

# The Effects of Emotional Exhaustion on Prison Employees' Job Satisfaction and Personal Accomplishments

Avdi S. Avdija<sup>1</sup>  
Roy, Sudipto<sup>2</sup>

## Abstract

This study investigates the effects of emotional exhaustion on job satisfaction and constraints of personal accomplishments of prison employees who work in the maximum and medium security prisons. Specifically, this study attempts to determine the amount of variation that can be explained in the job satisfaction and personal accomplishment, the main dependant variables, by using the emotional exhaustion as the main predictor, controlling for the effects of a selected number of demographic characteristics of prison employees. The data for this study were collected from three prisons in the State of Indiana - one maximum security prison and two medium security prisons. The results that emerge in this study suggest that emotional exhaustion accounts for eighteen percent of variation in the job satisfaction among prison employees, and about eight percent of the variation in the constraints of personal accomplishments.

## Introduction

Numerous studies have used emotional exhaustion primarily as an outcome variable (Roy & Avdija, 2012; Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010; Garland, 2004; Cropanzano, Rupp, & Byrne, 2003; Maslach, Schaufeli, & Leiter, 2001; Maslach & Leiter, 1997; Lee & Ashforth, 1996; Maslach, 1982; Lindquist & Whitehead, 1986). Few studies, however, have used emotional exhaustion as a predictor of job satisfaction or as a contributing factor that affects personal accomplishment in various occupations (Saiphon, 2010; Arabaci, 2010; Sharma, Verma, Verma, & Malhotra, 2010; Karatepe & Tekinkus, 2006; Karl & Peluchette, 2006; Mohler & Byrne, 2004). Both emotional exhaustion and constraints of personal accomplishments have been used to measure two of the three dimensions of job burnout (Maslach, 1982). Emotional exhaustion is considered the final stage of burnout and occurs when employees feel fatigued, overwhelmed, and emotionally drained by their job (Maslach, 1981; Griffin, Hogan, Lambert, et al., 2010). Such effect is frequently manifested in the reduction of job effectiveness and productivity (Maslach, Schaufeli, & Leiter, 2001). Nonetheless, emotional exhaustion is an independent construct, and as such, it can be studied independently or in conjunction with other variables. As an independent construct, emotional exhaustion can be used both as a predictor and as an outcome variable. Given that there is a low interest in studying the effects of various outcome correlates on the job satisfaction among prison employees, the present study incorporates emotional exhaustion as a primary predictor of job satisfaction and reduced personal accomplishments among correctional employees.

The syndrome of job burnout results in lack of job satisfaction. In other words, one of the consequences of job burnout is lack of job satisfaction (Matin, Kalali, & Anvari, 2012). As mentioned early, emotional exhaustion is one of the three dimensions of job burnout. In this context, it is noteworthy

<sup>1</sup> Indiana State University, Department of Criminology and Criminal Justice, [avdi.avdija@indstate.edu](mailto:avdi.avdija@indstate.edu)

<sup>2</sup> Indiana State University, Department of Criminology and Criminal Justice, [Sudipto.Roy@indstate.edu](mailto:Sudipto.Roy@indstate.edu)

that there is a host of factors that produce work-related emotional exhaustion; namely excessive stress, demanding job expectations both physical and psychological, underemployment, inadequate pay, lack of recognition, demand for perfectionism, etc. (Hatinen, Kinnunen, Pekkonen, & Kalimo, 2007; Wilk & Moynihan, 2005; Diefendorff & Richard, 2003; Zapf, 2002; van Dierendonck, Schaufeli, & Buunk, 1998; Zohar, 1997; Maslach, 1993; Lindquist & Whitehead, 1986; Dignam, Barrera, & West, 1986). This, in turn, has a subsequent effect which is manifested with a decrease in job satisfaction. Both satisfaction and dissatisfaction are viewed as a function of perceived relationship between what an individual wants from his or her job and what that individual perceives it as offering or entailing. In this study, job satisfaction refers to the attributes of job happiness among prison employees (Avdija & Roy, 2012).

Personal accomplishment, on the other hand, is the degree to which an individual is rewarded and recognized for meeting organizational goals. Reduced personal accomplishments are emotionally manifested in forms of feelings of ineffectiveness, incompetency, lack of productivity, and reduced motivation (Maslach, Schaufeli, & Leiter, 2001). In and of itself, reduced personal accomplishment, as measured by Spector and Jex's (1998) Organizational Constraints Scale (OCS) and Maslach, Jackson, and Leiter's (1996) Maslach Burnout Inventory (MBI), is a feeling. Thus, a sense of reduced personal accomplishment is affected by numerous variables, including emotional exhaustion. Emotional exhaustion can be particularly difficult for an individual to continue his or her active resistance against constraints that limit his or her personal accomplishment. In this context, emotional exhaustion becomes part of a set of constraints on personal accomplishment. Overall, the review of literature shows that emotional exhaustion, reduced personal accomplishment, and job satisfaction are interconnected constructs.

### **The Present Study**

The primary purpose of this study is to determine the amount of variation that can be explained in the job satisfaction and personal accomplishment by using emotional exhaustion as a predictor. Numerous studies have used emotional exhaustion as an outcome variable, representing one of three dimensions of occupational burnout in various professions (see Lambert, Hogan, Jiang, et al., 2010; Keinan & Malach-Pines, 2007; Garland, 2004; Morgan, Van Haveren, & Pearson, 2002; Hurst & Hurst, 1997). In this study, we use emotional exhaustion as a predictor. We start the analysis by examining the suitability of the data first. To accomplish that, we compute correlation matrix to determine whether or not we have multicollinearity issues with the data. Second, using hierarchical multiple regression analysis, a statistical technique that allows us to enter groups of variables in blocks, we examine the effect of selected demographic variables (e.g., age, gender, education, and marital status), working conditions, year of service in the correctional institutions, and emotional exhaustion on job satisfaction, the first dependent variable in this study. Third, we use the same set of variables to determine their effect on personal accomplishment, the second dependent variable in this study.<sup>3</sup> The demographic characteristics, working conditions, and years of service in the correctional institutions are used primarily as control variables in this study.

---

<sup>3</sup> This study has specific and distinct objectives as discussed on "The Present Study" section above. Thus, the results should be viewed and interpreted within the confines of the scope of this study.

## Method

### *Participants*

The total sample in this study consisted of 480 (157 females and 322 males) prison employees from two medium security prisons ( $n_1 = 158$  or 32.9% and  $n_2 = 146$  or 30.4%) and one maximum security prison ( $n_3 = 176$  or 36.7%). All three prisons were located in the state of Indiana. The portion of male participants in the total sample was considerably higher than female participants (67.1% vs. 32.9%). The participants ranged in age from 18 to 68 ( $M = 44.17$ ,  $SD = 11.47$ ). The years of service in the correctional institutions for the participants in the total sample ranged from 1 to 38 ( $M = 11.99$ ,  $SD = 8.14$ ). In terms of the current work positions they held in the correctional institutions at the time when they were surveyed, 51.9% of them were correctional officers, 11.9% were treatment staff, 10.6% were managers, 7.1% were educational instructors, 4.6% were human resources staff, 2.1% were health staff (e.g., physicians, nurses, etc.), and 11.9% others (e.g., housekeeping staff, etc.).

### *Dependent Variables*

Job satisfaction in this study refers to the attributes of job happiness among correctional employees (Avdija & Roy, 2012). As a construct, job satisfaction includes four core dimensions: feelings, attitudes, beliefs, and emotional behaviors toward ones job (Weiss, 2002).<sup>4</sup> To measure job satisfaction (JSS), in this study we used a thirty-five Likert-type scale items<sup>5</sup> adopted from Spector's (1994) Job Satisfaction Scale (JSS), which was initially designed to measure the job satisfaction of employees who work in non-profit organizations, primarily from human service perspective. The items of the JSS scale ranged from 1 (*disagree very much*) to 6 (*agree very much*). The internal consistency estimate of the job satisfaction scale was adequate (Alpha = .878). A higher score on this scale represents a higher level of job satisfaction

Constraints of personal accomplishment (CPA) is the second dependent variable in this study and it represents the perception of an individual's inability to meet organizational goals, which results in frustration and disappointment, and ultimately to a negative evaluation of self (Alarcon, Eschleman, & Bowling, 2009; Maslach & Leiter, 1997). To measure CPA, in this study we adopted an eleven-item Organizational Constraints Scale (OCS) from Spector and Jex (1998), which had an exceptionally high internal consistency with an alpha level of .852. Respondents are asked to indicate how often it is difficult or impossible to do their job because of the reasons listed on the scale (for each item). In this scale, the response choices ranged from 1 (*less than once per month or never*) to 5 (*several times per day*). A higher score on this scale represents an increased level of constraints, with a possible range of scores from 11 to 55.

### *Independent Variables*

Emotional exhaustion (EX), the main independent variable in this study, is defined as an unremitting state of physical and emotional weakening that result from exposure to constant stress and excessive job demands (Zohar, 1997). To measure emotional exhaustion, in this study we adapted one of the three subscales of Maslach Burnout Inventory (MBI) from Maslach, Jackson and Leiter (1996), which is a three factor-solution inventory that was designed to measure three sub-dimensions of job burnout; namely

---

<sup>4</sup> In this study, we do not claim that job satisfaction is a uni-dimensional construct. Additionally, due to space limitations, we did not include the results of factor analysis and the scree plot to determine the dimensions of job satisfaction as a construct.

<sup>5</sup> When we ran the reliability analysis, one item did not behave well; thus, to maximize the internal consistency between items, we excluded it from the Job Satisfaction scale.

emotional exhaustion, depersonalization, and personal accomplishment. The items of MBI subscale rated on a seven-point Likert-type scale ranging from 0 (*never*) to 6 (*every day*). The original subscale had 21 items. However, to increase the internal consistency of the scale, we reduced the number of items down to nineteen.<sup>6</sup> The internal consistency estimates of the MBI subscale that measured emotional exhaustion reached an exceptionally high reliability level (Alpha = .861) and thus it was deemed adequate for research purposes.

The length of service in the correctional institution was measured in years; whereas the working conditions in this study were measured using one dichotomous item with binary response categories (*Yes* = 1 and *No* = 0). The item we used in this study to measure working condition was, "Do you think – your working conditions are adequate?" Demographic variables that we included in this study were age (measured in years), gender (*Male* = 1, *Female* = 0), marital status (*Single* = 0, *Married* = 1), and education (*less than high school* = 0, *high school or more* = 1).

## Results

To investigate the effect of emotional exhaustion on job satisfaction and personal accomplishment, we computed hierarchical linear regression for a seven-variable model. In the first stage of the analysis, we computed the Person's correlation coefficients (see Table 1) to see if there were any problems with multicollinearity. Additionally, the following linearity conditions were met: 1) the dependent variables were interval level variables, 2) the main independent variable was a scale level variable, 3) and the assumptions of normally distributed errors and uncorrelated errors were also checked and met.<sup>7</sup> The Pearson's correlation matrix shows that there were two pairs of independent variable that had a moderately high correlation. The emotional exhaustion and working conditions showed a moderate correlation,  $r = -.49$ ,  $n = 480$ ,  $p < .001$ . Also the years of service and age showed a moderate correlation,  $r = .58$ ,  $n = 480$ ,  $p < .001$ . Nonetheless, these moderately high correlated sets of variables did not rise to the level of concern with the multicollinearity. Multicollinearity becomes a problem when the correlation among two or more predictors reaches about .70 (Pallant, 2007). The correlation matrix in Table 1 shows that none of the independent variables have reached this limit. Therefore, we conclude that there were no issues with the multicollinearity in this seven-variable model. It is noteworthy that the emotional exhaustion, the main independent variable, had a moderate to large-sized (i.e., between .40 and -.55) correlation with both dependent variables; namely the personal accomplishment and the job satisfaction.

---

<sup>6</sup> Two items that we excluded from the scale had a very low item-total correlation, .041 and .038 respectively. Thus, we removed them from the scale.

<sup>7</sup> Due to space limitations, the scatter plot was not included in this article. The scatter plot was only used to determine the linearity of variables in this study.

**Table 1: Pearson’s Correlation Matrix**

Variables	1	2	3	4	5	6	7	8
1. Age	----							
2. Gender	-.02	----						
3. Marital status	.10*	.11*	----					
4. Education	.06	-.15**	-.11**	----				
5. Years of Serv.	.58***	.09*	.06	.12**	----			
6. Working Cond.	.06	-.06	-.06	.05	.10*	----		
7. E.X.	-.15***	.09*	.03	-.07	-.11**	-.49***	----	
8. Job Satisfaction	.14***	-.04	-.01	.01	.13**	.37***	-.55***	----
9. CPA	-.13***	.11**	.03	.03	-.06	-.30***	.40***	-.45***

Notes: E.X. = Emotional Exhaustion; CPA = Constraints of Personal Accomplishment

\*p= <.05; \*\*p= <.01 \*\*\*p= <.001

To accomplish the first objective in this study, we examined the effect of emotional exhaustion on job satisfaction while controlling for the effects of a selected number of demographic variables (e.g., age, gender, education, and marital status), working conditions, and years of service in the correctional institutions. We accomplished this objective by computed a three-step hierarchical multiple regression model (see Table 2). First, we entered four demographic variables (e.g., age, gender, marital status, and education) in the Model 1, and then we entered years of service and working conditions in the correctional institutions in Model 2. Both models were statistically significant. However, the variables in Model 1 did not have a substantial explanation power,  $R^2 = .02$ ,  $F(4, 473) = 2.472$ ,  $p < .001$ . The data in Table 2 show that only age had a positive and statistically significant effect on job satisfaction among correctional employees ( $\beta = .135$ ,  $p < .001$ ). This shows that an increase in age (measured in years) is manifested with an increase in job satisfaction score for those who work in correctional institutions. Of the two variables we entered in Model 2, only working conditions was statistically significant ( $\beta = .365$ ,  $p < .001$ ). The second model (Model 2) was a better predictor of the job satisfaction among correctional employees,  $R^2$  change = .157,  $F(6, 471) = 38.200$ ,  $p < .001$ , explaining 14% of variation in job satisfaction. In Model 3, we entered emotional exhaustion, the main predictor of job satisfaction in this study. The data in Table 2 show that emotional exhaustion has a statistically significant and substantial effect on job satisfaction, ( $\beta = -.483$ ,  $p < .001$ ). As predicted, the data show that emotional exhaustion has a negative effect on job satisfaction. In other words, employees who reported a higher score on the emotional exhaustion scale, scored low on the job satisfaction scale. Emotional exhaustion by itself explained about 18% of the total variation in the job satisfaction among correctional employees,  $R^2$  change = .175,  $F(7, 470) = 122.728$ ,  $p < .001$ , while controlling for the effects of other variables in the model. The final model explained about 33% of the total variation in the job satisfaction among prison employees. According to Cohen (1988), this is considered a large effect.

**Table 2: Hierarchical Multiple Regressions: Regressing Job Satisfaction on all Independent Variables**

Hierarchical Steps		$\beta$	t	R <sup>2</sup>	$\Delta R^2$	F Change
Model 1	Age	.135	2.939***	.020	.020	2.472*
	Gender	-.044	-.957			
	Marital Status	-.022	-.474			
	Education	-.001	-.015			
Model 2	Years of Service	.057	1.092	.157	.136	38.200***
	Working Cond.	.365	8.522***			
Model 3	EX	-.483	-11.078***	.331	.175	122.728***

Final Model: R<sup>2</sup> = .331, Adjusted R<sup>2</sup> = .321, F (7, 470) = 33.288, p < .000

Notes: \*p = <.05; \*\*p = <.01; \*\*\*p = <.001; EX = Emotional Exhaustion

The second objective of this study was to test the effects emotional exhaustion on constraints of personal accomplishment while controlling for the effects of demographic variables (e.g., age, gender, marital status, and education), working conditions, and years of service in the correctional institutions. The results are presented in Table 3. To determine the unique contribution of demographic variables on constraints of personal accomplishment, we entered them in Model 1 in the hierarchical regression equation. Of the four demographic variables, only age ( $\beta = -.136$ ,  $p < .001$ ) and gender ( $\beta = .110$ ,  $p < .01$ ) were statistically significant in this model. In Model 2, we entered years of service and working condition. Only working condition was statistically significant in prediction personal accomplishment ( $\beta = -.295$ ,  $p < .001$ ). The R<sup>2</sup> change value for Model 2 was .085,  $F(6, 471) = 22.768$ ,  $p < .001$ . This indicates that 8% of the variation in constraints of personal accomplishments was explained by taking years of service and working conditions into account. In Model 3, we entered emotional exhaustion, the main predictor of personal accomplishments in this study. The emotional exhaustion significantly contributed to the prediction. The R<sup>2</sup> change value was .077,  $F(7, 470) = 44.823$ ,  $p < .001$  which indicates that about 8% of the variation in the constraints of personal accomplishment can be explained by taking emotional exhaustion into account. The beta weight ( $\beta = .320$ ,  $p < .001$ ), presented in Table 3, suggests that emotional exhaustion contributes most to predict constraints of personal accomplishments. The final model explained about 20% of the variation.

**Table 3: Hierarchical Multiple Regressions: Regressing Personal Accomplishment on all Independent Variables**

Hierarchical Steps		$\beta$	t	R <sup>2</sup>	$\Delta R^2$	F Change
Model 1	Age	-.136	-2.939***	.033	.033	4.027***
	Gender	.110	2.400**			
	Marital Status	.042	.922			
	Education	.059	1.277			
Model 2	Years of Service	.035	.647	.118	.085	22.768***
	Working Cond.	-.295	-6.748***			
Model 3	E.X.	.320	6.695***	.195	.077	44.823***
Final Model: R <sup>2</sup> = .195, Adjusted R <sup>2</sup> = .183, F (7, 470) = 16.260, p < .000						

Notes: \*p= <.05; \*\*p= <.01; \*\*\*p= <.001; E.X. = Emotional Exhaustion

## Discussion

The central aim of this study was to examine the effect of emotional exhaustion on job satisfaction and constraints of personal accomplishment among prison employees. A more specific aim of this study was to determine the amount of variation we can explain in the job satisfaction and the personal accomplishment by using emotional exhaustion as the main predictor, while controlling for the effects of demographic variables (e.g., age, gender, marital status, and education), working conditions, and the years of service in the correctional institutions. Prior research shows that emotional exhaustion has a negative effect on job satisfaction, regardless of occupation (Arabaci, 2010; Karatepe & Tekinkus, 2006; Karl & Peluchette, 2006; Mohler & Byrne, 2004). Nonetheless, this effect has rarely been tested on correctional employees. The contribution of this study to the existing literature is in that it tests the effect of emotional exhaustion – a variable that in most previous studies has been used primarily as an outcome variable – on the job satisfaction and personal accomplishment among prison employees.

This study had two outcome variables; namely job satisfaction and constraints of personal accomplishment. Initially, we wanted to examine the effect of emotional exhaustion on job satisfaction. The research findings of this study show that in a seven-variable model, emotional exhaustion is the best predictor of job satisfaction, explaining eighteen percent of the variation. As predicted, the results of this study show that emotional exhaustion has a negative effect on job satisfaction. In other words, employees who reported a higher score on the emotional exhaustion scale, scored low on the job satisfaction scale. Of the four demographic variables (e.g., age, gender, marital status, and education), only age was a significant predictor of job satisfaction among correctional employees. The data show that an increase in age (measured in years) is manifested with an increase in job satisfaction score. Not surprisingly, those who believed the working conditions were adequate, reported a higher score on job satisfaction, and this effect was statistically significant. Nonetheless, this finding is considered secondary in this study.

In addition to examining the effect of emotional exhaustion on job satisfaction, we also examined its effect on the constraints of personal accomplishment. The results of this study (see Table 3) shows that emotional exhaustion explains about eight percent of the variation in the constraints of personal accomplishment. Not incidentally, emotional exhaustion was positively correlated with the constraints of

personal accomplishment. This means that as the emotional exhaustion increases, this increase is manifested with an increase in constraints of personal accomplishment. In other words, emotional exhaustion is a contributing factor in the constraints of personal accomplishments among prison employees. Moreover, of the four demographic variables that we tested in this study (e.g., age, gender, marital status, and education), only age and gender had a statistically significant effect on the constraints of personal accomplishments. Younger prison staff reported a higher level of constraints of personal accomplishment. This means that as one gets older, the constraints of personal accomplishment decrease. Additionally, working conditions as a variable was statistically significant in prediction personal accomplishment. Thus, correctional employees who believed their working conditions were adequate were more likely to score low on the constraints of personal accomplishment scale. This suggests that improving working conditions in prison settings will reduce constraints of personal accomplishments.

Considering together, the results of this study clearly indicate that reducing emotional exhaustion and improving working conditions in the correctional institutions results in a higher job satisfaction among correctional employees. Additionally, the results show that younger employees are more likely to experience constraints on personal accomplishments, which suggest that age is an important factor in the perceived organizational support in the correctional institutions.

As with any research study, this study has its limitations. Thus, the results of this study should be viewed in the context in which this study has taken place, and within the scope of this study. In this study, we do not attempt to explore or develop and test an exhaustive list of best predictors of job satisfaction and constraints of personal accomplishment in prison settings. Rather, we have attempted to determine the effect of emotional exhaustion, the main dependent variable, on job satisfaction and constraints of personal accomplishments while controlling for the effects of a selected number of demographic variables, coupled with working conditions and years of service in the correctional institutions. Future research should consider examining the same set of variables by looking at different groups of correctional staff in terms of ranks they hold in the correctional institutions. Additionally, in this study we did not attempt to determine whether or not emotional exhaustion has the same effect on employees who work in maximum vs. medium security level. Future research can examine the difference in job satisfaction between employees who work in maximum security prisons and those who work in medium security prisons, as affected by emotional exhaustion. The research findings in this research article make better sense when read with these basic limitations in mind.

## References

- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009): Relationship between personality variables and burnout: A meta-analysis. *Work & Stress*, 23 (3), 244-263.
- Arabaci, B. (2010): The effects of depersonalization and organizational cynicism levels on the job satisfaction of educational inspectors. *African Journal of Business Management*, 4 (13), 2802-2811.
- Avdija, A. S., & Roy, S. (2012): A psychosocial measure of the factual autonomy and job satisfaction among prison employees. *Criminal Justice Studies*, 25 (3), 251-264.
- Cohen, J. (1988): *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003): The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88 (1), 160-169.
- Diefendorff, J. M., & Richard, E. M. (2003): Antecedents and consequences of emotional display rule perceptions. *Journal of Applied Psychology* 88 (2), 284-294.



- Dignam, J. T., Barrera, M., & West, S. G. (1986): Occupational stress, social support, and burnout among correctional officers. *American Journal of Community Psychology*, 16, 701-724.
- Garland, B. (2004): *The impact of administrative support on prison treatment staff burnout: An explanatory study*. New York: Sage Publications.
- Griffin, M. L., Hogan, N. L., Lambert, E. G., Tucker-Gail, K. A., & Baker, D. N. (2010): Job involvement, job stress, job satisfaction, and organizational commitment and the burnout of correctional staff. *Criminal Justice and Behavior*, 37 (2), 239-255.
- Hatinen, M., Kinnunen, U., Pekkonen, M., & Kalimo, R. (2007): Comparing two burnout interventions: Perceived job control mediates decreases in burnout. *International Journal of Stress Management*. 14 (3), 227-248.
- Hurst, T. E., & Hurst, M. M. (1997): Gender differences in mediation of severe occupational stress among correctional officers. *American Journal of Criminal Justice*, 22, 121-137.
- Karatepe, O. M., & Tekinkus, M. (2006): The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, 24 (3), 173 – 193.
- Karl, K., & Peluchette, J. V. (2006): Does workplace fun buffer the impact of emotional exhaustion on job satisfaction? *Journal of Behavioral and Applied Management*, 7 (2), 128-141.
- Keinan, G., & Malach-Pines, A. (2007): Stress and burnout among prison personnel: Sources, outcomes, and intervention strategies. *Criminal Justice and Behavior*, 34 (3), 380-398.
- Lambert, E. G., Hogan, N. L., Jiang, S., Elechi, O., Benjamin, B., Morris, A., Laux, J. M., & Dupuy, P. (2010): The relationship among distributive and procedural justice and correctional life satisfaction, burnout, and turnover Intent: An exploratory study. *Journal of Criminal justice*, 38, 7-16.
- Lee, C., & Ashforth, B. E., (1996): A meta-analysis examination of the correlates of three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123-133.
- Lindquist, C. A., & Whitehead, J. T. (1986): Burnout, job stress, and job satisfaction among southern correctional officers: Perceptions and causal factors. *Journal of Offender Counseling, Services, and Rehabilitation*, 10 (4), 5-26.
- Matin, H. Z., Kalali, N. S., & Anvari, M. R. A. (2012): Do demographic variables moderate the relationship between job burnout and its consequences? *Iranian Journal of Management Studies*, 5 (1), 47-62.
- Maslach, C. (1982): *Burnout: The cost of caring*. Englewood-Cliffs, NJ: Prentice Hall.
- Maslach, C. (1993): Burnout: A multidimensional perspective. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: recent developments in theory and research* (pp.19-32). Washington, D.C: Taylor & Francis.
- Maslach, C., & Jackson, S. E. (1981): The measurement of experienced burnout. *Journal of Occupational Behavior*, 2 (2), 99-113.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996): *Maslach burnout inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., & Leiter, M. P. (1997): *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-bass.
- Maslach, C., Schaufeli, W. B., & Leiter, M. (2001): Job burn out. *Annual Review of Psychology*, 52, 397-422.
- Mohler, C., & Byrne, Z. S. (2004): Emotional exhaustion, work relationships and health effects on organizational outcomes. Paper presented at the 19<sup>th</sup> annual conference of the Society of Industrial and Organizational Psychology, Chicago, Illinois.

- Morgan, R. D., van Haveren, R. A., & Pearson, C. A. (2002): Correctional officer burnout: further analyses. *Criminal Justice and Behavior*, 29 (2), 144-160.
- Pallant, J. (2007): *SPSS: Survival manual* (3<sup>rd</sup> ed.). New York, NY: Open University Press.
- Perlman, B., & Hartman, H. (1982). Burnout: Summary and future research. *Human Relations*, 35, 283-305.
- Roy, S., & Avdija, A. S. (2012): The effect of prison security level on job satisfaction and job burnout among prison staff in the USA: An assessment. *International Journal of Criminal Justice Sciences*, 7 (2), 524-538.
- Saiphon, Y. (2010): *The emotional exhaustion, motivation and job outcomes: A study of hotel frontline employees in Phuket*. (Unpublished Doctoral Dissertation). Oklahoma State University, Oklahoma.
- Sharma, A., Verma, S., Verma, C., & Malhotra, D. (2010): Stress and burnout as predictors of job satisfaction among lawyers. *European Journal of Social sciences*, 14 (3), 348-359.
- Spector, P. E. (1994):. *Job satisfaction survey (JSS)*. Department of Psychology, University of South Florida.
- Spector, P. E., & Jex, S. M. (1998): Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3 (4), 356-367.
- van Dierendonck, D., Schaufeli, W. B., & Buunk, B. P. (1998): The evaluation of an individual burnout intervention program: The role of inequity and social support. *Journal of Applied Psychology*, 83, 392-407.
- Weiss, H. M. (2002): Deconstructing job satisfaction: separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12 (2), 173-194.
- Wilk, S. L., & Moynihan, L. M. (2005): Display rule "regulators:" The relationship between supervisors and worker emotional exhaustion. *Journal of Applied Psychology*, 90 (5), 917-927.
- Zapf D. (2002): Emotion work and psychological well-being. A review of the literature and some conceptual considerations. *Human Resource Management Review* 12 (2), 237-268.
- Zohar D. (1997): Predicting burnout with a hassle-based measure of role demands. *Journal of Organizational Behavior*, 18 (2), 101-115.