

## Mediating Role of Employee Emotional Exhaustion in the Stress-Deviance Linkage

<sup>1</sup>Aminah Ahmad, <sup>2</sup>Zoharah Omar and <sup>2</sup>Farah Mardiana Radzali

<sup>1</sup>Institute for Social Science Studies, <sup>2</sup>Faculty of Educational Studies,  
Universiti Putra Malaysia, UPM Serdang, 43400 Selangor, Malaysia

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**Abstract:** Drawing from general strain theory and conservation of resources theory, we tested a mediation in which job stress is the predictor and workplace deviant behavior is the outcome with emotional exhaustion as the mediator. Using survey data from 261 public service employees in Malaysia we conducted structural equation modelling analysis. The results supported the proposed model. The stress-deviance linkage is significant and emotional exhaustion mediates the relationship between job stress and workplace deviant behavior. Emotional exhaustion resulting from the experience of stress further increases employee engagement in deviant behavior. The findings suggest that emotional exhaustion as a strain factor plays an important role in further understanding the effect of job stress on workplace deviant behavior. We discuss theoretical as well as practical implications of the findings for human resource management and recommendations for future research.

**Key words:** Job stress, deviant behavior, emotional exhaustion, human resource, management

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### INTRODUCTION

The prevalence of Workplace Deviant Behavior (WDB) is a serious matter for organizations since it is acknowledged that WDB has negative effects on an organization's performance and well-being (Resic *et al.*, 2013; Tuna *et al.*, 2016). WDB results in high production costs, loss of revenue and profits, inconsistent service quality and pricing and poor service reputation (Biron, 2010; Nasir and Bashir, 2012). Besides financial losses and poor service quality, WDB such as harassment and incivility tend to increase employee turnover and reduce the morale of employees (Bowling and Eschleman, 2010; Bowling and Gruys, 2010). In terms of health, the victims of WDB tend to suffer either physically or mentally (Nielsen and Knardahl, 2015).

Although, relatively more WDB studies have focused on the consequences compared to predictors of WDB (Piquero and Moffitt, 2014; Wei and Si, 2013) there is a growing interest on predictors of WDB among researchers. The predictor factors studied include personality or dispositional factors (Bolton *et al.*, 2010; Fida *et al.*, 2015; O'Neill and Hastings, 2011) organizational (Demir, 2011) and job-related factors (Bridger *et al.*, 213; Roberts *et al.*, 2011). With regard to job-related factors, contemporary workplace stress is increasingly common. Challenged by rising expectations on job performance, employees are clocking in longer hours, shouldering greater responsibilities and pushing

beyond their limits, both physically and mentally. Therefore, it is not surprising that researchers have identified job stress as a serious contemporary health issue with negative consequences. Indeed, previous findings have shown that WDB could result as a response to job stress (Roberts *et al.*, 2011) and job stress that could generate emotional exhaustion (Skaalvik and Skaalvik, 2011; Wang *et al.*, 2015). Other studies have shown that employee's experiencing emotional exhaustion tend to engage in deviant behavior (Bolton *et al.*, 2012). However, the interrelationships between job stress, WDB and emotional exhaustion have not been conceptualized and studied in a model to understand the indirect mechanism through which job stress would further increase employee engagement in WDB. Additionally, it appears that the investigation of emotional exhaustion as a variable mediating the stress-deviance relationship is, to the best of our knowledge limited. Hence, the aim of this study is to provide an understanding of how employee experience of emotional exhaustion can contribute to the stress-deviance linkage, with an insight on Malaysia. We propose that job stress will lead to emotional exhaustion which will in turn lead to WDB.

The contribution of this study to WDB literature and practice is twofold. First, the use of General Strain Theory (GST) and Conservation of Resources (COR) theory explains how job stress may render the experience of emotional exhaustion which consequently may lead to employee engagement in negative behavior. Second,

practically, the findings may be beneficial to employers as bases for planning preventive policies and practices that may reduce the source of stress as employees who experience less stress are less likely to experience emotional exhaustion leading to less engagement in deviant behavior than those who experience more stress.

**Workplace deviant behavior:** WDB refers to “voluntary behavior that violates significant organizational norms and in so doing threatens the wellbeing of an organization, its members or both” (Robinson and Bennet, 1995). The different deviant behaviors can be grouped into two categories:

- Minor-serious deviance
- Interpersonal-organizational deviance (Robinson and Bennett, 1995)

Examples of deviant behaviors in a minor form include intentionally working in an unhurried manner or withholding effort, clocking out at the office early as well as practicing favoritism. While examples of deviant behavior in a serious form include employee theft, corruption and harmful conduct towards co-workers (Bennet and Robinson, 2000), researchers have also cited other forms of WDB such as privilege abuse (Bolin and Heatherly, 2001) and absence from duty (Kidwell and Bennet, 1993). In literature on workplace behavior, other terms synonymous with WDB include counterproductive behavior (Sackett, 2002) organizational misbehavior (Vardi and Weitz, 2004), insidious behavior (Greenberg, 2010) and uncivil behavior (Roberts *et al.*, 2011). In addition, Appelbaum *et al.* (2007) suggested two categories of deviance; constructive and destructive. Constructive deviance refers to an employee’s innovative behavior that beneficially serves the organization. However, this paper focuses on destructive deviance, a behavior described as an employee’s intentional harmful conduct towards the organization and its members.

**General strain theory:** According to the GST, Agnew (2001) hypothesized that strain-related events render stressful experiences that influence the individual to engage in delinquent and deviant behavior. The concept of strain includes various forms of stressors and it is postulated that individuals respond to strain in multiple ways. Robust applications of GST has concentrated on criminal conducts specifically harmful conducts towards another individual in the form of theft or violence or damaging conducts on organizational property (Hay *et al.*, 2010). In addition, the GST theory explains that negative emotions exert pressures that result in

criminal and deviant behavior (Agnew, 2001). On the basis of response, GST asserts that strain-related events render negative emotional buildups with incremental need for corrective action and deviant behavior being a potential form of response. Agnew (2001) further advanced the theory by providing conditioning factors influencing individual’s strain adaptation using deviant or non-deviant behaviors. Based on the GST, we expect that job stress could affect WDB.

**Conservation of resources theory:** Our study employs the theory of Conservation of Resources (COR) postulated by Hobfoll (1988) to explain the extent to which job stress leads towards experiences in emotional exhaustion. The COR model hypothesizes that individuals strive to secure resources and stress occurs in the presence of threats of loss, actual loss and even inadequate return of investments on these resources. The resources include energies, conditions and personal characteristics that an individual values. Guided by Hobfoll’s COR (1998) theory, researchers suggest that stress could lead to emotional exhaustion in an event where employees are unable to secure adequate resources to fulfill the demands of work at hand (Halbesleben and Bowler, 2005, 2007). In other words, when an employee experiences stress resulting from the mismatch of role expectations and employee’s capabilities or resources, consequently, the employee will feel depleted of his or her emotional resources.

**Job stress and workplace deviant behavior:** Job stress refers to the divergence that exists between role expectation and what is being accomplished in that role (McVicar, 2003). Existing empirical findings demonstrate that stress at work is linked to negative behaviors including WDB (Lambert *et al.*, 2007). Spector and Fox (2005) noted that job stress can lead to employee engagement in deviant behavior. The major influence of job stress on deviant behaviors such as absenteeism, substance abuse, alcoholism, as well as low job motivation and productivity have been demonstrated by Safaria. Uncivil behavior (another label used to denote WDB) among workers in various industries in the United States was studied by Roberts *et al.* (2011). The researchers found that the experience of job stress increases worker’s tendency to display uncivil behaviors. Omar *et al.* (2011) did a study on WDB among Malaysian employees in government organizations and found that the higher the levels of job stress experienced by the employees, the greater the prevalence of WDB. A study by Ugrin *et al.* (2007) among North American, Asian and Indian workers revealed that due to job stress, workers are more likely to engage in non-work related computing as a means to forget the stress. Similarly, Garrett and Danziger (2008), in their study of workers in the United States

found that the experience of job stress could lead to cyberslacking which is a form of WDB. Building on these findings, we formulate our first hypothesis:

- $H_1$ : Job stress is positively linked to WDB

**Emotional exhaustion as a mediator:** Emotional exhaustion, defined as “feelings of being emotionally overextended and depleted of one’s emotional resources” (Maslach, 1993) is a strain experienced by an individual or the feelings of being drained by duties at work and it indicates the initial burnout stage (Halbesleben and Bowler, 2005). Emotional exhaustion is one of the three components in Maslach and Jackson (1981)’s model of burnout. The experience of job stress tend to drain an employee’s energy and thus emotional exhaustion ensue (Zhong *et al.*, 2009). Wang *et al.* (2015) found that employees who encounter stress at work experience increased levels of emotional exhaustion. Therefore, if an employee can manage job stress well, he or she will experience less emotional exhaustion.

The experience of emotional exhaustion leads to uncivil behavior or WDB among employees since they lack resources (cognitive) needed to be civil (Baumeister *et al.*, 2001). In an investigation of customer service employees at a call center in western Canada, Othman and Wahab (2010) found that emotional exhaustion is positively correlated to employee incivility. Mulki *et al.* (2006) in their study of health department employees in the Southeastern United States revealed that emotionally exhausted employees due to lack of supervisor’s participative leadership engaged in supervisor-targeted deviant behaviors. Another study conducted on Midwestern government workers in the United States showed that emotional exhaustion is linked to counterproductive work behaviours (Bolton *et al.*, 2012). In other words, employees who are emotionally drained by tasks and responsibilities at the workplace would feel more tired and thus would for example take longer breaks than allowed, spend less effort at work, avoid work through being absent or late or mistreat their coworkers. Furthermore, a survey of employees in the United States by Krischer *et al.* (2010) provides support for the positive linkage between the emotional exhaustion experienced and two forms of deviant behavior namely, production and withdrawal deviance. This leads to our second hypothesis:

- $H_2$ : Emotional exhaustion mediates the linkage between job stress and WDB

## MATERIALS AND METHODS

**Sample:** About 200 and 61 public service employees in Malaysia constituted the study sample. The public sector

was chosen since despite the government’s commitment to promote civility through the establishment of the Public Complaints Bureau in 2000, there still remains room for improvement through the reduction of negative employee behavior (Siddiquee, 2006). The daily paid part-time employees were excluded from the sample due to the difference in workload which may have an influence on the job stress studied. Self-administered structured questionnaire was used to collect data through the drop and collect method. In this present survey, the questions were in both English and Malay languages with the latter being the first language and the former the second language of Malaysians. The original questions which were in English were translated to the Malay language and back translation was conducted to make sure that the meanings of the questions were equivalent. We assured the participants of the confidentiality of all responses.

## Measures

**Workplace deviant behavior:** We used fifteen items from Bennett and Robinson (2000) to assess WDB. Employees were requested to rate from 1 (never) to 7 (very often) to how often they engage in the deviant behaviors. The WDB scale consisted of interpersonal deviance (behaviors that are directly harmful to other individuals within the organization) and organizational deviance (behaviors that are harmful to the organization). In a meta-analysis by Dalal (2005), the researcher recommended that the two dimensions be combined into an overall measure of workplace deviant behavior when the findings revealed that the corrected correlation between WDB directed toward individual and organization is relatively high ( $\rho = 0.70$ ). Also Gill *et al.* (2011) found a strong correlation between the subscales ( $r = 0.85$ ). Therefore, we aggregated across items and treated this as a single WDB construct. A sample item for interpersonal deviance is “Made fun of someone at work” and for organizational deviance is “Intentionally worked slower than you could have worked”.

**Job stress:** Seven items from Anderson *et al.* (2002) stress scale were used to determine the level of job stress. We requested participants to rate how often they experience stress-related feelings or situations on a scale ranging from 1 (never) to 7 (very often). A sample item is “Have you found that you could not cope with all the things you had to do?”

**Emotional exhaustion:** We assessed emotional exhaustion using a nine-item scale adapted from Maslach Burnout Inventory (MBI). The employees were requested to respond using a seven-point scale ranging from 1 (never) to 7 (very often). A sample item is “I feel burned out from my work” A high score indicates a high level of emotional exhaustion.

**Social desirability bias:** Social desirability bias refers to the inclination for individuals to describe themselves in a normally favorable fashion (Holden and Fekken, 1989). In this study, since employees are required to indicate how frequent they engage in WDB, they may have the inclination not to indicate the true frequency of engagement in the behavior and hence the social desirability bias test was conducted to address this limitation. Social desirability test scores may vary among individuals as well as in different contexts. The scores were summated to determine the social desirability of an individual. A higher score indicates a higher social desirability bias of an individual. In this study, we used a ten-item short version of Crowne-Marlowe social desirability scale (Crowne and Marlowe, 1960) with response options of true and false. Employees were asked to indicate whether the statements portray themselves. A sample item is “When I don’t know something, I don’t at all mind admitting it.” A score of 0 was assigned to true and 1 to false option. Negative statements were reverse coded. The mean and standard deviation of the scores were calculated. The mean score for social desirability was low ( $M = 4.43$ ,  $SD = 1.66$ ), thus indicating a low response bias in this study sample.

**Data analysis:** To assess how well the proposed conceptual model fitted the collected data, the SEM procedure was employed. Before performing SEM, we made sure that the following model assumptions were not violated -- sample size and normality of the data as suggested by Hair *et al.* (2010). The data collected from the participants (261) in this present study were sufficient for SEM, since, according to Kline (2011), a sample with a minimum of 200 participants is sufficient for the SEM procedure. The assumption of normality was checked for each univariate distribution of the variables using two statistical indices, namely skewness and kurtosis. Then, we computed descriptive statistics and correlation coefficients between variables.

The model fit for the measurement and structural models were assessed using four indices: The Carmines-McIver Index which is the ratio of the chi-square to the degree of freedom ( $\chi^2/df$ ). A ratio with a value between 2 and 3 indicates a satisfactory fit (Carmines and McIver, 1981). The Comparative Fit Index (CFI) which assesses the fit of the proposed conceptual model against the baseline model. A result closer to 1.0 indicates a good model fit with 0.90 indicating the conventional threshold for good fit (Bentler, 1990). The Root Mean Square Error of Approximation (RMSEA) which indicates how well the proposed model compares to the covariance matrix of the population (Browne and

Cudeck, 1993). A value ranging from .05 to .08 indicates a good model fit. Another fit statistic was calculated to compare models using the bootstrapping procedures (Bollen and Stine, 1992). The model fits the data if the p-value is greater than the significance level established at 0.05 when testing the null hypothesis in this present study.

## RESULTS

**Participant profile:** The participant’s ages ranged from 22-59 ( $M = 32.9$ ,  $SD = 7.77$ ). Of the participants, 160 (61.3%) were females and 101 (38.7%) were males. The participants comprised of 49.0% executives and 51.0% non-executives.

**Descriptive statistics of the variables:** Means, standard deviations and zero-order correlations are shown in Table 1. The correlation coefficients between variables are all below 0.65, the threshold suggested by Tabachnick and Fidell (1991) with regard to multicollinearity.

**Measurement model:** The Construct Reliabilities (CR) were 0.89 (for job stress), 0.89 (for emotional exhaustion) and 0.96 (for WDB). All composite reliabilities with values meeting the minimum standard (0.70 and above, Hair *et al.*, 2010) confirmed the convergent validity of the constructs. The Average Variance Extracted (AVE) of the constructs were 0.68 for job stress, 0.67 for emotional exhaustion and 0.76 for WDB. All constructs met the minimum criteria of convergence ( $AVE = 0.50$ ) (Hair *et al.*, 2010).

**Goodness-of-fit of measurement model:** The results indicated that based on the fit indices of the overall measurement model were acceptable with  $\chi^2(87) = 135.44$ ,  $p = 0.00$ ,  $\chi^2/df = 1.56$ , Goodness-of-Fit Index (GFI) = 0.94, CFI = 0.99, Incremental Fit Index (IFI) = 0.99, Tucker-Lewis coefficient Index (TLI) = 0.98, RMSEA = 0.05. The results showed that the fit indices were well above 0.9 level of acceptability, relative Chi-square ( $\chi^2/df$ ) was well below 3 and the RMSEA was 0.05 thus, indicating an acceptable fit between the hypothesized measurement model and the collected data. Thus, the results confirm the conceptual distinctiveness of the scales used for his study.

**Testing of hypotheses:** In  $H_1$ , it is proposed that job stress is negatively linked with WDB.

Table 1: Descriptive statistics and correlations of study variables

Variable	M	SD	1	2	3	4
Job stress	3.91	1.46				
Emotional exhaustion	3.53	1.51	0.61***			
WDB	2.70	1.71	0.30***	0.48***	-0.60***	

M = Mean; SD = Standard Deviation; N = 261; \*\*\* $p < 0.001$

Table 2: Model comparison

Model	$\chi^2/df$	$\chi^2(df)$	RMSEA	GFI	IFI	TLI	CFI
Direct model	1.88	80.92 (43)	0.06	0.95	0.99	0.98	0.99
Mediation model	1.56	135.45 (87)	0.05	0.94	0.99	0.98	0.99

RMSEA = Root Mean Square Error of Approximation; GFI = Goodness of Fit Index; IFI = Incremental Fit Index; TLI = Tucker-Lewis coefficient Index; CFI = Comparative Fit Index

Table 3: Results of mediation analysis via bootstrapping

Structural Model	$\beta$	p-value	95% BC CI	
			LB	UB
Direct model				
Job stress-WDB	0.30	0.00		
Mediation model				
Job stress-emotional exhaustion-WDB	0.01	0.93		
Standardized indirect effect	0.29	0.00	0.16	0.46

BC = Bias Corrected; CI = Confidence Interval; LB = Lower Boundary; UB = upper boundary

H<sub>2</sub>, it is postulated that emotional exhaustion mediates the linkage between job stress and WDB. To test H<sub>1</sub> and H<sub>2</sub>, the first step is to examine the direct structural model of the link between job stress and WDB. This is followed by an examination of the mediation structural model with emotional exhaustion as the mediator in the relationship between job stress and WDB. The structural model's standardized regression coefficients ( $\beta$ ) and p-values were calculated to test the research hypotheses of this study. There were significant effects of job stress on emotional exhaustion ( $\beta = 0.61$ ,  $p = 0.00$ ) and emotional exhaustion on WDB ( $\beta = 0.48$ ,  $p = 0.00$ ). The effect of job stress on WDB shrinks (from  $\beta = 0.30$ ,  $p = 0.00$  to  $\beta = 0.01$ ,  $p = 0.93$ ) upon adding the mediator, emotional exhaustion, to the model. Based on the goodness-of-fit indices, overall, the mediation model in this study was acceptable and fits the data better than the direct model (Table 2). The direct model explained 9% of the variance in WDB while the mediating model explained 23% of the variance in WDB. Hence, the mediation model explained the variance in WDB better than the direct model.

Based on the bootstrap analysis results in Table 3, for the direct model the linkage between job stress and WDB is significant ( $\beta = 0.30$ ,  $p = 0.00$ ) while for the mediation model the linkage between job stress and WDB is not significant ( $\beta = 0.01$ ,  $p = 0.93$ ). The indirect linkage between job stress and WDB through the mediating effect of emotional exhaustion is significant ( $\beta = 0.29$ ,  $p = 0.00$ ). Hence it can be concluded that the stress-deviance linkage is fully mediated by emotional exhaustion. The results further confirmed the hypothesized mediation model (Table 2).

The 95% Confidence Interval (CI) bootstrap estimate for the indirect effect of job stress on WDB through

emotional exhaustion did not include zero. Thus the results revealed that emotional exhaustion fully mediated the stress-deviance linkage (Table 3).

## DISCUSSION

In this study we tested a mediation model of the linkages among job stress, emotional exhaustion and WDB. Specifically, we investigated the linkages between job stress and WDB mediated by emotional exhaustion. The results indicated that job stress has a direct relationship with WDB which supports H<sub>1</sub>. Similar results were obtained by, for example, Lambert *et al.* (2007), Ugrin *et al.* (2007), Roberst *et al.* (2011) and Omar *et al.* (2011). Our results are in support of the GST which postulates that strainful events that result in stressful experiences would lead individuals to engage in deviant behavior.

This study demonstrates that emotional exhaustion provides a mechanism through which job stress transmits its effect on employee WDB. The employee experience of stress at work leads to emotional strain or emotional exhaustion. The emotional strain in turn leads to WDB. Hence, our results support H<sub>2</sub>. Our study represents the first few studies to empirically examine this mediation relationship. In so doing, we extend and provide additional support to the literature on emotional exhaustion as a mediator or intervening variable of the linkages between job stress and negative outcomes.

Overall, the present findings have significant theoretical and practical implications. This study used Agnew's GST and the COR theory as the theoretical foundation for studying the linkage between job stress and WDB and the role of emotional exhaustion as a mediator. The use of GST and COR theory extends previous research by explaining how job stress may render the experience of emotional exhaustion and as a consequence may lead to employee engagement in WDB. The GST (Agnew, 2001) suggests that an individual is less probable to behave deviantly when the individual possesses resources including personal traits to cope with stress.

This present research offers a few practical implications with regard to how organization can reduce WDB which is costly for organizations and employees. First, employers should plan for preventive policies and practices that could reduce the source of stress as employees who experience less stress are less prone to engage in deviant behavior than those who experience more stress. For example, employee work load as a source of stress (Shultz *et al.*, 2010) should be assessed and a supportive environment at research (Rhoades and Eisenberger, 2002) should be promoted.

There are several possible limitations of this present investigation. It may be argued that our results may be susceptible to problems of common method variance since all of the data in this study were obtained through self-reports. However, since this study includes individual experiences and WDB, self-reports are acceptable means to measure such constructs.

Furthermore, according to Spector *et al.* (2006), the problem associated with common method variance has been generally overstated. There are several reasons that make us believe that the common method bias with respect to social desirability response is a non-major limitation in this present investigation. Firstly, the anonymous data collected possibly limited the problem of social desirable responses. Secondly, the social desirability test conducted in this present study using the Crowne-Marlowe short version scale (Crowne and Marlowe, 1960) resulted in a mean score of 4.42 (SD = 1.66) indicating a low response bias. Thirdly, in a meta-analysis, Berry *et al.* (2007, 2012) compared the relationships between self-report WDB and other reported WDB with a number of common correlates and discovered that the relationships did not differ greatly, demonstrating that the use of self-reported data for WDB did not influence the relationships of WDB with other variables. Caution must be exercised in making conclusions on causal relationship due to the cross-sectional design of this study since results confirming mediation could not serve as evidence for causation (Preacher and Hayes, 2004). However, based on theories and previous research findings, we tend to believe that the directions of the linkages in our hypothesized model are plausible.

This present study focused specifically on WDB resulting from job stress. Job stress might yield a significant linkage with, for example, employee turnover intention (Bridger *et al.*, 2013; Thorsteinsson *et al.*, 2014) and job dissatisfaction (Cheng *et al.*, 2014). Future studies should also examine alternative mechanisms via which job stress may influence employee negative behaviors. Furthermore, this present study does not account for other possible sources of influence for WDB that could impact the findings, including for example, frustration, interactional injustice and payment inequity (Marcus and Schuler, 2004).

Another limitation relates to the study sample. The sample consisted of employees in the Malaysian public service sector. Hence, the results may not be generalized to employees in the private service sector. More studies are needed to gather data from private service industries to confirm the generalizability of the findings.

## CONCLUSION

The present study provides a meaningful contribution to the extant works on stress and deviance at the workplace by demonstrating the intervening role of emotional exhaustion in the stress-deviance relationship. Emotional exhaustion mediates the linkage between job stress and deviant behavior. Emotional exhaustion which was more strongly linked with the experience of stress at work makes employees vulnerable to engage in deviant behavior. The present findings help explain the possible mechanism that safeguards employees from engagement in negative behavior and support the notion that reducing job stress as a possible source of emotional exhaustion may be a preventive means to avoid the vulnerability of employees to display deviant behavior at the workplace.

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