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**Job stress and
 organizational citizenship
 behavior among
 university teachers within
 Bangladesh: mediating
 influence of occupational
 commitment**

1. Introduction

Teaching is viewed as an immensely stressful occupation (Kokkinos, 2007; Stoeber & Rennert, 2008; Shkëmbi et al., 2015; Desouky & Allam, 2017) because it is characterized by lots of assignments and highly engaged workdays (Hargreaves, 2003; Lindqvist & Nordänger, 2006). Job stress yields teachers' physical symptoms, emotional erosion, anxiety, dissatisfaction, depersonalization, and intention to leave the profession (Skaalvik & Skaalvik, 2011; Tschiesner et al., 2014; Colomeischi, 2015; De Simone et al., 2016; Skaalvik & Skaalvik, 2017; Harmsen et al., 2018). Additionally, job stress reduces teachers' organizational citizenship behaviors (OCB) as revealed in previous research (e.g., Bragger et al., 2005; Cheung and Cheung, 2013; Cohen and Abedallah, 2015; Uzun, 2018; Salehi & Gholtash, 2011). These studies were performed in the context of USA, China, Turkey, and Iran. But research on job stress and OCB among Bangladeshi university teachers remains

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unexplored. So, the proposed study would be an inaugural trial in the context of Bangladesh.

Today's organizations need workers who work voluntarily, tolerate limited resources and unfavorable situations, avoid negativity, share expertise, and explore unprecedented developments for improving the organization (Yucel, 2008) because these types of behaviors, particularly known as OCBs, contribute to organizational performance by improving efficiency, increasing productivity and profitability, satisfying and maintaining customers, fostering financial and employee performance, reducing costs, reducing employee absenteeism and turnover (Koys, 2001; Podsakoff et al., 2009; Organ, 2018). Similarly, the positive outcomes of the OCB have been seen in the teaching profession and academic setting. The OCBs presented by the teachers contribute to the development of the institution in improving job satisfaction and teachers' sense of fulfillment, improving students' discipline and academic performance, and improving discipline and image in school (Oplatka, 2009).

It has been seen in previous research that occupational commitment (OC) is a psychological mechanism (Aranya & Jacobson, 1975; Lee et al., 2000; Meyer et al., 1993) that motivates teachers to demonstrate OCB (Cohen, 2006; Cohen & Liu, 2011; Ahmad et al., 2014; Imer et al., 2014). While previous studies have evidenced that job stress reduces OC (Jepson & Forrest, 2006; Gilbert et al., 2014; Klassen & Chiu, 2011; Klassen, et al., 2013) and reduced OC diminishes OCBs among teachers (Cohen, 2006; Cohen & Liu, 2011; Ahmad et al., 2014; Imer et al., 2014). Although these studies have examined the relationship between job stress and OC; OC and OCB among teachers, the mediating influence of OC on the linkage between job stress and OCB remains inconclusive.

This study contributes to the existing job stress and OCB literature through the following ways. Firstly, this research examines the negative relationship between job stress and OCB. This inverse relationship contributes to the thought of how job stress shatters teacher OCB. Secondly, job stress and OC will be inversely associated, which will contribute to the notion of how job stress reduces the level of OC among teachers. Therefore, this study offers some suggestions to the university decision-makers to detect the signals and ways of reducing job stress. Thirdly, OC will positively influence OCB. This positive association broadens the view of how the OC motivates teachers to present OCB, suggesting the university authorities to recruit highly committed candidates as faculty members. Finally, the link between job stress and OCB has been elucidated through OC. This mediation role proves OC as a resource that will improve teachers' abilities to better manage job

stress, which will subsequently enhance teacher OCB. In view of the gaps in the existing literatures, the present research has formulated the following objectives:

1. To examine the relationship between job stress and OCB among university teachers in Bangladesh.
2. To explore the mediating role of OC on the association between job stress and OCB.
3. To provide some suggestions on how to control job stress experienced by teachers and improve OCB among teachers.

2. Review of literatures

Job stress. Job stress is a state of mental pressure influenced by personality mediators, environmental factors, and emotional reactions (Derogatis, 1987). (Kyriacou (2001) defined teacher stress as the negative emotions, like anger, frustration, anxiety, depression, and nervousness that teachers experience due to some stressful events in the working environment During the last two decades, several researchers (e.g., Montgomery & Rupp, 2005; Gonzalez et al., 2008; Buchanan, 2010; Skaalvik & Skaalvik, 2011 & 2017; Newberry & Allsop, 2017; Desouky & Allam, 2017; Harmsen et al., 2018; Harmsen et al., 2019) have identified several factors as stressors among teachers, such as higher workload, pupil misbehavior, low student motivation, value dissonance, scarcity of support, the paucity of learning and development opportunities, job dissatisfaction, poor working environment, poor relation with colleagues, and poor affinity with parents.

Occupational commitment (OC). OC is the psychological association between a person and his/her occupation, which is founded on the emotional response to that profession (Lee et al., 2000), is supported in previous researches (e.g., Aranya & Jacobson, 1975; Meyer et al., 1993). OC can be viewed from three dimensions, such as affective, normative, and continuance commitment to the occupation (Meyer et al., 1993). OC appears with several positive attitudinal and emotional outcomes among employees, such as heightening level of job satisfaction (Lee et al., 2000; Freund, 2005), work engagement (Freund, 2005), job involvement (Lee et al., 2000), and some behavioral outcomes, such as reduced absenteeism (Freund, 2005), improved job performance (Lee et al., 2000), and citizenship behaviors (Cohen & Liu, 2011; Imer et al., 2014). Additionally, the committed individuals plan to improve their professional aspects (Alutto et al., 1973).

Organizational citizenship behavior (OCB). OCB denotes employees' those discretionary behaviors that surpass their formally assigned job duties and responsibilities and improve the operational effectiveness of the organization (Organ, 1988 & 1990). In other words, OCB refers to the performance that supports the social and psychological environment in which task performance takes place (Organ, 1997, p. 95). That OCB elicits higher organizational performance criteria was documented in previous research (e.g., Walz & Niehoff, 2000; Koys, 2001; Podsakoff et al., 2009). Focusing on early empirical research, Organ (2018) indicated that the organizations with the employees having a higher level of OCB would experience heightening level of operating efficiency, productivity, customer satisfaction, customer retention, financial performance, and lowered employee turnover. Similarly, the positive outcomes of OCB were also recorded in the teaching profession. The performance of citizenship activities and behaviors improves the teachers' level of job satisfaction and sense of self-fulfillment; enhances the pupils' discipline and academic performance; and heightens the school's discipline and image (Oplatka, 2009).

2.1. Hypothesis development

2.1.1. The association between job stress and OCB

Emotional dissonance and Work-family conflict (WFC) are considered stressful events in the teaching profession (Isenbarger & Zembylas, 2006; Chang, 2009; Tziner & Sharoni, 2014; Hossen et al., 2018). Several studies reported a significant link between emotional dissonance, WFC, and OCB among teachers. For instance, Cheung & Cheung (2013), in a sample of 264 school teachers from China, unrolled a significant inverse correlation between emotional dissonance and OCB toward individuals. Bragger et al. (2005) conducted a study among 203 school teachers working in New Jersey and New York and pointed out that WFC was significantly related to OCB. Similarly, by performing hierarchical regression analysis, they found that WFC is a significant predictor of OCB when controlling for job satisfaction and organizational commitment.

Teacher burnout is a consequence of prolonged job stress (Maslach et al., 1996). Several studies examined the association between burnout and OCB among teachers. For example, Salehi & Gholtash (2011) conducted a study in Iran, Cohen & Abedallah (2015) in Israel, Uzun (2018) in Turkey and they found a significant negative association between burnout and OCB in the teaching profession. Several studies (e.g., Jain et al., 2013; Soo & Ali, 2016)

also uncovered a significant inverse linkage between job stress and OCB among the employees of banking and call center organizations. These studies were operated in the context of Malaysia and India. Therefore, the following hypothesis is proposed:

H1: Job stress has a significant negative impact on OCB within the teaching profession in Bangladesh.

2.1.2. The association between job stress and OC

Various studies unearthed a significant correlation between job stress and occupational commitment among teachers around the globe. For example, Jepson and Forrest (2006) operated a study on stress among 95 faculty members from schools in the UK and informed that stress and OC were significantly associated. A subsequent study among 109 Dominican teachers (75 English-medium and 34 Spanish-medium content teachers) found a negative and significant correlation between work stress and occupational commitment (Gilbert et al., 2014). This significant correlation was reported for both groups. In addition, Klassen & Chiu (2011) disclosed a significant level of negative association between overall stress and OC in a sample of 813 Canadian teachers (434 practicing and 379 pre-service faculty members). However, the correlations were small. Another study of a sample of 1,187 pre-service teachers from Hong Kong, England, Thailand, and Canada revealed that job stress from pupil behavior and the workload was significantly and negatively associated with OC in all four countries (Klassen, et al., 2013). Hence, the following hypothesis is proposed:

H2: Job stress has a negative and significant association with OC among university teachers within Bangladesh.

2.1.3. The link between OC and OCB

Several previous studies revealed the association between OC and OCB among teachers. For example, Cohen & Liu (2011) conducted a study among 192 Israeli teachers to explore associations between the three forms of occupational commitments (i.e., affective, continuance, and normative OC) and two forms of citizenship behaviors (i.e., OCB-altruism and OCB-organization). They uncovered a positive and significant association between OCB-altruism and all the three

forms of OC and between OCB-organization and all the forms of OC). However, in hierarchical linear modeling (HLM), they found only the affective occupational commitment to be significantly and positively related to organizational OCB. In a prior study among 569 Israeli teachers belonging to two ethnic groups, such as Jews and Arabs, Cohen (2006) found a small but significant correlation between altruistic OCB and OC and between organizational OCB and OC.

Subsequently, Ahmad et al. (2014), in a sample of 230 Pakistani school teachers, revealed that teachers' commitment to the profession was significantly related to OCB. Imer et al. (2014), in a study of 360 individuals working in Istanbul (180 engineers and 180 teachers), also unearthed a significant correlation between affective OC and the three forms of OCBs, such as helping OCB, civic virtue OCB, and sportsmanship OCB and between normative OC and all the forms of OCBs except sportsmanship OCB. However, in hierarchical regression analysis, the authors found significant associations between affective OC and civic virtue OCB when controlled for dispositional affects like positive affect, internal and social negative affect. Therefore, the following hypothesis is proposed:

H3: OC has a significant positive impact on OCB among university teachers in Bangladesh.

2.1.4. The mediating influence of OC on the association between job stress and OCB

The Conservation of Resources (COR) theory (Hobfoll, 1989) and Job Demands-Resources Model (JD-R model; Bakker & Demerouti, 2007) are the effective frameworks to comprehend the interplay between job stress, OC, and OCB among teachers. The COR theory depicts that stress does exist when an individual losses resources or fails to gain resources. According to this theory, resources are those things, circumstances, personal characteristics, or energies that are considered to be beneficial for an individual. As stress arises due to the loss of resources, people try to make the most effective use of the resources left after loss to healing from the stress. Besides, the optimization of remaining resources and limiting resource loss improve the individuals' ability to symmetrize the continuous challenges, manage the stressful environment, lower negative outcomes, and improve the conditions. In light of this discussion, it can be assumed that resources will play the role of a mediator between stressors and outcomes.

The JD-R model delineates that two components, such as job demands and resources are associated with job stress. Job demands are those physical, psychological, social, and organizational aspects that may yield job stress among employees who have not properly recovered from the prior demands (Bakker & Demerouti, 2007). Whereas, job resources are those aspects of the job that not only reduce the stress eliciting from job demands but also instigates employee motivation, growth, advancement, and positive organizational outcomes (Bakker & Demerouti, 2007). Job resources may be organizational, social, and psychological (Bakker & Demerouti, 2007). Besides, the inclusion of personal resources (e.g., self-efficacy, self-esteem, and optimism) is the extension of the JD-R model (Xanthopoulou et al., 2007). Personal resources are the psychological aspects of an individual which are generally connected with resiliency and indicate his/her ability to manage and impact milieu successfully (Hobfoll et al., 2003).

Taking the above discussions into account, we have proposed that OC is a personal resource (see figure 1). Some reasons do work behind the consideration of OC as a personal resource. Firstly, OC is a psychological thing (Aranya & Jacobson, 1975; Meyer et al., 1993; Lee et al., 2000). Secondly, OC fosters job satisfaction, job involvement, work engagement, job performance, extra-role behaviors, and career advancement planning among employees (Alutto et al., 1973; Lee et al., 2000; Freund, 2005; Cohen & Liu, 2011; Imer et al., 2014). These findings imply that OC elicits an employee's positive attitudes and behaviors. Finally, OC is negatively associated with job stress (Jepson & Forrest, 2006) indicating that OC reduces stress. This information denotes that OC improves an employee's ability to manage the stressful work setting.

Teaching has become a serious stressful profession (Kokkinos, 2007; Stoeber & Rennert, 2008; Shkëmbi et al., 2015; Desouky & Allam, 2017) Job stress lessens the level of OC among teachers, which was empirically recorded in earlier research (e.g., Jepson & Forrest, 2006; Klassen & Chiu, 2011; Klassen, et al., 2013; Gilbert et al., 2014). As OC is a driver of employees' positive attitudes and behaviors (Alutto et al., 1973; Lee et al., 2000; Cohen & Liu, 2011; Imer et al., 2014), reduced OC will diminish the level of citizenship behaviors among teachers (Cohen, 2006; Cohen & Liu, 2011; Ahmad et al., 2014; Imer et al., 2014). Hypothesis 1 (H1) indicates that job stress has negative effects on OCB among teachers. H2 suggests that stress leads to reduced OC and H3 indicates that reduced OC weakens OCB. Therefore, the following hypothesis is suggested:

H4: OC will mediate the negative association between job stress and OCB among teachers.

2.2. Developing research model

Given the theories and existing research findings discussed above, we have proposed a research model considering OC as a mediating variable in the relationship between job stress and OCB among teachers (see figure 1).

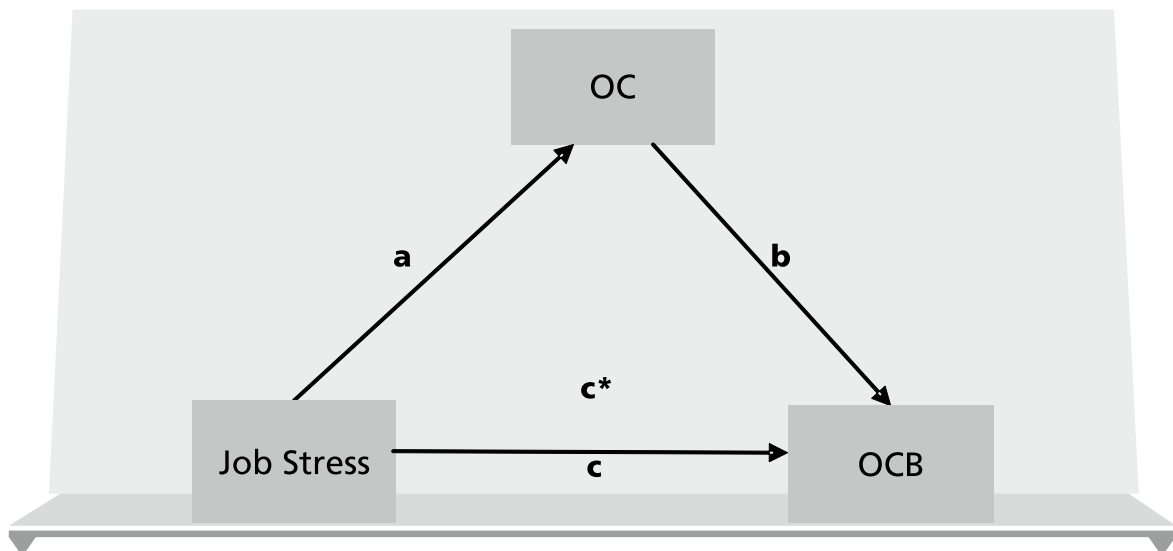


Figure 1. Research model of the effects of job stress on OCB through OC. Path 'c' indicates the relation between job stress and OCB without mediation (total effect). Path 'a' represents the association between job stress and OC. Path 'b' indicates the link between OC and OCB. Path c* shows the impact of job stress on OCB with the presence of mediating variable, OC (direct effect). The indirect effect comes from $a*b$

Source: authors' own design based on existing literatures

3. Research methodology

3.1. Participants and procedures

The respondents of this study were 244 teachers working at universities in Bangladesh. To collect data from these participants, 16 universities in Bangladesh were purposively selected. Then 400 teachers' e-mail addresses were collected at random. Subsequently, an invitation letter was sent with

the link of a Google Form containing the questionnaire to these addresses. The questionnaire claimed to be completely anonymous because it did not contain any information regarding the participants' names, departments, and university names. The survey was commenced on April 27, 2020 and ended on July 3, 2020. Till to the deadline, 244 faculty members gave their consent and submitted the filled up questionnaires, representing a response rate of 61 percent. These samples were considered representative of all universities in Bangladesh because teachers from public and private, general, science and technology, and engineering universities in the country were randomly surveyed.

As presented in table 1, 62.3 percent of teachers were working in public universities and 37.7 percent were working in private universities. Of them, 52.5 percent were aged between 21 and 30 years, 37.3 percent were between 31 and 40 years, 7.4 percent between 41 and 50 years, and 2.9 percent were aged above 50 years. 27.9 percent of the total respondents were female and 72.1 percent were male. Of 244 teachers, 11.1 percent completed their Bachelor's degrees, 75.0 percent completed their Master's degrees, and 13.9 percent acquired other degrees like Ph.D. 57.8 percent were Lecturers, 26.2 percent were Assistant Professors, 9.4 percent were Associate Professors, and 6.6 percent were Professors. Mean teaching experience of the teachers was 5.70 years (SD = 6.12).

Table 1. Characteristics of the study sample, (n = 244)

Characteristics	Frequency	Percentage
Age (years)		
21-30	128	52.5
31-40	91	37.3
41-50	18	7.4
Above 50	7	2.9
Gender		
Female	68	27.9
Male	176	72.1
Educational qualifications		
Bachelor's	27	11.1

Master's	183	75.0
Other	34	13.9
Type of university working in		
Private	92	37.7
Public	152	62.3
Designation		
Lecturer	141	57.8
Assistant Professor	64	26.2
Associate Professor	23	9.4
Professor	16	6.6
Teaching experience (Mean = 5.70 years; SD = 6.12)		

Source: authors' own design based on survey data

3.2. Measures

Based on the existing literature regarding teacher stress, job stress for the present research was measured by using 10 items (Montgomery & Rupp, 2005, Gonzalez et al., 2008, Buchanan, 2010, Skaalvik & Skaalvik, 2011 & 2017, Newberry & Allsop, 2017, Harmsen et al., 2018, Harmsen et al., 2019). Few samples of the items were "I experience stress because I often have to do lots of work (both academic and official) within limited time" and "I have poor relationship with my colleagues and seniors". To get responses, a five-point Likert scale was used, where 1 stands for "strongly disagree" and 5 for "strongly agree". Higher mean scores on this scale indicated higher job stress being experienced by the teachers. The Cronbach's alpha (α) demonstrated in the present study is 0.75 (see table 2).

To measure occupational commitment (OC), a 6-item scale provided by Jepson and Forrest (2006) was used. Two sample items of this scale were "I enjoy my job" and "I am satisfied in my position as a teacher". The same Likert scale as used in job stress was also used. Higher mean scores in this scale referred to a higher level of OC among teachers. The Cronbach's alpha (α) of this scale was 0.76 in the previous study, whereas in the present sample, the scale has reported better alpha reliability, $\alpha = 0.86$ (see table 2).

With discussion among the researchers, teacher OCB was measured by adopting 11 items from the OCB scale given by Podsakoff & MacKenzie (1989). "I willingly help others who have heavy workloads and work-related problems" and "I help newcomers and orient them with the university" were the two sample items. Subsequently, Podsakoff et al. (1990) and Moorman (1991) reported the alpha reliability of this scale, which was above 0.70. While the internal consistency (α) is 0.77 in the current study (see table 2).

3.3. Data analysis

SPSS 21 version software program was used to analyze the data. The alpha reliability test of the constructs, such as job stress, OC, and OCB was done (see table 2). According to George and Mallery (2003), alpha values greater than 0.90 are excellent, from 0.8 to 0.9 are good, from 0.7 to 0.8 are acceptable, and between 0.6 and 0.7 are questionable. The current study found that the alpha reliability of OC is good and the alphas of job stress and OCB are in acceptable range (see table 2). Before performing reliability analysis, normality and multi-collinearity of the data were performed. By examining the past research, Weston and Gore (2006) found that skewness values greater than 3 and kurtosis values greater than 10 indicate the non-normal distribution of data, whereas correlation values greater than 0.85 indicate multicollinearity. Consistent with these suggestions, the analyses reveal that the values of skewness and kurtosis of the variables are less than 3 and 10, respectively. Besides, the normal Q-Q graphs showed that the data plots of all the variables were following a straight diagonal line. In addition, the correlations between the constructs are less than 0.85 (see table 2). Therefore, it is indicating that the variables of this study are normally distributed and free from multicollinearity problems.

Thereafter, bivariate correlation analysis was done to reveal the nature and degree of associations between job stress, OC, and OCB. Hierarchical regression analyses were performed to test H1, H2, and H3. To test the direct and indirect effects for OC's mediation effect (H4), the researchers used Baron and Kenny's (1986) mediation approach: (1) 'c' indicates the link between the independent variable (IV) and dependent variable (DV); (2) 'a' represents the link between IV and mediating variable (MV); (3) 'b' shows the link between MV and DV; and (4) c^* represents the link between IV and DV when MV is added. The results from this approach will lead to any of the three decisions: (1) If the direct influence between the IV and DV is non-significant, full mediation does exist; (2) If the direct effect stays significant but the strength of significance (β) reduces, partial

mediation does exist; and (3) if the direct effect remains significant and the beta (β) value stays same as before, there is no mediation. To confirm the mediation results obtained from the Baron and Kenny's (1986) approach, Sobel's mediation test (Sobel, 1982) was also conducted.

4. Empirical results

4.1. Bivariate correlation

This study performed a bivariate correlation analysis between job stress, OC, and OCB to define the nature and level of association between these constructs. As found in table 2, there is a weak but significant inverse correlation between job stress and OCB ($r = -.18, p < 0.01$). However, OC and OCB are highly, significantly, and positively correlated ($r = .52, p < 0.01$). Job stress has a moderate level of significant negative relation with OC ($r = -.33, p < 0.01$).

Table 2. Descriptive statistics, Cronbach's alpha, and correlation coefficients of the research constructs

Variables	Mean	SD	Cronbach's alpha (α)	OCB	Job stress	OC
OCB	4.10	.45	.77	1		
Job stress	2.57	.58	.75	-.18**	1	
OC	4.27	.63	.86	.52**	-.33**	1

Note: ** $p < 0.01$ ($n = 244$)

Source: authors' own design based on survey data

4.2. Hypotheses testing

Regression analyses were conducted to prove the hypotheses formulated in the earlier sections. The first hypothesis (H1) postulated a significant inverse association between job stress and OCB. As shown in table 3, the study has revealed a non-significant inverse impact of job stress on OCB among teachers when controlling for demographic variables ($\beta = -.02, p > .05$). Hence, the first hypothesis (H1) has not been supported. The second hypothesis (H2) assumed a significant negative link between job stress and OC. Accordingly, the results

have reported that job stress significantly and negatively impacts teachers' OC when controlling for demographic variables ($\beta = -.32, p < .001$; see table 4). Therefore, H2 has been confirmed.

Table 3. Hierarchical regression analysis predicting OCB

Predictors	β	p-value	R ²
Step 1 Demographic variables:			.03
Age	-.05	.67	
Gender	.04	.52	
Educational qualification	.16	.03	
Type of university	-.09	.19	
Designation	-.04	.75	
Teaching experience	.07	.61	
Step 2 Main effects:			.30
Job stress	-.02	.74	
OC	.53	.000	

Source: authors' own design based on survey data

The third hypothesis (H3) expected a positive significant effect of OC on OCB. The findings also expressed a significant positive relation between OC and OCB ($\beta = .53, p < .001$; see table 3). So, the H3 has also been accepted. Furthermore, mediation analysis was done to verify the fourth hypothesis (H4). To test this hypothesis, at first mediation analysis following the Baron and Kenny's (1986) approach was performed (see table 5). As indicated in table 5, there is a full mediating impact of OC on the association between job stress and OCB.

Table 4. Hierarchical regression analysis predicting OC

Predictors	β	p-value	R ²
Step 1 Demographic variables:			.06
Age	-.14	.26	
Gender	.02	.72	
Educational qualification	.19	.01	
Type of university	.09	.18	
Designation	.04	.77	
Teaching experience	.11	.41	
Step 2 Main effects:			.16
Job stress	-.32	.000	

Source: authors' own design based on survey data

Results also showed that the effect of job stress on teacher OCB gets reduced ($\beta = -.18$ to $\beta = -.009$) when both OC and job stress were added as the independent variables to the model. Additionally, to confirm this result, the Sobel test (Sobel, 1982) was conducted (see table 6). To do this test, the 'Sobel test calculator' was used (available at <http://quantpsy.org/sobel/sobel.htm>) and results from this calculator have been demonstrated in table 6. Results have reported OC as a significant mediating variable in the relationship between job stress and OCB ($z = -4.691$, $p < .00001$).

Table 5. Results of Baron and Kenny's mediation analysis, (n = 244)

Hypothesis	Paths	β	p-value	Comment
OC mediates the relationship between job stress and OCB (H4)	(c) job stress \rightarrow OCB	-.18	.004	
	(a) job stress \rightarrow OC	-.33	.000	
	(b) OC \rightarrow OCB	.52	.000	Full mediation
	(c*) job stress \rightarrow OCB (presence of mediator)	-.009	.879	

Note: ' β ' indicates the standardized regression coefficients of the paths.

Source: authors' own design based on survey data

Table 6. Results of Sobel mediation test, (n = 244)

Path coefficients (Unstandardized)	The standard error of a and b	Sobel's Z-score	Indirect effect (a*b)	Sobel's standard error	p-value	Comment
a = -.358	S _a = .065	-4.691	-0.13461	0.029	0.00000	Mediation exists
b = .376	S _b = .042					

Notes: 'a' is the unstandardized beta coefficient for the association between job stress and OC and 'S_a' is the standard error of 'a'; 'b' is the unstandardized beta coefficient for the association between OC and OCB when job stress is also an independent variable and 'S_b' is the standard error of 'b'.

Source: authors' own design based on survey data

5. Discussion

The objectives of the present research are to peruse the effect of teachers' job stress on OCB and also the mediating impact of OC on this relationship. To test this model, the researchers have first examined the impact of job stress on OCB and OC. Surprisingly, the results of hierarchical regression analysis have informed that job stress has a negative but non-significant influence on OCB. Some reasons might be working behind this unexpected result. First, the teachers might be reluctant to express their experience of job stress. This reluctance might be appeared due to lack of open and free discussion sessions to share their experience of stress. Second, the respondents might think that they should not reveal their negative attitudes, emotions, and behaviors like stress, while they might be more interested to uncover their positive outcomes like OCB. So, this result is not aligned with the previous studies (Bragger et al., 2005; Salehi & Gholtash, 2011; Cheung & Cheung, 2013; Cohen & Abedallah, 2015; Uzun, 2018).

However, the present study showed that job stress has a significant negative impact on OC which means that a growing level of job stress reduces the level of OC among teachers. This finding is splendid and extends the knowledge of the impacts of job stress within teaching profession in the context of Bangladesh because earlier research also supported that it was negatively associated with OC (Jepson & Forrest, 2006; Klassen & Chiu, 2011; Klassen et al., 2013; Gilbert et al., 2014). Job stress produces negative physical symptoms, emotional, and behavioral erosions among teachers as reported in previous studies (Skaalvik

& Skaalvik, 2011; Tschiesner et al., 2014; Colomeischi, 2015; De Simone et al., 2016; Skaalvik & Skaalvik, 2017; Harmsen et al., 2018). Because of these adverse effects of job stress, it leads to reduced levels of OCB and OC among teachers as found in this study. Therefore, these findings have highlighted the essentiality of reducing job stress to improve the levels of OC and OCB among teachers.

Second, the results also ensure that OC positively anticipates OCB that promotes teachers' and students' positive outcomes and the institution's image as suggested by Oplatka (2009). This result is consistent with the previous research (Cohen, 2006; Cohen & Liu, 2011; Ahmad et al., 2014; Imer et al., 2014) that reported a positive association between OC and OCB. This positive link indicates that the growing level of OC enhances the teacher's OCB. Accordingly, both the previous and present findings suggest the importance of improving OC to flourish OCB among teachers. Third, the affirmation of the mediating role of OC between job stress and OCB not only claims the importance of a psychological connection between a teacher and his/her profession but also saturates the gap in the existing research on how OC influences the association between job stress and OCB in the context of the teaching profession. As indicated in the COR theory (Hobfoll, 1989) and the JD-R model (Bakker & Demerouti, 2007), resources reduce the level of stress and foster positive employee and organizational outcomes. Confirmation of the mediating effect of OC supported the notions of these models.

5.1. Theoretical implications

This is the first study that contributes to the existing theory by examining university teachers' job stress, OC, and OCB in the same frame and the mediating influence of OC on the relationship between job stress and OCB. This framework has been designed by following the COR and JD-R theories as well as past research. After executing this framework, it has been found that job stress negatively influences both OCB and OC. These results have proved the adverse effects of job stress in the context of the teaching profession. Given the functional effects of OCB and OC, it will not be a wise decision for the educational institutions to let these two valuable resources be destroyed. Moreover, the above-mentioned findings will help academia to understand how job stress destroys the image building events, such as OC and OCB. Second, this research has empirically proved the functional role of OC on OCB among teachers. According to this finding, teachers do not get themselves connected with OCBs automatically but an inner feeling is needed to display OCB. The present study indicates that OC

is such a psychological thing that motivates teachers to get involved in OCB. In this way, this result expands theoretical knowledge of how OC instigates an individual to come up with a positive outcome like OCB.

Third, the main contribution of the current study is the assertion of the indirect effect of job stress on OCB when OC is considered as a mediating variable. This research with the support of this mediating role and the previous discussion has demonstrated OC as a resource and a precedential mechanism to study the impact of job stress on OCB within the teaching profession. In this way, these results extend the notion of how job stress reduces OCB and OC intensifies OCB by reducing the dysfunctional effects of job stress. Therefore, the insights of this model could be used in future research to unearth additional means for the educational institutions to manage job stress that impedes teachers from doing OCB. Besides, this model could be tested in the context of other occupations and cultures.

5.2. Practical implications

The results of the current research have some pragmatic implications for university decision-makers, colleagues, seniors, and teaching professionals. First, the university authorities should endeavor to find ways to keep down teachers' experience of job stress because job stress exhausts a teacher's positive attitudinal and behavioral outcomes. Faculty members' disinclination to confess that they experience stress could be a challenge. Universities thus should take some proactive initiatives to track out signs of stress experienced by the teachers. One example could be arranging two-way and open discussion sessions at regular intervals, where the teachers will not worry about disclosing the events that induce stress. Respective department or faculty could arrange such types of meetings in which the experienced teachers and those who manage job stress successfully will share their views about how they encounter and limit the stress. Besides, the administration should build a positive and supportive attitude inside toward teachers, provide adequate information or manuals regarding service rules, and also should not force the teachers to work beyond their assigned regular duties. Additionally, a teacher's colleagues and seniors of the respective department should provide enough support when he/she is overloaded and fall in difficulties in managing stressful aspects like students' disruptive behaviors. Sufficient training programs like various seminars and workshops on stress management strategies, contemporary research methodologies, English language proficiency, Ph.D. preparation and opportunities, and other career and

professional development related issues should be arranged at regular intervals. These initiatives may motivate teachers to spontaneously perform activities beyond their routine tasks even in the face of onerous job demands.

Second, the positive and mediating influences of OC suggest that the teachers who have a high level of commitment toward their occupations confront and control their felt stress effectively and also engage in OCB. So, the university authorities should recruit those candidates as the faculty members who acquire a high score on such types of psychological resources like OC. Since after joining as a teacher, he/she may be physically, emotionally, or behaviorally exhausted in the face of stressful job events. So, the universities should take some initiatives to detect the level of OC of the teachers, such as conducting teacher attitude surveys including OC related items. Thus, the universities can unearth the reasons for poor levels of OC and accordingly take proper steps to heighten OC, subsequently thriving OCB among teachers. Universities can also enhance OCB by motivating teachers by highlighting how OCB positively influences teachers' and students' attitudes and behaviors, thus contributing to the image building of the universities. In light of the aforesaid measures, it is hoped that the job stress of teaching professionals could be diminished and their OC could be fostered to minify the effects of job stress on positive outcomes like OCB, thus developing universities' images.

6. Conclusions

Teachers who feel emotionally and behaviorally distressed in the presence of stressful job events may be reluctant to perform voluntary and unrewarded activities. However, the teachers who have a high level of commitment and passion toward their professions are more prone to adapt to job stress-impelling events and less likely to avoid showing behaviors that exceed their formal assigned duties. Consequently, this study contributes to the notion of how OC clarifies the influences of job stress on OCB in the context of the teaching profession, which could assist universities better handle their teachers' job stress and heighten their levels of OC and OCB.

As discussed earlier, this study comes up with a number of notable contributions to be offered to the university administrations, departmental heads, faculty deans, colleagues and seniors, and teachers. However, the present research is enclosed by some limitations. First, this study used cross-sectional survey data to perform analyses. Cross-sectional data have some constraints, such as the possibility of not being the representative, likelihood of generating

biased and inaccurate responses, and difficulty to define causal relationships between variables. Therefore, research is suggested in the future with the inclusion of longitudinal data for gaining better insights into the current model. Second, this study did not generalize its results to all universities in Bangladesh. Additionally, this research investigated the mediating influence of only one personal factor. So, it is recommended to perform future research by considering a larger sample with other personal factors, such as a passion for the job, self-efficacy, personality type, resilience, and emotional intelligence that could have mediating influences in the negative relationship between job stress and OCB. Finally, this research included university teachers from Bangladesh only. Hence, the current study leaves a future opportunity for examining this model by covering other occupations in the context of other countries.

Summary

Job stress and organizational citizenship behavior among university teachers within Bangladesh: mediating influence of occupational commitment

This study aims to explore the impact of job stress on organizational citizenship behavior (OCB) among university teachers in Bangladesh along with the mediating effect of occupational commitment (OC) on this relationship. An online questionnaire survey using the Google form was conducted to collect data from respondents. 244 valid samples were analyzed using bivariate correlation and regression analyses. The results of hierarchical regression analyses reveal that job stress is negatively and significantly linked to OC when controlling for demographic variables, such as age, gender, educational qualification, type of university, designation, and teaching experience; surprisingly, it has no significant effect on OCB. However, OC is positively related to OCB. Also, the OC has a full mediating influence on the linkage between job stress and OCB. With the support of mediation test, this study suggests OC as a personal resource and mechanism to better manage teacher job stress and improve OCB. Detailed implications and contributions have been discussed in the previous sections.

Keywords: *job stress, occupational commitment, organizational citizenship behavior, university teachers, Bangladesh.*

JEL: M12, I23, C83

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