

## Interactional Effects of Attitudinal and Perceptual Factors on Organizational Citizenship Behavior<sup>1,2</sup>

Yutaka UEDA

### Abstract

The effect of various attitudinal and perceptual factors on organizational citizenship behavior (OCB) has been empirically determined. This study examined whether these two kinds of factors affect OCB independently or interactively. The results of the hierarchical regression analysis showed that job satisfaction and either organizational or group identification had a significant interactive effect on OCB, while organizational commitment had no significant effect on OCB after either organizational or group identification was entered in a regression. The effect of job satisfaction had a greater impact on OCB when organizational identification or group identification was weak than when it was strong.

**Keywords:** organizational citizenship behavior, job satisfaction, organizational commitment, organizational identification, group identification.

### 1. Introduction

The concept of organizational citizenship behavior (OCB) was first introduced in the 1980s (Bateman & Organ, 1983; Smith, Organ, & Near, 1983). Since then, various antecedent factors have been identified. The previous literature has consistently found attitudinal factors, such as job satisfaction and organizational commitment, affect OCB (Organ, Podsakoff, & MacKenzie, 2006).

On the other hand, as a perceptual factor influencing OCB, organizational identification has also received attention from researchers in organizational behavior. Organizational identification is defined as “a specific form of social identification where the individual defines him or herself in terms of his or her membership in a particular organization” (Mael & Ashforth, 1992, p.105), or “the tendency of individuals to perceive themselves and their groups or organizations as intertwined, sharing common qualities, successes, failures, and destinies” (Mael & Tetrick, 1992, p. 813). When an employee with high organizational identification has a high

---

1 上田 泰「組織市民行動に対する態度要因と知覚要因の相互作用的な影響」

2 I would like to thank the editors for their helpful comments on an earlier draft of this paper.

propensity to identify with the organization, he/she has a strong desire to act in the organization's interests.

Although organizational identification is a perceptual factor, it is often confused with organizational commitment (Van Knippenberg & Sleebos, 2006). Organizational commitment, particularly affective organizational commitment, is an employee's psychological attachment to the organization. When employees have a high commitment to the organization, they are aware of the organization as an entity that is different from them. Employees perform OCB because they have a positive attitude toward the organization that provides excessive benefits to them (Organ, 1988). On the other hand, employees with high organizational identification perform OCB not because they receive a benefit from the organization but because they are aware of the organization as if it is them. They might not have a contributive motive toward the organization when they perform OCB. They exhibit OCB because they know that the organization needs it.

This study determined the interactional effect of attitudinal and perceptual factors on OCB through multiple regression analysis. As perceptual factors, the effect of organizational identification and group identification were examined because they were considered to have a close relationship with interpersonal-typed OCB, such as OCB for individuals (OCB-I).

## **2. The Effect of Attitudinal and Perceptual Factors on OCB**

Considering the history of OCB research, researchers first focused on job satisfaction as an antecedent of OCB. Originally, OCB research started with Dr. Dennis Organ's expectation that an employee's behaviors beyond the range of his/her formal job would be more affected by job satisfaction (Organ, 1977). For this reason, OCB researchers have focused on the effect of job satisfaction on OCB for a long time (Organ et al., 2006).

On the other hand, organizational commitment has also been emphasized as an antecedent of OCB for a long time. Organizational commitment is an employee's psychological attachment to an organization. Meyer and Allen's (1991) argument that organizational commitment is classified into affective, continuance, and normal organizational commitment is widely known. Previous studies have revealed that affective organizational commitment positively impacts OCB (Organ et al., 2006).

Although not as much as job satisfaction and organizational commitment, organizational identification has also received attention from researchers as a perceptual factor that affects OCB. Organizational identification influences OCB

positively. For example, Van Dick, Grojean, Christ, and Wieseke (2006) empirically examined the causal relationship between organizational identification and OCB and found that the former had a significantly positive effect on the latter, but not vice versa. Furthermore, Kesen (2016) also found a significant positive effect of organizational identification on OCB.

On the other hand, an employee often identifies him/herself with a smaller group, such as a department or a team he/she belongs to, rather than the organization. For example, Hui, Lee, and Rousseau (2004) argued that Chinese people tend to position themselves in a close human relationship rather than as members of the organization. They explained that “traditional Chinese people tend to approach organizations ‘thinking interpersonally,’” in contrast to the Western perspective of the employment relationship that is based upon “thinking organizationally” (p. 233). This implies that Chinese people do not tend to identify themselves with the whole organization but with the workgroup to which they belong because it is much easier for them to recognize themselves interacting with coworkers in the same workgroup. This might be true not only for Chinese people but also for most Asian people, including Japanese.

Furthermore, Bentein, Stinglhamver, and Vandenberghe (2002) considered employees committed to not only the organization but also the supervisor and workgroup. They showed that these different kinds of commitment did not independently influence OCB; however, a commitment to the most proximal entity mediated the effect of commitment to more marginal entities on OCB. These arguments discuss the possibility that an employee often becomes conscious of him/herself associated with a small workgroup, not the whole organization because such a small group is the place where he or she directly interacts with other coworkers. Hence, it is easy to imagine that such an employee tends to identify him/herself with the small workgroup rather than the whole organization.

Some researchers have focused on both organizational and workgroup identification simultaneously. For example, Kong and Weng (2019) distinguished organizational and workgroup identification and proposed the hypothesis that “organizational identification plays a distal role in influencing job satisfaction through workgroup identification” (p. 5). However, they did not examine this relationship empirically. Van Dick, van Knippenberg, Kerschreiter, Hertel, and Wieseke (2008) empirically showed that job satisfaction and extra-role behaviors were more enhanced when both organizational and workgroup identification were higher than when either one was high.

### **3. Interactional Effects of Attitudinal and Perceptual Factors**

As described above, the process of enhancing OCB differs between attitudinal and perceptual factors. An employee with high job satisfaction or organizational commitment performs OCB in return for excessive benefits from the organization (Organ, 1988). In contrast, if an employee identifies him/herself with the organization, he/she does not tend to consider that he/she has to return the favor to the organization. He/she engages in contributive behavior toward the organization because he/she knows that the organization needs it. From this argument, the following interactional effects of attitudinal and perceptual factors affecting OCB are expected. When an employee's organizational or group identification is high, the effect of attitudinal factors on OCB decreases. This is because OCB is still at a high level due to high awareness of identification with the organization even when the employee has a low level of attitudinal factors and is not aware of returning the favor to the organization. On the contrary, when an employee's organizational or group identification is low, the effect of attitudinal factors on OCB is increased because the organization is perceived as an entity different from an employee, and he/she becomes more acutely aware of returning the favor to the organization when he/she has a high level of attitudinal factors. Therefore, we propose the following hypotheses.

H1: The positive effect of job satisfaction on OCB is stronger when organizational identification is low than when it is high.

H2: The positive effect of job satisfaction on OCB is stronger when group identification is low than when it is high.

H3: The positive effect of organizational commitment on OCB is stronger when organizational identification is low than when it is high.

H4: The positive effect of organizational commitment on OCB is stronger when group identification is low than when it is high.

### **4. Research Method**

#### *Sample*

The data were collected by contracting with an Internet research service company, Macromill Inc., where many people register as potential respondents. The company was asked to collect data from people who worked with others in the workplace, regardless of their employment status. This is an important prerequisite for data collection for an OCB study because if a respondent worked alone, he/she would not be able to answer some OCB-related items, such as helping others in the workplace. Data were collected in October 2019. The final sample consisted of 312 individuals (177 men

and 132 women). The age of the respondents ranged from 20 to 65 years, with a mean age of 38.23 years. Although the respondents' nationality was not confined, most of them were considered Japanese because the questionnaire was written in Japanese.

### *Measures*

Conventional scales validated by previous studies were used in this study. The original measures in English were translated into Japanese by the author, although some expressions were slightly changed according to the Japanese culture and work environment.

**Organizational citizenship behavior (OCB).** The seven-item organizational citizenship behavior for individuals (OCB-I) scale developed by Williams and Anderson (1991) was used. This scale measures the degree to which various kinds of helping behaviors toward a supervisor, coworkers, and newcomers are performed by a focal employee. While we translated each item into Japanese, the expression "a personal interest in other employees" for one of the original items was changed to "empathetic to other employees" because the former might give Japanese people a false impression of a privacy breach. Cronbach's alpha for these seven items was 0.825.

**Job satisfaction.** Among Spector's (1985) 36 items on various aspects of job satisfaction, four items measuring satisfaction with work were used. Cronbach's alpha for these four items was 0.755.

**Organizational commitment.** The six-item overall organizational commitment scale developed by Marsden, Kalleberg, and Cook (1993) was used in this study. Considering the relatedness of Meyer and Allen's (1997) organizational commitment classification, which comprises affective, normative, and continuance factors, this scale can be closely related to affective organizational commitment. Cronbach's alpha for the six items was 0.829.

**Organizational Identification.** The six-item organizational identification scale developed by Mael and Ashforth (1992) was used in this study. Since this scale was developed for teachers, it included the expression "school" as the entity with which teachers identify. Therefore, we changed the term "school" to "your organization" (*tsutomesaki* in Japanese) for our purposes. Cronbach's alpha for the six items was 0.724.

**Group identification.** The six-item organizational identification scale developed by Mael and Ashforth (1992) was used by changing "school" to "your department." Cronbach's alpha for the six items was 0.799.

**Gender and Age.** Gender was classified as 1 for male and 2 for female. The chronological age was used as the age variable. Both were used as control variables.

## 5. Result

Table 1 shows the descriptive statistics and inter-correlations of the variables. First, concerning gender and age as control variables, gender had a significantly negative correlation with organizational commitment ( $\gamma = -0.162$ ,  $p < 0.01$ ) and a significantly positive correlation with OCB ( $\gamma = 0.128$ ,  $p < 0.05$ ). While it is generally known that organizational commitment enhances OCB, this result showed that female employees had a lower organizational commitment and higher OCB on average than male employees, which indicated that female employees had a greater tendency to perform OCB regardless of the degree of organizational commitment.

Table 1 Descriptive Statistics and Inter-correlations regarding Variables

Variables	Means	Std. Dev.	1	2	3	4	5	6	7
1. Gender	1.430	0.496	–						
2. Age	38.230	10.512	–0.006	–					
3. Organizational Identification	2.904	0.736	–0.094	0.059	(0.724)				
4. Group Identification	3.097	0.797	–0.021	0.041	0.771**	(0.799)			
5. Job Satisfaction	3.149	0.906	–0.069	0.068	0.320**	0.363**	(0.755)		
6. Organizational Commitment	2.684	0.793	–0.162**	0.075	0.372**	0.334**	0.627**	(0.829)	
7. OCB	3.609	0.671	0.128*	0.085	0.237**	0.308**	0.269**	0.143*	(0.825)

N = 312, \*\* :  $p < 0.01$ , \* :  $p < 0.05$

As expected, positive correlations at a 0.01 significance level were observed between any two of the four explanatory variables. Particularly, while the correlations between the two attitudinal factors and that between the two perceptual factors were very high ( $\gamma = 0.627$ – $0.771$ ,  $p < 0.01$ ), correlations between attitudinal and perceptual factors were significantly positive but not very high ( $\gamma = 0.320$ – $0.372$ ,  $p < 0.01$ ). Furthermore, these four explanatory variables had significantly positive correlations with OCB ( $\gamma = 0.143$ ,  $p < 0.05$ , for organizational commitment,  $\gamma = 0.237$ – $0.308$ ,  $p < 0.01$  for other variables), which was also as expected.

Next, the results of the hierarchical regression analysis are shown in Tables 2–5. In this analysis, gender and age as control variables were entered into the regression at the first step, and one attitudinal factor and one perceptual factor were entered into it in the second step. Finally, a product of these attitudinal and perceptual factors as an interaction of these variables was entered in the third step.

When job satisfaction and either organizational or group identification were regarded as explanatory variables in the second step, these variables not only had a significantly positive effect on OCB at  $p < 0.01$  ( $\beta = 0.219$ ,  $p < 0.001$  for job satisfaction and  $\beta = 0.179$ ,  $p = 0.002$  for organizational identification in Table 2;  $\beta = 0.188$  for job satisfaction and  $\beta = 0.240$  for group identification in Table 3), but the interactions of these variables also had a significantly negative impact on OCB in the third step

( $\beta = -0.113$ ,  $p = 0.036$  in Table 2;  $\beta = -0.095$ ,  $p = 0.075$  in Table 3).

On the other hand, the results were completely different when the organizational commitment was treated as an explanatory variable. As mentioned above, previous studies have found a positive effect of organizational commitment on OCB. However, when organizational or group identification was entered into a regression along with organizational commitment, the organizational commitment had no significant effect on OCB because of the stronger impact of organizational or group identification ( $\beta = 0.083$ , n.s. in Table 4;  $\beta = 0.065$ , n.s. in Table 5). Similarly, the interactions of organizational commitment and organization or group identification were not significant ( $\beta = -0.040$  in Table 4;  $\beta = 0.033$  in Table 5).

Table 2 The Results of Hierarchical Regression Analysis (1)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adj. R <sup>2</sup>	F
	B	Std. Error	Beta				
1 (Constant)	3.151	0.180		17.550	<0.001	0.018	3.771*
Gender	0.174	0.076	0.129	2.294	0.022		
Age	0.005	0.004	0.086	1.523	0.129		
2 (Constant)	2.167	0.238		9.119	<0.001	0.116	11.186**
Gender	0.217	0.072	0.161	2.998	0.003		
Age	0.004	0.003	0.060	1.124	0.262		
Job Satisfaction (JS)	0.162	0.042	0.219	3.884	<0.001		
Organizational Identification (OI)	0.163	0.051	0.179	3.168	0.002		
3 (Constant)	2.221	0.238		9.344	<0.001	0.126	9.994**
Gender	0.221	0.072	0.163	3.064	0.002		
Age	0.004	0.003	0.065	1.220	0.223		
Job Satisfaction (JS)	0.156	0.042	0.211	3.756	<0.001		
Organizational Identification (OI)	0.152	0.051	0.167	2.962	0.003		
JS×OI	-0.100	0.047	-0.113	-2.110	0.036		

a. Dependent Variable: OCB \*\*;  $p < 0.01$ , \*;  $p < 0.05$

Table 3 The Results of Hierarchical Regression Analysis (2)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adj. R <sup>2</sup>	F
	B	Std. Error	Beta				
1 (Constant)	3.151	0.180		17.550	<0.001	0.018	3.771*
Gender	0.174	0.076	0.129	2.294	0.022		
Age	0.005	0.004	0.086	1.523	0.129		
2 (Constant)	2.107	0.229		9.198	<0.001	0.138	13.423**
Gender	0.198	0.071	0.147	2.780	0.006		
Age	0.004	0.003	0.063	1.193	0.234		
Job Satisfaction (JS)	0.139	0.042	0.188	3.310	0.001		
Group Identification (GI)	0.202	0.048	0.240	4.255	<0.001		
3 (Constant)	2.183	0.232		9.402	<0.001	0.144	11.452**
Gender	0.195	0.071	0.145	2.747	0.006		
Age	0.004	0.003	0.063	1.204	0.230		
Job Satisfaction (JS)	0.137	0.042	0.185	3.266	0.001		
Group Identification (GI)	0.188	0.048	0.223	3.905	<0.001		
JS×GI	-0.077	0.043	-0.095	-1.785	0.075		

a. Dependent Variable: OCB \*\*;  $p < 0.01$ , \*;  $p < 0.05$

Table 4 The Results of Hierarchical Regression Analysis (3)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adj. R <sup>2</sup>	F
	B	Std. Error	Beta				
1 (Constant)	3.151	0.180		17.550	<0.001	0.018	3.771*
Gender	0.174	0.076	0.129	2.294	0.022		
Age	0.005	0.004	0.086	1.523	0.129		
2 (Constant)	2.367	0.243		9.727	<0.001	0.078	7.605**
Gender	0.220	0.075	0.163	2.949	0.003		
Age	0.004	0.003	0.067	1.219	0.224		
Organizational Commitment (OC)	0.070	0.050	0.083	1.403	0.162		
Organizational Identification (OI)	0.198	0.053	0.218	3.710	<0.001		
3 (Constant)	2.398	0.247		9.695	<0.001	0.077	6.117**
Gender	0.219	0.075	0.162	2.928	0.004		
Age	0.004	0.003	0.068	1.238	0.217		
Organizational Commitment (OC)	0.068	0.050	0.080	1.351	0.178		
Organizational Identification (OI)	0.193	0.054	0.211	3.557	<0.001		
OC×OI	-0.040	0.055	-0.040	-0.718	0.474		

a. Dependent Variable: OCB \*\*: p < 0.01, \*: p < 0.05

Table 5 The Results of Hierarchical Regression Analysis (4)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adj. R <sup>2</sup>	F
	B	Std. Error	Beta				
1 (Constant)	3.151	0.180		17.550	<0.001	0.018	3.771*
Gender	0.174	0.076	0.129	2.294	0.022		
Age	0.005	0.004	0.086	1.523	0.129		
2 (Constant)	2.264	0.236		9.575	<0.001	0.111	10.681**
Gender	0.197	0.073	0.145	2.681	0.008		
Age	0.004	0.003	0.069	1.287	0.199		
Organizational Commitment (OC)	0.055	0.049	0.065	1.133	0.258		
Group Identification (GI)	0.241	0.048	0.287	5.046	<0.001		
3 (Constant)	2.232	0.243		9.176	<0.001	0.109	8.595**
Gender	0.198	0.073	0.147	2.700	0.007		
Age	0.004	0.003	0.067	1.237	0.217		
Organizational Commitment (OC)	0.058	0.049	0.068	1.177	0.240		
Group Identification (OI)	0.249	0.050	0.295	5.020	<0.001		
OC×GI	0.030	0.051	0.033	0.586	0.558		

a. Dependent Variable: OCB \*\*: p < 0.01, \*: p < 0.05

Finally, simple slope analysis was performed following the significant results regarding the interactions of job satisfaction and two identification measures (Figures 1 and 2). According to the convention, one standard deviation above and below the mean of variables were considered as high or low criteria for these variables, respectively. Conveniently, organizational or group identification is considered to moderate the effect of job satisfaction on OCB.



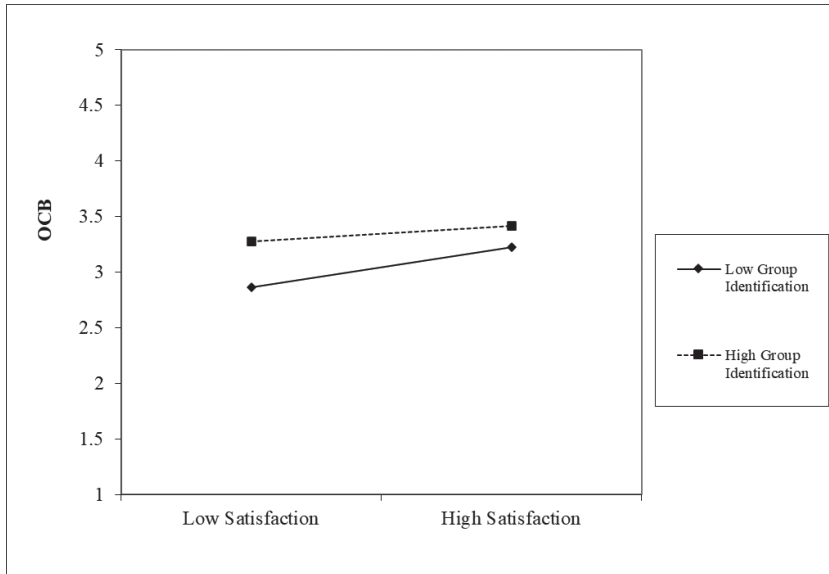


Figure 1 Simple Slope Analysis of Job Satisfaction and Organizational Identification

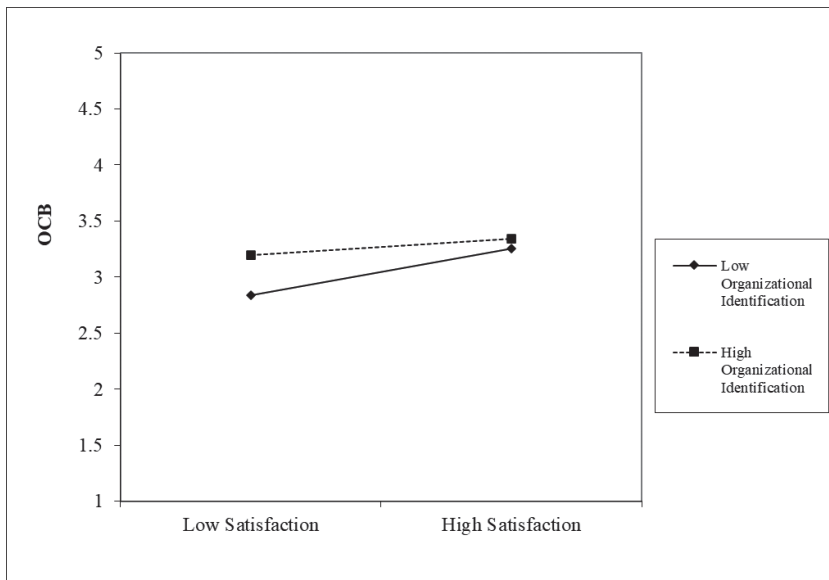


Figure 2 Simple Slope Analysis of Job Satisfaction and Group Identification

Figure 1 shows the different effects of job satisfaction on OCB depending on organizational identification, and Figure 2 depicts the different impacts depending on group identification. As can be observed, the two figures appear quite similar. The gradient of the slope of job satisfaction in the case of low organizational identification

was 0.230 ( $t = 4.381$ ,  $p < 0.001$ ), while that in the case of high organizational identification was 0.083 ( $t = 1.477$ , n.s.). Similarly, the gradient of the slope of job satisfaction in the low group identification was 0.198 ( $t = 3.713$ ,  $p < 0.001$ ), while that in the high group identification was 0.076 ( $t = 1.375$ , n.s.). These results support H1 and H2.

## 6. Discussion

This empirical study revealed several important findings. First, if Asian people emphasize interpersonal relationships with other employees more than a relationship with the organization, as Hui et al. (2004) expected, group identification might be a stronger moderator of the effect of attitudinal factors on OCB. However, our empirical results show that organizational and group identifications had a similar impact on OCB-I, even when attitudinal factors were included as independent variables. Second, the two attitudinal factors had different effects. Even after organizational or group identification was included, job satisfaction still had a significant impact on OCB, and the interactions of job satisfaction and one of the identification variables were also significant. This result supports our hypotheses (H1 and H2). Third, organizational commitment did not affect OCB after an identification variable was included, and the interaction between organizational commitment and identification was not significant. This result does not support our hypotheses (H3 and H4).

The third point requires discussion. There might be a problem, not with the conceptual shuffle between organizational commitment and organizational identification (Van Knippenberg & Sleebos, 2006), but with the scales measuring these two concepts. Organizational commitment items inquire about the degree to which an employee commits to the organization but do not inquire about the reason why he/she has such a commitment to the organization. For example, when a respondent faces the item, "I am willing to work harder than I have to help this organization succeed," he/she might agree to this question not only when he/she wants to return the favor to the organization, but also when he/she identifies with the organization. Thus, the results of this study might come from organizational commitment items measuring some of the tendency of high organizational identification. However, this explanation cannot be applied to the results of group identification.

On the other hand, when the items regarding job satisfaction are utilized, it makes no sense that the measurement of high job satisfaction is due to high organizational or group identification because they are specialized in measuring the attitude toward the job. This might be the reason behind obtaining results that support our hypotheses.

In this empirical study, the two identification variables did not differ from each other in terms of their interaction with attitudinal factors. However, organizational identification was excluded because of the stronger effect of group identification if these two variables were entered simultaneously into the stepwise regression with OCB as a dependent variable. Thus, interpersonal OCB can be said to have a greater impact on group identification than organizational identification.

## 7. Conclusion

This study determined the interactional effects of attitudinal and perceptual factors on OCB. As a result of our empirical study, different results regarding the two attitudinal factors were found. Although we inferred some reason for these different results, it is difficult to specify the precise reason for this difference using a simple analysis.

Despite some limitations, this study has significant implications for future studies. The effect of many factors on OCB has been examined since the research on OCB began. It might be desirable to focus on various factors. However, researchers sometimes pick up a meaningless factor as an antecedent candidate with little logical explanation of why such a factor affects OCB. Even if a significant relationship is found, it may be meaningless without enough explanation. We hope this research will serve as a clue to rediscover that there are still unresolved aspects regarding traditional OCB antecedents, such as job satisfaction and organizational commitment.

\*This study was supported by JSPS KAKENHI Grant Number 19H01520.

Yutaka Ueda

Professor, Faculty of Business Administration, Seikei University

October 15, 2021

## References

- Bateman, T. S. & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *Academy of Management Journal*, 26(4), 587-595.
- Bentein, K., Singlhamber, F., & Vandenberghe, C. (2002). Organization-, supervisor-, and workgroup-directed commitments and citizenship behaviours: A comparison of models. *European Journal of Work and Organizational Psychology*, 11(3), 341-362.

- Hui, C., Lee, C., & Rousseau, D. M. (2004). Employment relationships in China: Do workers relate to the organization or to people? *Organizational Science*, 15(2), 232-240.
- Kesen (2016). Linking organizational identification with individual creativity: Organizational citizenship behavior as a mediator. *Journal of Yasar University*, 11(41), 56-66.
- Kong, F. & Weng, J. (2019). A review on asymmetries in workgroup and organizational identifications. *Social Behavior and Personality: An International Journal*, 47(5),1-8.
- Mael, F. & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13, 103-123.
- Mael, F. A. & Tetrick, L. (1992). Identifying organizational identification. *Educational and Psychological Measurement*, 52(4), 813-824.
- Marsden, P. V., Kalleberg, A. L., & Cook, C. R. (1993). Gender differences in organizational commitment: Influences of work positions and family roles. *Work and Occupations*, 20(3), 368-390.
- Meyer, J. P. & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- Organ, D. W. (1977). A reappraisal and reinterpretation of the satisfaction-cause-performance hypothesis. *Academy of Management Review*, 2(1), 46-53.
- Organ, D. W. (1988). *Organizational Citizenship Behavior: The Good Soldier Syndrome*, Lexington, MA: Lexington Books.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational Citizenship Behavior: Its Nature, Antecedents, and Consequences*, Thousand Oaks, CA: Sage.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663.
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13(6), 693-713.
- Van Dick, R., Grojean, M., Christ, O., & Wieseke, J. (2006). Identity and the extra mile: Relationships between organizational identification and organizational citizenship behaviour. *British Journal of Management*, 17(4), 283-301.
- Van Dick, R., van Knippenberg, D., Kerschreiter, R., Hertel, G., & Wieseke, J. (2008). Interactive effects of work group and organizational identification on job

satisfaction and extra-role behavior. *Journal of Vocational Behavior*, 72(3), 388-399.

- Van Knippenberg, D. & Sleebos, E. (2006), Organizational identification versus organizational commitment: self-definition, social exchange, and job attitudes. *Journal of Organizational Behavior*, 27: 571-584.
- Williams, L. J., & Anderson, SE. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, 17(3), 601-617.