 5. I am happy with my job.

#### **OCB** Podsakoff, MacKenzie, Moorman, & Fetter (1990)

#### Conscientiousness

Please indicate to what extent the following statements apply to you.

- 1. My attendance at work is above the norm.
- 2. I do not take any additional breaks.
- 3. I abide by the rules and regulations of the company, even when no one is watching.
- 4. I am one of the most conscientious employees.
- 5. I believe in doing honest work for honest pay.

#### **Sportsmanship**

Please indicate to what extent the following statements apply to you.

- 1. I spend a lot of time complaining about petty things.
- 2. I always focus on what is negative instead of the positive things.
- 3. I tend to "make a mountain out of a molehill".
- 4. I always find fault with what the organization is doing.
- 5. I am the "squeaky wheel" that always needs to be greased.

#### **Civic Virtue**

Please indicate to what extent the following statements apply to you.

- 1. I attend meetings that are not mandatory but are deemed important.
- 2. I participate in events that are not mandatory but serve the company's image.
- 3. I keep myself informed about changes in the organization.
- 4. I read announcements, memos, etc. from the organization and keep up to date.

#### **Courtesy**

Please indicate to what extent the following statements apply to you.

- 1. I take measures to avoid problems with other employees.
- 2. I pay attention to how my behavior affects the work of others.
- 3. I do not abuse the rights of others.
- 4. I try to avoid problems for colleagues.
- 5. I consider the impact of my actions on other employees.

#### **Altruism**

Please indicate to what extent the following statements apply to you.

- 1. I help colleagues who were absent (e.g., vacation, illness).
- 2. I help others who have a heavy workload.
- 3. I help with the induction/orientation of new employees, even if this is not required.
- 4. I willingly help others who have work-related problems.
- 5. I am always willing to lend a helping hand to those around me.

#### **Perception of Autonomy**

Please indicate to what extent the following statements apply to you.

- 1. When I am given a lot of freedom to decide when and how to do my tasks, I feel less supported by my supervisor.
- 2. I feel that my supervisor trusts me when I am allowed to allocate my own time to complete my tasks.
- 3. When my supervisor does not control how I do my tasks and leaves some decisions to me, I feel supported by him.

Need for Autonomy Van Yperen, Rietzschel, & De Jonge (2014)

Please indicate to what extent the following statements apply to you.

At work, I feel the need to...

1. ...to decide for myself how I do my work.

- 2. ...to have a say in determining my activities and tasks.
- 3. ...to decide for myself how best to approach my work.
- 4. ...to have the freedom to do my work as I see fit.

# Appendix C

Multifactor analysis of the OCB subscales (intercorrelations)  $Component\ Matrix^a$ 

Component Mair ix	
	Component
	1
OCB Civic Virtue	.74
OCB Courtesy	.70
OCB Altruism	.65
OCB Sportsmanship	.55
OCB Conscientiousness	.44

Extraction Method: Principal Component Analysis.

a. 1 components extracted.