

The Relationships of Job involvement, Responsibility and Job Satisfaction with Job Burnout

Eiman Dorreh, PhD Student
Department of Psychology
Islamic Azad University, Science and
Research Campus, Tehran

Shahed Masoudi, PhD Student
Department of Psychology
Faculty Member of Islamic Azad
University, Ghuchan

Nasrin Refaee Saeedi, MA
Department of Career Counselling
Islamic Azad University, Ghuchan

The main aim of the current study was to examine the relationships between job involvement, responsibility and job satisfaction with job burnout. A sample of 180 workers at Arak Aluminum Factory completed Kanungo Job Involvement Scale, Maslach and Jackson Job Burnout Inventory, Spector Job Satisfaction Survey and California Personality Inventory (CPI). Analysis of data by Pearson moment correlation coefficient statistical analysis indicated that there were significant statistical relationships among the four variables of the study. Also, regression analysis indicated that a linear combination of predictor variables of job involvement, job satisfaction and responsibility was able to predict 31.8% of changes in the criterion variable of emotional exhaustion as the main component of job burnout. Also, job involvement and job satisfaction had the highest role in predicting the emotional exhaustion.

Keywords: job satisfaction, job burnout, job involvement, responsibility

Job burnout is a term which is generally used to describe the mental weariness of workers (Schaufeli & Bakker, 2004). Cherniss (1980, as cited in Conrad and Kellar-Guenther, 2006) has defined job burnout as the loss of excitement and responsibility towards the job. Although primary studies

on job burnout had been limited to helping professions, now most researchers believe that different jobs including interpersonal stressing and chronic contacts can pave the way for job burnout in the workers (Lewin & Sager, 2007).

Job burnout has been mainly studied and conceptualized in the studies related to stress (Pines & Keinan, 2005) and it has been defined as a psychological symptoms consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Goldberg, 1998; Maslach & Leiter, 2008; Maslach, Schaufeli, & Leiter, 2001). Emotional exhaustion refers to the feeling of getting empty of mental and emotional energy, depersonalization refers to taking of a non-human attitude about others, and reduced personal accomplishment refers to the feeling of losing competence and usefulness in the job (Maslach & Goldberg, 1998).

Emotional exhaustion is considered as the fundamental and basic core of job burnout (Brown & Benson, 2003). People who experience high rates of emotional exhaustion manifest various professional and personal problems such as reduced job satisfaction and performance, giving the job up, drug and alcohol abuse, physical illnesses and psychological disorders (depression, anxiety, sleep disorder, hopelessness and the risk of suicide) and disorders in family and social performances (Knudsen, Ducharme, & Roman, 2006; Middeldorp, Cath, & Boomsma, 2006; Ahola & Hakanen, 2007; Stafford & Judd, 2010; Brown & Benson, 2003; Saleh & Shapiro, 2008).

Studies indicate that various personal characteristics and professional factors such as work overload, time limitation, role conflict and confusion (Middeldorp, Stubbe, Cath, & Boomsma, 2005), locus of control (Schmitz, Neumann, & Opperman, 2000), hardiness (Garrosa, Moreno-Jimenez, Liang, & Gonzalez, 2008), work self-determination (Fernet, Guay, & Senecal, 2004), emotional intelligence (Chan, 2006) social support and personal self-efficiency (Boyd, Lewin, & Sager, 2009), methods of coping

with stress (Kim, 2011; Kravits, McAllister-Black, Grant, & Kirk, 2010), psychological empowerment in the job (Hochwalder & Burcefors, 2005), and the personality traits of introversion, responsibility and psychoneurosis (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; O’Neill & Xiao, 2010) are closely associated with emotional exhaustion. Moreover, in the area of gender differences in job burnout, study results indicate that women tend to manifest the signs of emotional exhaustion more, while men mostly suffer from depersonalization (Lackritz, 2004; Purvanova & Muros, 2010).

When job burnout is studied and conceptualized as a process, the relationships between its constituent parts are considered. There are 2 models for this (Figure 1): Maslach (1982a) and Golembiewski and Munzenrider (1981).

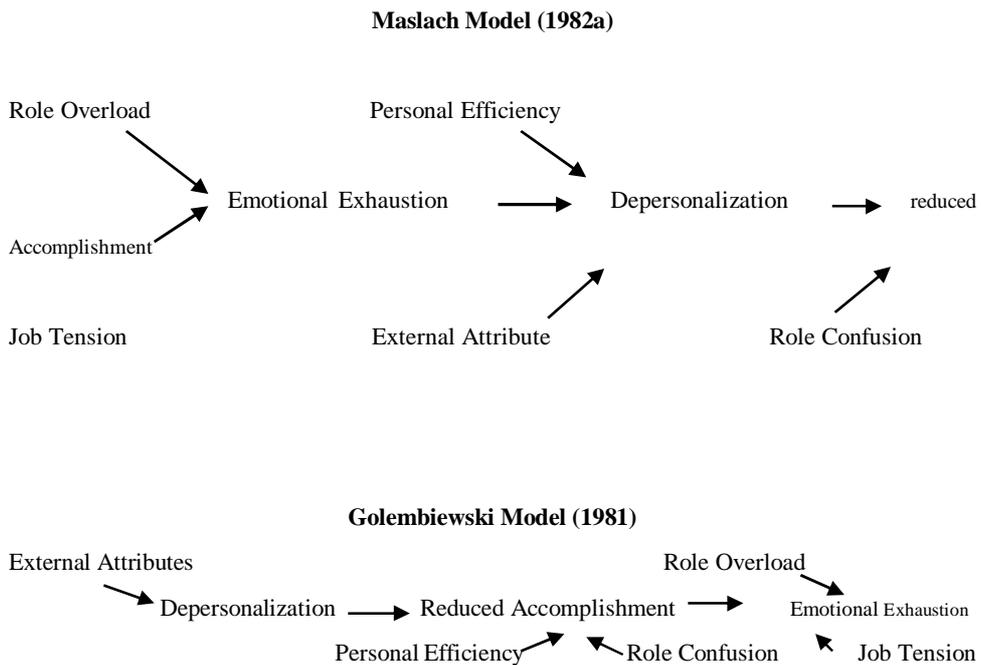


Figure1 .Two Models of Job Burnout

According to Maslach model (1982a) the job burnout process begins with emotional exhaustion. Emotional exhaustion is a reaction to chronic stresses related to the job (role overload and professional tension) that results in reduced emotional and mental powers in an individual. As a strategy to confront stress, the individual maintains distance from his/her job and others in a cognitive and emotional way (depersonalization). After depersonalization, the individual realizes the disharmony between his/her current position and primary expectations about his/her professional performance which results in a feeling of insufficiency, self-assessment and low effectiveness (reduced personal accomplishment).

According to Golembiewski and Munzenrider (1981) the process of job burnout starts when functional detachment which is inevitable in some professions (e.g. health care and social services) causes a feeling of depersonalization. This depersonalization interferes with professional performance and influences the individual's self-assessment of his/her performance and finally reduced personal accomplishment causes emotional exhaustion in the individual.

These two models have been empirically examined and it has been shown that Maslach model has a better explaining power among the personnel of rehabilitation centers, nurses and medical and psychonursing assistants while Golembiewski model among police officers, teachers and personnel of nursing homes (Leiter & Maslach, 1986; Burke & Greenglass, 1989; Lewin & Sager, 2007; Angermeyer, Bull, Bernert, Dietrich, & Kopf, 2006; Martinussen, Richardsen, & Burke, 2007).

Among variables which are associated with job burnout is job involvement that refers to the intensity of an individual's psychological identification with his/her job (Kelle, 1997). Schaufeli and Bakker (2004) have defined job involvement as "a positive and dedicated mental state towards a job".

An involved individual considers his/her job a major part of his/her identity and manifests traits such as dedication, loyalty, excitement,

enthusiasm, and inclination to work harder for his/her professional duties in a much better way (Hallberg & Schaufeli, 2006). Job involved individuals are in a constant search of opportunities for learning and personal and professional development (Maurer, Weiss, & Barbeite, 2003) and they have internal motivations to do their professional duties (Kim, Shin, & Swanger, 2009). In fact, job involvement is the positive aspect of job burnout and it indicates a consideration for positive psychology which emphasizes on optimized performance (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008).

Among the factors effective on individuals' efficiency rate is their satisfaction of their job and profession. Job satisfaction refers to an individual's attitude about his/her job (Keshtkaran, 2006). In other words, job satisfaction is a desirable emotional response to the professional position. It is an intuitive concept for most workers who consider it as a desirable and favorable goal (Broome, Knight, Edwards, & Flynn, 2009). Studies indicate that low job satisfaction is closely associated with the triple dimensions of job burnout, particularly with emotional exhaustion (Wright & Cropanzano, 1998).

Responsibility refers to reliable, conscious, responsible and orderly manners of an individual and a responsible individual devotes more resources to acting and persisting in resolving the problems when he/she faces negative feedback on an action or decision (Schulz-Hardt, Thurow-Kroning, & Frey, 2009). Responsibility includes duty-oriented and goal-oriented behaviors and specifies that an individual will continue doing something until favorable result is obtained. In fact, responsibility is a personality trait related to desirable professional performance and a protective shield against job stresses (Demerouti, 2006).

So far it appears that contextual variables and personal readiness have a role in the appearance of burnout (Burisch, 2002). Thus, in this study efforts have been made to examine the relationship of job involvement, job satisfaction and responsibility with emotional exhaustion as the main

factor of job burnout and to answer the following questions:

1. Do job involvement, responsibility and job satisfaction predict the level of emotional exhaustion in workers?

Method

The examined sample consisted of 180 contract and contractor workers of Arak Aluminum Factory with an average age of 29 years old who were selected by accidental sampling. Forty-two individuals were single and 128 were married. Forty-two individuals had primary school education, 59 had middle and high school education, 73 had finished high school, and 6 had associate degree or higher educations. Forty-five workers had 1 to 3 years work experience, 62 between 4 and 6 years, 44 between 7 and 9 years, 21 between 10 and 12 years, and 8 workers 13 years or more.

Research Tools

The following tools were used in the current study:

Maslach Burnout Inventory (MBI). Maslach and Jackson Burnout Inventory (1982) evaluate the three dimensions of burnout (emotional exhaustion, depersonalization, inefficiency). In this study, emotional exhaustion scale was used only. 9 items have been dedicated to emotional exhaustion, 5 items to depersonalization and 8 items to inefficiency (totally 22 items). This scale evaluates the two factors of frequency and intensity of job burnout. In this study, the dimension of emotional exhaustion and its frequency have been considered. Maslach and Jackson Burnout Inventory have been translated by Emad Filian in 1992 and its statistical validity has been determined. According to Filian' report (1992, as cited in Zare Bahram Abadi, 2003) the internal reliability of the subscales in Maslach and Jackson Burnout Inventory have been ($\alpha=.8$) for emotional exhaustion, ($\alpha=.75$) for depersonalization and ($\alpha=.72$) for inefficiency that indicating the needed.

Reliability for this scale in this study, the Chronbach' alpha for the dimension of emotional exhaustion was .85.

Job satisfaction survey. Spector Job Satisfaction Survey (EJS) (1985) was used to assess job satisfaction. This questionnaire assesses 9 factors of job satisfaction including salary and allowances, intra-organizational interactions, coworker relations, job nature, rewards, rules and regulations, chances of promotion, peripheral bonuses, and satisfaction of supervisors. Each factor is assessed by 4 questions and the total score of job satisfaction is obtained from adding the scores of the 9 factors up. The reliability coefficient of the EJS by the methods of Chronbach' alpha and split-half has been 0.83 and 0.86 respectively and its validity coefficient has been equal to 0.64 (Naami&Zargar, 2006). In the current study The Chronbach' alpha was .80.

Job Involvement Scale (Kanungo, 1982) (JIS). This scale includes 10 items ranging on a 5 degree scale of strong disagreement, disagreement, neutral, agreement and strong agreement. The scale has been translated by Orizi (2005, as cited in Amiri Azjangi, 2007) and its reliability and validity have been obtained to be .82 and .86 based on the split-half method and Chronbach's alpha. In the current study the Chronbach's alpha was .81

California Personality Inventory (CPI). The CPI was used to assess responsibility. It includes 18 standard scales each scale evaluating one of the important inter-personal psychological aspects. In this personality inventory, responsibility is assessed by 15 items. In the current study the Chronbach's alpha was .79.

The statistical analyses of correlation, independent t-test, and regression were used to analyze the data.

Results

The Pearson correlation coefficient was calculated between the pairs of the 4 scales and is presented in Table 1. As observed, there is a significant

statistical relationship between the pairs of all the study variables and since all the correlations have values less than 0.85, therefore, the existence of multicollinearity between the scales was rejected (Tabachnick & Fidell, 1996).

Table 1
Pearson Correlation Coefficients between Study Variables

Variables	1	2	3	4
Job Satisfaction	1			
Emotional Exhaustion	-.54*	1		
Job Involvement	.45*	-.40*	1	
Responsibility	.28*	-.25**	.37*	1

*less than .01 ** less than .05

In order to predict the workers' emotional exhaustion, regression analysis was used. In the current study, emotional exhaustion was entered in the regression analysis as the criterion variable and job involvement, responsibility and job satisfaction as the predictor variables. Results of the regression analysis have been presented in Tables 2 and 3.

Table 2
Results of the Regression Analysis to Predict Emotional Exhaustion Based on Job Involvement, Responsibility and Job Satisfaction

Statistic	R	R ²	df	F	Level of Significance
Index					
Value	.536	.318	21.178	24.858	.000

Table 3
Regression Coefficients of Job Involvement, Responsibility and Job Satisfaction

Predictor Variables	B	T	Level of Significance
Job Involvement	-.35	-4.986	.000
Job Satisfaction	-.231	-3.622	.000
Responsibility	-.126	-1.786	.076

Results of regression analysis of emotional exhaustion in Tables 2 and 3 indicate that only job involvement ($\beta=-.35$) and job satisfaction ($\beta=-.231$) can predict emotional exhaustion ($F=24.858$, $P=.000$). These two variables predict about 31.8% of the variation in the scores of emotional exhaustion.

These findings indicate that the higher the score of an individual in job involvement and job satisfaction, the more likely he/she obtains a low score in emotional exhaustion scale.

Discussion and Conclusion

The main aim of the current study was to predict workers' emotional exhaustion as the main component of job burnout based on contextual variables (job satisfaction and job involvement) and personality variable (responsibility). Results of the study indicated that collinearity between job involvement and job satisfaction (predictor variables) was able to predict 31.8% of the variation in the scores of emotional exhaustion. Job involvement ($\beta= -.35$) and job satisfaction ($\beta =-.231$) had the highest role in predicting the emotional exhaustion. In the studied sample, responsibility was not able to predict emotional exhaustion ($\beta=-.126$, $P>.05$). In general, it can be concluded that by an increase in job involvement and job satisfaction, emotional exhaustion tends to decrease.

Rutherford, Boles, Hamwi, Madupalli, and Rutherford (2009) examined the relationship between job satisfaction and emotional exhaustion. Results of their study indicated that five dimensions of job satisfaction (satisfaction with supervisors, job nature, policies and organizational support, progress and promotion in job, satisfaction with salary and allowances) were associated with emotional exhaustion, and reduced job satisfaction causes giving the job up through emotional exhaustion. Of course, organizational commitment moderates this relationship (Teng, Shyn, & Chang, 2007).

In the study of Girgis, Hansen and Goldstein (2009) the most important predictors of emotional exhaustion were job satisfaction, work hours, and weakness in social skills. Also, Kuhn, Goldberg and Compton (2009) found that job satisfaction and the personality trait of tolerance of uncertainty were strongly associated with emotional exhaustion. Findings of Piko (2006) also indicated that low job satisfaction was associated with high emotional exhaustion and giving the job up. In the opinions of Mulki, Jaramillo and Locander (2006), the reason of this phenomenon resulted from this that low job satisfaction causes a decrease in enthusiasm towards the job which can cause anxiety and a feeling of failure. This causes a negative attitude towards the job, organization and other individuals and finally causes emotional exhaustion. In general, the relationship between job satisfaction, emotional exhaustion and psychological health has been confirmed in other studies (Laschinger, Shamian, & Thomson, 2001; Skaalvik & Skaalvik, 2007, 2009; Elit, Trim, Mand-Bains, & Sussman, 2004).

The other results of the study indicate that job involvement play a significant role in predicting workers' emotional exhaustion ($\beta = -.35$). The significance of job involvement in predicting different aspects of exhaustion has been emphasized many times. Maslach and Leiter (1997, as cited in Kim et al., 2009) have considered job involvement at the very end of exhaustion. In their opinion, job involvement is specified by energy (in

comparison to exhaustion), involvement (in comparison to depersonalization), and efficiency (in comparison to inefficiency).

Salmela-Aro, Tolvanen and Numi (2009) found a close association between job involvement and exhaustion. They however pointed out those psychological characteristics such as optimism, strategies to focus on duty and problem resolving strongly mediate this association. Findings of Knudsen, Ducharme and Roman (2009) also indicate an association between emotional exhaustion and lost tendency towards the job.

According to what we said so far, job burnout endangers the health of personnel in different economic and service sectors. It results in destruction in the quality of services offered by them, and it can be a reason for absence, emotional weakness, and inefficiency. Moreover, job burnout is correlated with physical weariness, sleeplessness, increased drug and alcohol abuse and appearance of family problems (Toker, Shirom, Shapira, Berliner, & Melamed, 2005; Dessy, 2009). Thus, preventing job stresses either at the individual level or group and organizational levels can be effective in reducing the feeling of exhaustion and returning the health to the individual (Maslach & Goldberg, 1998). According to the findings of the current study, it is recommended that personnel, managers and planners of organizations to get familiar with the issue of job stress as a main factor in the appearance of job burnout with the help of specialists to prevent the procedure of exhaustion and then to find appropriate resolutions to reduce inter-personal stresses in personal and organizational levels and to apply them.

Main Limitation

The main limitation of the current study was insufficient access to the samples of the study in one shift. Because the participants' shifting caused that they could not complete the questionnaire during one shift and the created time interval could influence on the results of the study.

Suggestions for Future Researches

In general, the results of the current study as a descriptive examination on professional and personality factors effective on job burnout are important. Nonetheless, it is recommended that to obtain more accurate results on the relationship between emotional exhaustion and personality and organizational factors, future research to include family, personality and professional factors and also, studies on more diverse samples and professions are needed.

References

- Ahola, K., & Hakanen, J. (2007). Job strain, burnout and depressive symptoms: A prospective study among dentists. *Journal of Affective Disorders, 104*,103-110.
- Amiri Azjangi, N. (2007). *Examining the Relationship of Job Characteristics with Organizational Commitment and Job Involvement of Personnel in Isfahan Petrochemistry Complex*, MA Dissertation. University of Isfahan.
- Angermeyer, M. C., Bull, N., Bernert, S., Dietrich, S., & Kopf, S. (2006). Burnout of caregivers: A comparison between partners of psychiatric patient and nurses. *Archives of Psychiatric Nursing, 20*,158-165.
- Boyd,N. C., Lewin, J. E., & Sager, J. K. (2009). A model of stress and coping and their influence and organizational outcomes. *Journal of Vocational Behavior, 75*, 197-211.
- Broome, M. K., Knight, K. D., Edwards, R. J., & Flynn, M.P. (2009). Leadership, burnout and job satisfaction in outpatient drug-free treatment programs. *Journal of Substance Abuse Treatment, 37*, 160-170.
- Brown, M., & Benson, J. (2003). Rated to Emotional exhaustion? Reaction to performance appraisal processes. *Industrial Relations Journal, 34*, 67-81.
- Burisch, M. (2002). A longitudinal study of burnout: The relative

- importance of dispositions and experiences. *Work and Stress*, 16, 1-17.
- Burke, R. J., & Greenglass, P. (1989). Psychological burnout among men and woman in teaching: An examination of the Cherniss model. *Human Relationships*, 42, 261-273.
- Cano-Garcia, F. J., Padilla-Munoz, E., M., & Carrasco-Ortiz, M. A. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences*, 38, 929-940.
- Chan, D. W. (2006). Emotional intelligence and components of burnout among Chinese secondary school teacher in Hong Kong. *Teaching and Teacher Education*, 22, 1042-1054.
- Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout and compassion satisfaction among Colorado child protection workers. *Child Abuse and Neglect*, 30, 1071-1080.
- Demerouti, E. A. (2006). Job characteristics, flow and performance: The moderating role of conscientiousness. *Journal of Occupational Health Psychology*, 11, 266-280.
- Dessy, E. (2009). Effective communication in difficult situation: Preventing stress and burnout in The NICU. *Early Human Development*, 86, S39-S41.
- Elit, L., Trim, k., Mand-Bains, I. H., & Sussman, J. (2004). Job satisfaction, stress, and burnout among Canadian gynecologic oncologists. *Gynecologic Oncology*, 94, 134-139.
- Fernet, C., Guay, F., & Senecal, C. (2004). Adjusting to job demands: The role of work self-determination and job control in predicting burnout. *Journal of Vocational Behavior*, 65, 39-56.
- Garrosa, E., Moreno-Jimenez, B., Liang, Y., & Gonzalez, J. L. (2008). The relationship between socio-demographic variable, job stressors, burnout and hardy personality in nurses: An exploratory study. *International Journal of Nursing Studies*, 45, 418-427.
- Girgis, A., Hansen, V., & Goldstein, D. (2009). Are Australian oncology

- health professionals burning out? A view from the trenches. *European Journal of Cancer*, 45, 393-399.
- Golembiewski, R. T., & Munzenrider, R. F. (1981). Efficacy of three versions of one burnout and organizational covariance: A replication using norms from a large population. *Journal of Human Resources Administration*, 4, 228-246.
- Hakanen, J. J., Perhoniemi, P., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73, 78-91.
- Hallberg, U., & Schaufeli, W. B. (2006). "Same" but different? Can work engagement be discriminated from job involvement and organizational commitment? *European Psychologist*, 11, 119-127.
- Hochwalder, J., & Brucefors, A. B. (2005). Psychological empowerment at the workplace as a predictor of ill health. *Personality and Individual Differences*, 39, 1237-1248.
- Kelle, R. T. (1997). Job involvement and organizational commitment as longitudinal predictors of job performance: A study of scientists and engineers. *Journal of Applied Psychology*, 82, 803-811.
- Keshtkaran, A. (2006). A study of job satisfaction and its demographic correlates of faculty members at Shiraz University of Medical Science. *Journal of Medical Education*, 8, 65-71.
- Kim, H. (2011). Job conditions, unmet expectations and burnout in public welfare workers: How different from other social workers? *Children and Youth Services Review*, 33, 358-367.
- Knudsen, H. K., Ducharme, L. J., & Roman, P. M. (2006). Counselor emotional exhaustion and turnover intention in therapeutic communities. *Journal of Substance Abuse Treatment*, 31, 173-180.
- Knudsen, H. K., Ducharme, L. J., & Roman, P. M. (2009). Turnover intention and emotional exhaustion "at the top": Adapting the job

- demands-resources model to leader of addiction treatment organization. *Journal of Occupational Health Psychology*, 14, 84-95.
- Kravits, K., McAllister-Black, R., Grant, M., & Kirk, C. (2010). Self-care strategies for nurses: A psycho-educational intervention of stress reduction and the prevention of burnout. *Applied Nursing Research*, 23, 130-138.
- Kuhn, G., Goldberg, R., & Compton, S. (2009). Tolerance for uncertainty, burnout and satisfaction with the career of emergency medicine. *Annals of Emergency Medicine*, 54, 106-113.
- Lackritz, J. R. (2004). Exploring burnout among university faculty: incidence, performance, and demographic issues. *Teaching and Teacher Education*, 20, 713-729.
- Laschinger, H. K. S., Shamian, J., & Thomson, D. (2001). Impact of magnet hospital characteristics on nurses perceptions of trust, burnout, quality of care and work satisfaction. *Nursing Economics*, 19, 209-219.
- Leiter, M. P., & Maslach, C. (1986). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior*, 9, 297-308.
- Lewin, J. E., & Sager, J. K. (2007). A process model of burnout among salespersons: Some new thoughts. *Journal of Business Research*, 60, 1216-1224.
- Martinussen, M., Richardsen, A. M., & Burke, R. J. (2007). Job demands, job resources and burnout among police officers. *Journal of Criminal Justice*, 35, 239-249.
- Maslach, C. (1982a). *The Cost of Caring*. Englewood Cliffs: NJ Prentice Hall.
- Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied & Preventing Psychology*, 7, 63-74.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93, 498-512.

- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Reviews of Psychology, 52*, 397-422.
- Maurer, T. J., Weiss, E. M., & Barbeite, F. G. (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology, 88*, 707-724.
- Middeldorp, C. M., Cath, D. C., & Boomsma, D. I. (2006). A twin-family study of the association between employment, burnout and anxious depression. *Journal of Affective Disorders, 90*, 163-169.
- Middeldorp, C. M., Stubbe, J. H., Cath, D. C., & Boomsma, D. I. (2005). Familial clustering in burnout: A twin-family study. *Psychological Medicine, 35*, 113-120.
- Mulki, J. K., Jaramillo, F., & Locander, W. B. (2006). Emotional exhaustion and organizational deviance: Can the right job and a leader's style make a difference? *Journal of Business Research, 59*, 1222-1230.
- Naami, A., & Zargar, Y. (2006). Identifying job stressing factors and examining the relationship between these factors with job satisfaction among personnel of an industrial company in Khuzestan Province: *New Findings in Psychology, 1*(1), 1-31.
- O'Neill, J. W., & Xiao, Q. (2010). Effect of organizational/occupational characteristics and personality traits on hotel manager emotional exhaustion. *International Journal of Hospitality Management, 29*, 652-658.
- Piko, B. F. (2006). Burnout, role conflict, job satisfaction, and psychological health among Hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies, 43*, 311-318.
- Pines, A. M., & Keinan, G. (2005). Stress and burnout: The significant difference. *Personality and Individual Differences, 39*, 625-635.
- Purvanova, R. K., & Muros, J. (2010). Gender differences in burnout: A

- meta-analysis. *Journal of Vocational Behavior*, 77, 168-185.
- Rutherford, B., Boles, J., Hamwi, G. A., Madupalli, R., & Rutherford, L. (2009). The role of the seven dimension of job satisfaction in salespersons' attitudes and behaviors. *Journal of Business Research*, 62, 1146- 1151.
- Saleh, P., & Shapiro, C. M. (2008). Disturbed sleep and burnout: Implications for long-term health. *Journal of Psychosomatic Research*, 65, 1-3.
- Salmela-Aro, K., Tolvanen, A., & Numi, J. E. (2009). Achievement strategies during university studies predict early career burnout and engagement. *Journal of Vocational Behavior*, 75, 162.172
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 298-315.
- Schmitz, N., Neumann, W., & Opperman, R. (2000). Stress, burnout and locus of control in German nurses. *International Journal of Nursing Studies*, 37, 95-99.
- Schulz-Hardt, S., Thurow-kroning, B., & Frey, D. (2009). Preference-based escalation: A new interpretation for the responsibility effect in escalating commitment and entrapment. *Organizational Behavior and Human Decision Processes*, 108, 175-186.
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy and teacher burnout. *Journal of Educational Psychology*, 99, 611-625.
- Skaalvik, E. M. & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25, 518-524.
- Stafford, L., & Judd, F. (2010). Mental health and occupational well-being of Australian gynecologic oncologists. *Gynecologic Oncology*, 116, 526-532.

- Tabachnick, B., & Fidell, L. S. (1996). *Using Multivariate Statistics*. New York. Happer Collins College.
- Teng , C. I., Shyn, Y. I. L. , & Chang, H. Y. (2007). Moderating effects of professional commitment on Hospital Nurses in Taiwan. *Journal of Professional Nursing, 23*, 47-54.
- Toker, S., Shirom, A., Shapira, I., Berliner, S., & Melamed, S. (2005). The association between burnout, depression, anxiety and inflammation biomarkers: C - reactive protein and fibrinogen in men and woman. *Journal of Occupational Health Psychology, 10*, 344-362.
- Wright, T, A., & Cropanzano, S. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology, 83*,486-493.
- Zare Bahram Abadi, M. (2003).*Comparing the Relationship of Social Support and Hardiness with Job Burnout in Drivers of Bus and Taxi Driving Organization in Tehran*. MA Dissertation. AllamehTabatabaee University.

Received: 21 / 8/ 2013
Revised : 10/ 5/ 2014
Accepted: 12 / 5/ 2014