URL: http://dx.doi.org/10.31703/gssr.2018(III-III).18

DOI: 10.31703/gssr.2018(III-III).18

# Impact of Time Pressure on Organizational Citizenship Behavior: Moderating Role of Conscientiousness

Tariq Iqbal Khan\* Imran Saeed† Sajid Rahman Khattak‡



In this article, we examined the relation **Abstract** between time pressure and organizational citizenship behavior and the moderating role conscientiousness. Two hundred and thirty employee working in service sector of different cities located in Pakistan participated in this study. Time lag research design was adopted in this study. Data for time pressure and conscientiousness were collected at time 1 (Self-Reported) and data for organizational citizenship behavior was collected at time 2 (Supervisory-Rating Method). Results of this study revealed that time pressure and conscientiousness was negatively related to organizational citizenship behavior. Furthermore, it was found that conscientiousness act as moderator in the relations between time pressure and organizational citizenship behavior. The findings make study significant for improving organizational behavior.

## **Key Words:**

Time Pressure, Conscientiousness, Organizational Citizenship Behavior

## Introduction

In the present era of competition, organizations are continuously striving to get ahead from their rivals. Organizations need to promote such culture that increases their employees' satisfaction level. So, their employees accomplish tasks that are not included in their job description and exhibit attitudes like loyalty, organizational compliance and help each other. In a nutshell display organizational citizenship behavior (Podsakoff et al., 2000). In organizational literature, OCB is a highly pertinent subject. Organ (1988) conceptualized the word organizational citizenship behavior as, positive behavior that employee depicts on the job but it is not a part of his formal job, such as volunteering to do tasks that are beneficial for the organization as a whole. Moreover, an employee is not bound to exhibit this behavior.

<sup>&</sup>lt;sup>‡</sup> Assistant Professor, Institute of Business & Management Sciences, University of Agriculture, Peshawar, KP, Pakistan.



<sup>\*</sup> Assistant Professor, Department of Management Science, University of Haripur, Haripur, KP, Pakistan.

<sup>†</sup> Lecturer, Institute of Business & Management Sciences, University of Agriculture, Peshawar, KP, Pakistan. Email: imranktk1984@gmail.com

Furthermore, in literature the term organizational citizenship behavior has been treated with numerous overlapping terms, such as contextual performance (Borman & Motowidlo, 1993), extra role behavior (Dyne & LePine, 1998) and prosocial organizational behavior (Brief & Motowidlo, 1986), all carrying the same meaning. To help managers, scholars across the globe have conducted a massive research in identifying the antecedents of OCB. Some of the antecedents that have been identified are age (Wanzian, & Weiwu, 2006), personality (Borman, 2004), leadership support (Netemeyer et al., 1997), performance (Bachrach et al., 2006) and time pressure (Hui, Organ & Crooker, 1994); commitment (Somech, & Bogler, 2002; Kuehn, & Al-Busaidi, 2002); job satisfaction (Zeinabadi, 2010; Kuehn, & Al-Busaidi, 2002; Foote, & Li-Ping, 2008; Organ, & Lingl, 1995); employee involvement (Cappelli, & Rogovsky, 1998), work engagement (Babcock, & Strickland, 2010); procedural justice (Moorman, 1991; Moorman, Niehoff, & Organ, 1993). These antecedents are followed by some of these consequences such as decreased turnover intentions (Hendrix, Robbins, Miller, & Summers, 1998); job variety (Chiu, & Chen, 2005). Moreover, OCB has a positive (Podsakoff et al., 1997; Podsakoff et al., 2000) as well as negative (Podsakoff & MacKenzie, 1994) impact performance. The present research intends to analyze the impact of time pressure on OCB.

According to Baer and Oldham (2006) time pressure is defined as, "degree to which employees' sense, that they have inadequate time to perform their tasks related to job, or requirement to perform work at faster speed than normal". It is a kind of job stressor that has a negative impact on wellbeing of employees (Elfering et al., 2005) as at times it can result in psychological stress (Keinan, Friedland, & Porath, 1987) and problems of musculoskeletal (Bigos et al., 1991). The present study intends to explore the impact of time pressure on OCB. Previous research advocates that time pressure are a form of stress that has a negative impact on OCB (Boerner, Dütschke, & Schwämmle, 2005; Bragger et al., 2005; Organ & Hui, 1995; Kohan & Mazmanian, 2003; Jain, & Cooper, 2012). On the other hand, some readings propose that there exists a positive impact of stress with OCB (Singh, & Singh, 2010; Karam, 2011). Moreover, few studies have found no relationship between these constructs (Paillé, 2010).

The existing body of knowledge suggests that numerous potential variables, moderate the relationship of various forms of job stress with OCB. Some of the variables taken as moderator in prior studies are: gender (Bolino, & Turnley, 2005); perceived organizational support (Jain, Giga, & Cooper, 2013); self-efficacy (Zerat, et al., 2014); burnout (Emmerik, Stone, & Jawahar, 2003); emotional intelligence (Salami, 2007; Li, 2013). Despite OCB is considered significant to organizational effectiveness Podsakoff, MacKenzie, Paine, & Bachrach, 2000) but little research has been conducted to identify the impact of personality on OCB (Ilies et al., 2009). Moreover previously no research has tested the conscientiousness as a moderator in the relationship of time pressure and OCB.

However, this study aims to find the combined effect of time pressure and Conscientiousness on OCB. Time pressure is the most important concept due to which scholars agreed on this phenomenon and conclude that is a personality characteristic, individual think that the work deadlines as positive or negative (Garden, 1997; Wynekoop & Walz, 2000). If someone likes to work under time pressure, challenge stressor may boost his/her level of organizational citizenship behavior. On the contrary, if employee does not like to work under pressure his level of OCB decreases. That is why each individual's based on his personality trait; is likely to show different emotional or physical reaction when exposed to stressful event (Bolger & Zuckerman, 1995). In personality research conscientiousness is a major trait of Big Five Factor Model of personality (Costa & McCrae, 1996; Hart, Griffin, Wearing, & Cooper, 1996). Those people who have conscientious characteristics are self-controlled, and usually identify themselves as attentive and hardworking (McCrae, et al., 2000). In literature of stress, conscientiousness is considered as the most prominent trait factor that influences how employee responses to different work stressors (Hobfall, 2001).

The research intends to provide a quantitative review along with the verification of structural relationships among variables. By unfolding two main aspects; firstly it will identify the link between time pressure and OCB. Furthermore, it will also clarify the moderating role of conscientiousness. This study will fulfill the gap as; up to the best of scholar knowledge no study has been conducted in Pakistani context. Moreover, in past different study's findings revealed that individual behavior is different across culture and respond differently (Hofsted, 1984; Gelfand, Erez, & Aycan, 2007). It will identify that how time pressure can lead to OCB and to what extend conscientiousness moderates this relationship within the Pakistani culture.

## Theory and Hypothesis

## Time pressure

Today's organizations have serious concern about the factors that affect job performance. Literature highlights that time pressure as an important variable that affect job performance. Employee performance was restricted through time pressure which may cause stress. Kinicki and Vecchio (1994) defined time pressure as performing certain tasks an insufficient time. Previous studies highlight time pressure as a kind of stress in certain situation like auditing (Solomon & Brown, 1992); business management (Bronner, 1982); decision making (MacRae, 2002) and marketing Heroux et al., (1988). Researchers like Allen et al., (1997) concluded that individuals are not in a position to become a mentor as such activity create pressure and need time and thus create stress. Furthermore, researchers also

concluded that time pressure has negative relation with certain profession i.e. accounting profession (Choo & Firth, 1998).

The concept of time pressure is presented in contrasting manner in literature. On one hand, there are those who suggest that time pressure decreases employee innovation, either through time deficit or anxiety and negatively affect the wellbeing and working standards of individuals (Hancock et al., 1995; Hockey, 2011). On the other hand, there are those who suggest that time pressure increases innovation, apparently through a sense of necessity and challenge. It can result in a sense of achievement (Podsakoff et al., 2007). Hence time pressure could have positive as well negative consequences, depending upon certain environmental eventualities (Amabile, Hadley & Kramer, 2002).

LePine et al., (2005) argued that time pressure has also some positive consequences on job outcomes. On the same way, Ohly and Fritz (2010) argued that time pressure is a challenging task which is associated with proactive behavior. They concluded that performance of employees under time constraint will enable them to achieve organizational goals in short time. Sonnentag et al., (2010) studied different occupations and professions and found a positive association between time pressure and pre-emptive work behavior. Fay and Sonnentag (2002) have the same findings. Ohly et al., (2006) also found the same results and concluded that time pressure has significant and positive relation with proactive behavior. Freedman and Edwards (1988) also found that time pressure has significant and positive association with job enjoyment and work performance.

Researchers also find a mix result regarding the relationship between time pressure and job performance. Gilboa et al., concluded that time pressure has both positive and negative association with job performance. Roa and Pradham (2007) argued that those employees who completed their tasks on time highlights their performance in number of ways like totality of work, timelines, productivity, efficiency, effective work, error free completion of tasks and so on. To perform efficient and effective work, an employee needs stability between work and family life. However, if the job of an employee disturbs their family life it become a stress and negatively affects their performance (Smith & Bourke, 1992).

In contrast to this position, various researchers also find an inverse relation between time pressure and job performance. Ohly and Fritz (2010) argued that time pressure is unfavorable to human health and well-beings and has negative relation with work performance. Similarly, Semmer et al., (2007) concluded that time pressure is dangerous and harmful in case where employee observe illegal or unlawful work experience such as immoral work environment or too much high expectation of top management form employees without any facilitation.

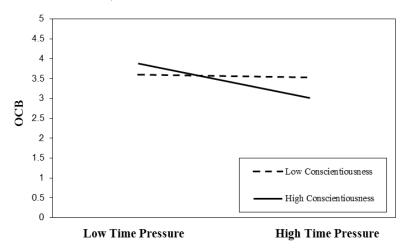
## Time Pressure and OCB

Decades ago the concept of organizational citizenship behavior was coined by

Dennis Organ along with his co-authors. He initially described it as, "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that is aggregate promotes the effective functioning of the organization" (Organ, 1988). Research reveals that there is insufficient understanding about OCB across organizational members (Lam, Hui, & Law, 1999). Moreover, Morrison (1994) conducted a study that revealed that employees having a same nature of job differ in their levels of commitment, satisfaction and tenure. Moreover they were likely to defined, their in-role and extra role differently.

Furthermore, in laboratory experiment, Hui et al., (1994) studied OCB and time pressure and found a negative association between them. On the same way Organ and Hui, (1995) conducted a field study and found that time pressure did not hinder OCB. Ohly and Fritz (2010) argued that time pressure is unfavorable to human health and well-beings and has negative relation with work performance. Similarly, Semmer et al., (2007) concluded that time pressure is dangerous and harmful in case where employee observe illegal or unlawful work experience such as immoral work environment or too much high expectation of top management form employees without any facilitation.

In the face of these controversial findings regarding the effects of time pressure on various job outcomes, it can be drawn that time pressure may causes individuals to demonstrate low creativity, low extra-role behaviors and low performance at their jobs. Moreover, performance was found to be negatively associated to time pressure Ohly and Fritz (2010) and positively related to OCB (George & Bettenhausen, 1990).



Hence, it can be drawn that time pressure is negatively associated with OCB. As individuals exposed with high time pressure may find no time to demonstrate citizenship behaviors as these individuals themselves are occupied with heavy

workload with deadlines. Therefore, it is reasonable to believe that time pressure will have an adverse influence on citizenship behaviors. Consequently, following hypothesis can be developed:

**H1:** Time Pressure has a negative relationship with OCB

### **Role of Conscientiousness**

The Big Five Personality Model is widely used in the field of organization behavior as it based on five personality traits. These well-defined traits are agreeableness, extraversion, openness, neuroticism and conscientiousness. These traits are genetically fixed in every personality (Rothbart, 2000; McCrae et al., 2000). However, in literature few scholars have explored the multiplicative interaction of these traits on employee behavioral outcomes at workplace (Blickle, et al., 2013). The present article covers the moderating impact of one trait i.e. conscientiousness on time pressure and OCB because it is considered the leading factor while conducting research on personality (Hart et al., 1996; Costa & McCrae, 1996).

Researchers conceptualized conscientiousness as individual characteristics like carefulness, responsible, determination, hard worker, and well planned (Barrick & Mount, 1991). Such qualities of employees are essential for successful performance at different work setting. Moberg (1997) argued that conscientiousness is necessary for achieving excellence. An individual having such personality trait are hardworking, preserving, well-organized and self-controlled and diligent. Such individual knows about their capabilities and skills and avoid challenging and difficult tasks (McCrae et al., 2000). As such individual are systematic and well-planned, they initially judge the pre-requisite of every task and accept those tasks which he/she perform well and gain competitive edge against other. In literature of stress, conscientiousness is considered as the most prominent trait factor that influences how employees' response to different works stressor (Hobfall, 2001).

Many researchers highlighted the significant influence of conscientiousness on organizational settings (Meyer, Dalal, & Bonaccio, 2009; Taylor, Bedeian, & Kluemper, 2012). Research suggests that high conscientiousness people spend more effort to counter the work-related issues and problems (Wang & Erdheim, 2007; Watson, Clark, & Harkness, 1994; Mount & Barrick, 1998). Furthermore conscientiousness individuals make sure that their work is done in a perfect manner in a given time (Biderman, Nguyen, & Sebren, 2008). Hence, they can manage time pressure.

Researchers argued that conscientiousness is important personality type as compared to other personality traits especially when study personality related research. Researchers also concluded that conscientiousness is significant predictor of OCB as compared to other personality traits and also enhance individual well-being (Ilies et al., 2010; Murphy & Lee, 1994). Thus, based on the

citied literature we concluded that individuals having higher conscientiousness may reveal high level of OCB even in a high time pressure environment.

**H2:** conscientiousness weakens the relationship of time pressure with OCB (such that high conscientiousness individuals tend to manage high time pressure)

#### Methods

## **Collection of Data Procedure and Sample**

Data collected for this study was personally administered from full time permanent and contractual employees covering the geographical location of four different cities of Pakistan. Time lag or longitudinal survey method was used to collect the collect the data in two different point of time. Data on time pressure and Conscientiousness were collected at stage one (self-reported), while after one month data of OCB was collected at stage 2 (supervisory rating method). Previous studies conducted in Pakistan also used this method (Bashir & Ramay, 2010). Moreover, as English is used as a medium of instruction in most of the academic institutes and high proportion of employed individuals can understand English. Hence, the questionnaire was not required to be translated in local language.

To get the questionnaire filled from the participants, personal as well as professional contacts were used. Before filling the questionnaire, subjects were provided little information on cover letter which briefly elucidates the purpose of the study. They were also ensured about the confidentiality about the information. Moreover, the amount of researcher's interference was minimal. No major obstacle was faced during the collection of the data. The employees willingly complete the questionnaires which are self-report and it contains of Conscientiousness and time pressure. Each employee's supervisor completes their supervisory-rated questionnaires of OCB. Both supervisor and subordinates have no access to each other response.

In this study 300 questionnaires were circulated and at the end 230 usable paired response from self as well supervisor rated received and the response rate was 76%. Out of 230 paired response 90% were male and their average age was 28 with (SD=8.8) years and average tenure was 4.59 (SD= 4.788) years. The sample of this study contained 49.1% clerical and technical staff. 34.3% assistant managers, and 13.5% managers and 3% directors with education levels ranging from undergraduate to graduate level degrees.

## Measures

Self-reports version questionnaires were used for Conscientiousness and time pressure. And supervisory rated version questionnaire was used for OCB. All

variables was measured with 5-point liker scale i.e. range from 1 = strongly disagree to 5 = strongly agree.

#### Time Pressure

A scale developed by Dapkus (1985) was used to measure time pressure. The items comprised: "You feel pressed for time" and "There just does not seem to be enough hours in the day". The reliability score of this construct was found to be 0.593. However after deleting item number 5 from the questionnaire the score raised to 0.682.

## **Organizational Citizenship Behavior**

Williams and Anderson (1991) developed the scale of OCB with 13 items was used to measure OCB with alpha reliability 0.88. Examples of items are "Helps others who have been absent" and reverse items contain "Great deal of time spent with personal phone conversations". The reliability score of this construct was found to be 0.69. However after deleting item number 8 from the questionnaire the score raised to 0.74.

#### Conscientiousness

Conscientiousness was accessed using a 10-items measure developed by Goldberg (1981). Examples of items comprised are "I am always prepared" and reverse coded items comprise "I leave my belongings round". The reliability score of this construct was found to be 0.65. However after deleting items 6 and 7 from the questionnaire the score raised to 0.68.

### Limitations

The limitations of the study are as followed. First, data for this study was collected from different geographical region i.e. Rawalpindi, Hassan Abdal, Haripur and Islamabad that limits the study to a certain area. So there is a need to conduct the study at a broader level with a larger sample size. Secondly, time pressure and conscientiousness were reported by the employee, there can be an element of biasness. On the other hand, was reported by the supervisor.

### Results

Table 1 demonstrate that there is negative connection between time pressure and organizational citizenship behavior (r = -.13, p < .05), time pressure and

Conscientiousness also adversely related (r=-165, p<.05) and OCB also negatively related to Conscientiousness (r=-.05, p>.05).

Table 1. Means, Standard Deviation, Correlation and Reliabilities

S		Mean	S.D.	1	2	3	4	5	6	7
1	Age	31.60	8.84	-						
2	Gender	1.10	0.30	24**	-					
3	Education	1.06	0.23	091	08	-				
4	Tenure	4.60	4.79	.62**	16*	12	-			
5	Time Pressure	0.004	0.58	11	08	01	049	(0.68)		
6	OCB	3.56	0.55	.02	.06	01	.066	130*	(0.74)	
7	Conscientiousness	0.00	0.59	02	01	05	013	165*	054	(0.68)

*Note.* N = 230; ". \* p < .05, \*\* p < .01

For hypotheses testing multiple regressions was used. Tenure was used as control variable and entered in the first step. Table 2 (given on next page) shows the regression effect of time pressure and Conscientiousness on OCB. Results revealed that time pressure was negatively related to OCB ( $\beta$  = -.135, p < .05; !R² = .026, p < 0.1). These results render support for hypotheses 1. Moreover, Conscientiousness was also negatively related to OCB ( $\beta$  = -.088, p < 0.1; !R² = .026, p < 0.1). Furthermore, it was found that Conscientiousness moderates the relationship of time pressure with OCB ( $\beta$  = -1.68, p < 0.1; !R² = .038, p > 0.1) by weakening it.

Table 2. Regression Results for Time pressure, Conscientiousness and OCB

	OCB			
	β	$\Delta R^2$		
Step 1:				
Tenure	.06	.004		

Step 2:		
Time Pressure	15**	
Conscientiousness	09	.026*
Step 3:		
Time Pressure x Conscientiousness	11*	.038*

Note. N = 230; Standardized Coefficients are reported. Gender was coded as "1" for male and "2" for female. \*p < .1, \*\*p < .05

However, for high and low (M  $\pm$  SD) value of the moderator i.e. conscientiousness were plotted. The plots of the interaction are shown in figure 1. The graph depicts that low conscientiousness individuals when exposed to time pressure, have no effect on OCB. On the other hand, when high conscientiousness individuals who have complete awareness of the work they perform, are exposed to time pressure, their OCB tends to reduce. Hence, results provide the evidence against rejection of hypothesis 2.

#### **Discussion and Conclusion**

This study results provide an insight into association between time pressure and OCB along with the moderating effect of Conscientiousness in Pakistan. Time pressure is yet an under research area in many Asian countries. Consistent with Hui, Organ and Crooker (1994), the present study evidently states that individuals working under time pressure tend to reduce their association with the organization, by reducing their OCB. The reason behind this finding can be that once the individuals are forced to work in limited amount of time, they experience the feeling of anxiety and lose focus of their work. Most of the organizations in Pakistan today tend to hire small number of employees, in order to save the organization expenses. And those small numbers of individuals are to complete all the tasks with in a deadline. As a result individuals feel pressurized and they sense that organization is draining energy out of them. This ultimately causes an employee OCB to deteriorate.

The finding of the study also revealed that high conscientiousness individuals' OCB tends to reduce when they are to work under time pressure. And low conscientiousness individuals' OCB is not affected by time pressure. The reason behind this finding can be that in Pakistan, high conscientiousness individuals are fully aware of their job. However, when they are to work under time pressure they tend to lose their focus and that ultimately reduces an individual's level of OCB. On the other side, employee with lower level of conscientiousness are not affected

by increase in time pressure. This can be, because unconscientiousness individuals are not fully aware of their work and they are not affected if they are to be forced to accomplish certain tasks at a limited amount of time.

The present study is useful for managers across Pakistan. As it has provided an understanding of employees' behavior, and the way they react to time pressure. It is up to the managers to make sure that employees are provided enough time to complete a task and their OCB remains stable. In this regard certain policies should be made to make sure that employees are not pressurized by time.

### References

- Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. The Journal of Psychology, 144(3), 313-326.
- Bachrach, D. G., Powell, B. C., Bendoly, E., & Richey, R. G. (2006). Organizational citizenship behavior and performance evaluations: Exploring the impact of task interdependence. Journal of Applied Psychology, 91(1), 193-201.
- Bigos, S. J., Battie, M. C., Spengler, D. M., FISHER, L. D., Fordyce, W. E., Hansson, T. H., ... & Wortley, M. D. (1991). A prospective study of work perceptions and psychosocial factors affecting the report of back injury. Spine,16(1), 1-6.
- Boerner, S., Dütschke, E., & Schwämmle, A. (2005). [Doing voluntary extra work? Organizational citizenship behavior in the hospital--a comparison between physicians and nurses]. Gesundheitswesen (Bundesverband der Arzte des Offentlichen Gesundheitsdienstes (Germany)), 67(11), 770-776.
- Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: the relationship between individual initiative and role overload, job stress, and work-family conflict. Journal of Applied Psychology, 90(4), 740.
- Borman, W. C. (2004). The concept of organizational citizenship. Current Directions in Psychological Science, 13(6), 238-241.
- Borman, W. C., & Motowidlo, S. M. (1993). Expanding the criterion domain to include elements of contextual performance. *Personnel Selection in Organizations; San Francisco: Jossey-Bass*, 71.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of management Review*, 11(4), 710-725.
- Cappelli, P., & Rogovsky, N. (1998). Employee Involvement and Organizational Citizenship: Implications for Labor Law Reform and "Lean Production# x201D.Industrial & labor relations Review, 51(4), 633-653.
- 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(6), 523-540.
- Claessens, B. J., Van Eerde, W., Rutte, C. G., & Roe, R. A. (2004). Planning behavior and perceived control of time at work. Journal of Organizational Behavior, 25(8), 937-950.
- Eatough, E. M., Chang, C. H., Miloslavic, S. A., & Johnson, R. E. (2011). Relationships of role stressors with organizational citizenship behavior: A meta-analysis. Journal of Applied Psychology, 96(3), 619.
- Elfering, A., Grebner, S., Semmer, N., Kaiser- Freiburghaus, D., Ponte, L. D., & Witschi, I. (2005). Chronic job stressors and job control: Effects on event- related coping success and well- being. Journal of Occupational and Organizational Psychology, 78(2), 237-252.
- Foote, D. A., & Li-Ping Tang, T. (2008). Job satisfaction and organizational citizenship behavior (OCB) Does team commitment make a difference in self-directed teams? Management Decision, 46(6), 933-947.
- George, J. M., & Bettenhawn, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a senrice context. Joud of Appiied Psychology, 75.698-709
- Jain, A. K., & Cooper, C. L. (2012). Stress and organisational citizenship behaviours in Indian business process outsourcing organisations. IIMB Management Review, 24(3), 155-163.
- Jain, A. K., Giga, S. I., & Cooper, C. L. (2013). Perceived organizational support as a moderator in the relationship between organisational stressors and organizational citizenship behaviors. International Journal of Organizational Analysis, 21(3), 313-334.
- Karam, C. M. (2011). Good organizational soldiers: conflict-related stress predicts citizenship behavior. International journal of conflict management, 22(3), 300-319.
- Keinan, G., Friedland, N., & Ben-Porath, Y. (1987). Decision making under stress: Scanning of alternatives under physical threat. Acta Psychologica,64(3), 219-228.
- Kiffin-Petersen, S. A., Jordan, C. L., & Soutar, G. N. (2011). The big five, emotional exhaustion and citizenship behaviors in service settings: The

- mediating role of emotional labor. Personality and Individual Differences, 50(1), 43-48.
- Kuehn, K. W., & Al-Busaidi, Y. (2002). Citizenship behavior in a non-western context: An examination of the role of satisfaction, commitment and job characteristics on self-reported OCB. International Journal of Commerce and Management, 12(2), 107-125.
- Li, Y. M. (2013). Moderating effects of emotional intelligence in the relationship between emotional labor, emotional exhaustion and organizational citizenship behavior of first-line hotel service staff. Актуальні проблеми економіки, (2), 226-236.
- Moorman, R. H., Niehoff, B. P., & Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment, and procedural justice. Employee Responsibilities and Rights Journal, 6(3), 209-225.
- Netemeyer, R. G., Boles, J. S., McKee, D. O., & McMurrian, R. (1997). An investigation into the antecedents of organizational citizenship behaviors in a personal selling context. The Journal of Marketing, 85-98.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington Books/DC Heath and Com.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington Books/DC Heath and Com.
- Organ, D. W., & Lingl, A. (1995). Personality, satisfaction, and organizational citizenship behavior. The journal of social psychology, 135(3), 339-350.
- Paillé, P. (2010). Perceived stressful work, citizenship behaviour and intention to leave the organization in a high turnover environment: Examining the mediating role of job satisfaction. Journal of Management Research, 3(1).
- 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.
- Salami, S. O. (2007). Moderating effect of emotional intelligence on the relationship between emotional labour and organizational citizenship behaviour. European Journal of Social Sciences, 5(2), 142-150.

- Singh, A. K., & Singh, A. P. (2010). Role of stress and organizational support in predicting organizational citizenship behavior. The IUP Journal of Organizational Behavior, IX (4), 7-25.
- Somech, A., & Bogler, R. (2002). Antecedents and consequences of teacher organizational and professional commitment. Educational administration quarterly, 38(4), 555-577.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. Academy of Management Journal, 41(1), 108-119.
- Van Emmerik, I. H., Stone, T. H., & Jawahar, I. M. (2003, August). The relationship between altruism and helping behaviors: some moderating effects of burnout. In Academy of Management Proceedings (Vol. 2003, No. 1, pp. B1-B6). Academy of Management.
- Wanzian, L., & Weiwu, W. (2006). A demographic study on citizenship behavior as in-role orientation. Personality and Individual Differences, 42, 225-234
- Zeinabadi, H. (2010). Job satisfaction and organizational commitment as antecedents of Organizational Citizenship Behavior (OCB) of teachers. Procedia-Social and Behavioral Sciences, 5, 998-1003.
- Zerat, M., Hassani, M., Rashidi, A., Hadidi, M., & Piri, M. (2014). The Moderating Role Of Self-Efficacy In Relationship Between Occupational Stress With Organizational Citizenship Behavior And Job Satisfaction Among Faculty Members Of Urmia University Of Medical Sciences. Journal of Urmia Nursing And Midwifery Faculty, 12(3), 0-0.