Job Demands, Burnout and Resources in Teaching a Conceptual Review

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Abstract: This proposed paper reviews the conceptualization and relationship between Job demands, job resources and burnout as carried out by some empirical indication through a non-systematic existing literature of review. From empirical evidence it has been clear that complex multifold relationship exists between them. It has been concluded in the light of previous studies that the organizations should try to proactively locate the contributing factors of job demands, resources and burnout therefore, the management could control it in well-organized and successful way.

Key words: Job Demands · Burnout · Resources · Teaching

INTRODUCTION

Burnout is related to emotional instability of high working demands and unsatisfactory resources. It is part of strain which has been linked to chronic, job related stressors. Job related burnout is at higher level in different working sectors, that has resulted in decrease in job performance, diminishing self-esteem, decline in job satisfaction and the general tendency of employees to opt for turnover [1, 2]. From early studies, burnout was conceptualized as a multi-component (emotional exhaustions, depersonalization and personal accomplishment) construct. Thus, burnout is defined "as a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who work with people in some capacity" [3].

Job demands increases burnout but stress is not the main cause of burnout [4]. Initially, teaching profession was categorized among the "low stress occupation" [5] having less workload and frequent opportunities [6]. The people thought that university teaching has work freedom, flexible working hours and less workload. However, with emergence of new political and socio-economic trends, the educational institutions have also changed and teaching is now considered as a tough profession [7]. It has been observed that recent past two decades, such advantages are no more existing. Therefore in countries like United States of America, United Kingdom, Australia and New Zealand a significant rise in occupational stress among the teaching community has been observed [8]. Previous literature for example [9, 10, 11, 12, 13] has revealed that the teaching is a stressful professions. When teachers are in stress his personal life will be disturbed which will affect the satisfaction level. Their decision power will decrease with the passage of time. In addition, job stress on teachers at higher level affects their career decisions, performance, health problems both physical and mental and throughout job satisfaction [14]. Other stressors of the burnout among the faculty members are higher self expectations, searching funding for research, low pay, lack of resources, tough faculty selection criteria without resources. Some researcher explained in their studies done in United Kingdom, United state of America, New Zealand and Australia universities that low salary, job insecurity [6, 15], deficiency of groups or community, there is no relationship with co-worker [16] and deficiency of feedback regular performance [17] are reason for Stress and burnout.

Burnout Factors: Burnout is a consequence of an imbalance between job demands and job resources [18, 19], which are considered as main predicators of burnout. The following section will explain each variable by conceptualizing it in comprehensive way.

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Conceptualizing Job Demands: Burnout is directly related to increase in job demands [20, 21, 22, 23]. Job demands, in the context of the study, refers to physical, social, organizational and psychological aspects in which employee needs effort to achieve individual and organizational goals [24, 25].

Job demands have been measured in different professions in developing countries on the basis of various dimensions like emotional demands, family conflict, workload, role conflict and ambiguity, lack of autonomy, promotions, scholarships, administrative duties and organizational role stressors [26, 27].

Workload: Workload is defined as work done in a specific time or the amount of work supposed to be done in specific time. Workload is an important dimension of job demands [20, 28, 29, 30] and is observed to be the main significant source of stress in academia. It is felt in profession due to lack of skills, career development, long working hours, number of students in classes, teacher shortage [31, 32], research productivity, technology and has consistent relationship with burnout. Research also finds that less acceptable performance of students adversely affects faculty members [33].

Burnout in university faculty occurs due to high quality research and teaching as one of the primary aims of their educational institutions. This is mainly because of lack of research environment and facilities. In universities, there is lack of libraries and updated databases. Faculty members remain under pressure due to their heavy workload, job demands and publication efforts [33]. Innovation and creativity are equally important reminders both for organization and researchers. This also has its fallout related to stress when one of the objective is to save money or to attract and earn funds particularly in Asia [34].

Unpleasant Working Environment: Unpleasant working environment also put stress on teachers and adversely affect their quality and quantity of their productivity and performance. To meet higher performance expectations of individual and organizational, faculty have pressures and environmental demands like workload, financial funds and job insecurity. Similarly, routine working hours, fewer facilities, administrative red-tape also cause stress [35, 36]. Several research findings testify that American and Canadian teachers (63%) view departmental problems of students the most stressful factor in teaching environment [37].

Social Demands: It was found that some parents expect more from teachers and feel less hesitation in attributing a low individual performance to teacher. In doing so, they assume teacher to be answerable for everything, which may become a potential cause of stress for teachers. Sometimes, direct interference of parents in the student-teacher relation may aggravate the situation to a level that it causes stress and burnout [38].

Techno-Stressors: As said earlier, fewer facilities may also include non-availibility or lack of access to modern technology. A complex profession in itself [39] teaching is made more efficient through the use of technology that can reduce stress. However, unlike developed nations, developing countries are still struggling as they have to equip their educational institutions with state of the art technologies and also to train teachers to utilize those resources properly. The later part of this challenge has been found to be of great concern as majority of teachers find themselves inexperienced and less equipped to manage and appropriate the use of technological resources [40, 41].

Career Demands: In the present day fast changing and growing education sector, individual success leading to societal one has become a challenge [42, 43, 44]. Formulation of uniform policy and its circulation among all stakeholders has been the minimum for an employee to expect from policy makers. In case of failure, it may become a tormenting source of stress among them. In this connection, teachers fail to get an up-to-date policy particularly in the field of research. Most of them are at loss to comprehend evaluation criterion for research journals both national and international. The main factors which affect professional development are teacher experience, environment, culture and job satisfaction [44]. Researchers have found the significant effect of professional development of academia in developing and developed world [45, 46, 47, 48].

Role Conflict and Ambiguity: The role conflict and ambiguity are one of the most commonly experienced job demands. The role conflict is defined as mismatches between job and its description, expectations and incompatibility of the job, where congruity will be tested by impact of job performance, whereas role ambiguity is a state of un certainty and vagueness, where individuals cannot understand the assigned tasked [49]. Role conflict and ambiguity are also identified as the most important

dimension of job demands in organization [50, 51, 29, 30]. These are significant triggers for burnout among teachers [52] as teachers are liable to answer to two or more superiors in their different roles. Moreover in educational institutions, the lack of resources, tight rules and policies and conflicting requests from colleagues also result in creation of role conflict and ambiguity [49]. So far as the types of role conflict and ambiguity are concerned, then role conflict has basically three types, such as. Task Conflict, which is related to contents and aims of the work; Relationship Conflicts, which is related to interpersonal relationship; and the Process Conflict, which is related to how work gets to be done. On the other side, the role ambiguity is consisted due to uncertainty about authority, allocation of time and relationship with others [49].

The role conflict and ambiguity have negative effects on the performance and productivity of employees, because it leads to development of burnout and strain symptoms including anxiety, depression, emotional exhaustion, irritation and disengagement. Therefore, the organizations should provide such work environment where the employees could be saved from exposure to such work demands [29, 53].

After discussing in detail the different factors of burnout, the readers will be in position to comprehend the process of development of burnout and its possible consequences.

The review of existing literature job demands reveals that a number of studies like for example [20, 21, 22, 23, 54, 55] have been conducted on the relationship between job demand and burnout and it has been found that there is positive relationship between burnout and job demands. Such studies have discussed job demand and burnout dimensions like emotional exhaustion, depersonalization, personal accomplishment, workload, emotional demands, time pressure, physical environment, misbehavior from subordinates and social demands. In proposed study the researcher will focus on the job demands such as workload, role conflict and role ambiguity. On other hand burnout factors such as emotional exhaustion and disengagement. Previously these demands were studied in western culture and in professions other than teaching.

Conceptualizing Job Resources: Other than job demands, job resources also influence burnout. Most of the studies have used job resources in a direct relationship with burnout and have a reported negative relationship [20, 21, 22, 23]. Job resources are physical, social,

institutional and psychological views of job which reduce demands and achieve personal growth, goals and development [24, 56, 25].

Job resources have been measured teachers in developing world on the basis of its contributing factors including lack of resources, autonomy, funding, performance feedback, administrative or organizational support, job control and social support organizational structures, colleague support, supervision, personal resources, personal relationship with administrators [57, 21, 22, 23, Maslach *et al.*, 2001; 58, 59].

The review of existing literature on job resources shows that attention has been given to the moderating role of job resources [60, 61]. In proposed study, the researcher will also use job resources that as (job control and social support) as moderators in the relationship between job demands that as (workload, role conflict and role ambiguity) with burnout like for example (emotional exhaustion and disengagement).

Conceptualizing Burnout: Burnout has been defined as a characteristic of stress, that outlines the response stressors at work [62]. It is a stressful and unpleasant situation which causes different types of problems and affects both individual and organizational performance. It is the outcome of imbalance in provision of workload, rewards, control, values, community and fairness or some of them. Other symptoms of burnout were found by other researchers which were sick leave, ill health and absenteeism (Leiter and Maslach 1998, 2000). The typical symptoms of burnout includes disengagement, depression and emotional exhaustion [63].

Burnout will be higher when emotional exhaustion and depersonalization measures of burnout increases and have lower levels of personal accomplishment at the same time. Most of researchers agree that burnout emerge in shape of job dissatisfaction, absenteeism, wishing to quit the organization and organizational commitment. Yet, few researchers have proven that burnout has a direct effect on job performance [64]. The burnout indicators have been studied by the researchers as non-availability of resources and having lack of responsibility [65]. The level of rewards and over commitment within institutions increase level of burnout [66].

The burnout could be experienced by employees in any sector, but employees in certain working sector are especially prone to burnout. These include the services related sectors like nursing, home care, hoteling and teaching. It is because these professions require exposure

to more interpersonal and social demands and also require more emotional labor [61, 67]. In teaching profession the academicians are exposed to variety of stressors which impart their daily routine work and also result in development of burnout like symptoms, in other words the teachers start experiencing both physical and psychological symptoms which hamper their work and performance [68].

Generally burnout could be measured with the help of two main core dimensions that is emotional exhaustion and disengagement. However the third measure of burnout could also be personal accomplishment [20, 62] and as it is suggested that personal accomplishment is related to personality of an individual [69, 22], therefore it can influence (both in negative and positive ways) the burnout development process. The burnout could be measured through examining its different dimensions; these dimensions are actually the characteristics of burnout which determine the nature of burnout. Maslach *et al.*, (2001) [70] represents burnout by five main characteristics firstly, the emphasis of burnout on behavioral and mental indicators more than physical ones, Secondly, burnout and its indicators are related to working environment, Thirdly, there is a insufficient energy such as emotional exhaustion and depression, Fourthly, the symptoms manifest themselves in people that do not suffer from psychopathology. And last but not the least decrease in effectiveness and performance at working environment due to negative attitudes and behaviors related with burnout. The most commonly used dimensions of burnout include, the study of emotional exhaustion, disengagement, physical exhaustion and depression related symptoms. The following section will discuss emotional exhaustion, disengagement and personal accomplishment:

Emotional Exhaustion: Emotional exhaustion is an exploratory factor of burnout. It is the most important dimension of burnout and is widely reported and analyzed. Demerouti *et al.* [71] defined emotional exhaustion as "a consequence of intense physical, affective and cognitive strain, such as. as a long-term consequence of prolonged exposure to certain job demands" p.210. Anbar and Eker (2007) [72] explain that "emotional exhaustion refers to the depletion of psychic energy or the draining of emotional resources" (P.15). Maslach *et al.* [70] found that feelings of being overextended and depleted is one of leading symptom of emotional exhaustion.

Emotional exhaustion frequently occurs with physical exhaustion and its symptoms include deficiency of energy, less sleeping, problems in family and increase in drinking [73]. When an employee is emotionally exhausted then he no longer stays in that personal or professional position. Almost half of workers have high level of emotional exhaustion due to main factors of stress such as heavy workloads, low supportive relations, personal engagement, less quantity of staff members and understanding burnout [74].

It has been found that emotional exhaustion plays a mediating role between job demand (workload) with other two measures of burnout and performance [20, 22, 29, 64] and is positively correlated with stress outcomes [63] but some of the researchers argue that stress and burnout are two different things [75,76]. In this regard the higher level of support from colleagues is related to low level of emotional exhaustion [10, 77].

Disengagement: Disengagement is the second measure of burnout having strong relationship with emotional exhaustion. and depersonalization in burnout across occupational and organizational settings. Where disengagement is similar to depersonalization but opposite to engagement and cynicism is the component of disengagement [78]. Demerouti *et al.* [71] defined it as "distancing oneself from one's work in general, work object and work content" p.210. It causes negative feelings and dehumanizing acts towards others without reason [72]. Maslach *et al.* [70] refers to it as "negative, callous or excessively detached response to various aspects of the job".

Disengagement in teachers is negative feelings towards other employees and is dangerous for the smooth functioning of institution. Teachers suffering from disengagement develop behavioral attitude towards students marked by little or no attention and at times breakdown in communication [72]. Here in the proposed paper, depersonalization is used as dependent variables and to find their relationships with job demand and its dimensions.

Personal Accomplishment: Personal accomplishment is the third measure of burnout. Personal accomplishment refers to declining of feelings of capability and productivity. It represents the self-estimation dimensions of burnout. Personal accomplishment becomes more defective when the workplace is marked by lack of social support [74]. Every person faces stressors in routine life.

The effect of burnout varies from employee to employee and also depends on time and experiences. Here, a person sees himself in a negative light particularly in relations [1]. Leiter (1993) [79] argued that emotional exhaustion and disengagement lead dependently but personal accomplishment feels independently. Most of the researcher argues that personal accomplishment is not the core dimension of burnout and it is related to personality. Therefore, the researcher did not include it as a variable in proposed study. In the next section, the researcher discusses job resources and its various dimensions in detail.

Relationship Between Job Demands, Burnout and Resources: The previous section has conceptualized the three concepts of the proposed study. After this readers are familiarized with the meaning and characterists of these concepts, now it is important to discuss the relationship between these concepts, so that not only the nature of relationship of these concepts is know but also their interaction with each other is known. Moreover the strength and direction of relationship of these concept is also known. In fact the relationship between job demands, burnout and resources is multifold and complex. These concepts interact with each other in different ways, where this interaction changes with change in circumstances. In order to understand this whole process, a review of existing literature will be helpful. Therefore the following section will explain the relationship between job demands, burnout and resources by taking examples from both recent and previous, discussing different findings and explaining the nature of relationship.

Firstly, the relationship between job demands and burnout will be discussed as they are interrelated with each other in way that job demands lead to creation of burnout symptoms. As we know that the job demands are un wanted environmental factors which negatively affect the working performance of employees by causing physical and psychological burnout symptoms, therefore the nature of job demands decide the nature of symptoms of burnout. In this regard, several studies have been conducted in past in order to explore the relationship between job demands and burnout symptoms. For example Schaufeli and Bakker (2004) [25] found in their study on job demands, burnout and work engagement that there was positive relationship between workload and emotional and their symptoms of burnout. Infact the job demands were good predictors of burnout symptoms. Similarly in another study Schaufeli, Bakker and Rhenen

(2009) [80] also found positive relationship between workload, emotional demands and home interface and burnout. moreover burnout and job demands were also positively associated with sickness absence. In another study the job demands like emotional demands, work conflict and social conflict were found positively correlated with burnout symptoms that as cynicism and emotional exhaustion [81]. The findings of some of studies, as mentioned above proves that there is positive relationship between job demands and burnout. The reason behind it is that job demands exert a negative pressure on the routine working life of an individual, if such pressure persists for long time then individual naturally develop negative symptoms of burnout and become unable to function properly.

After discussing the relationship between job demands and burnout, lets come to the effect of third factor that as resources on the relationship between job demands and burnout. As previously discussed that burnout and job demands positively interact with each other, it mean if there is an increase in job demands, the increase in burnout symptoms and vice versa. But the resources have totally a different role. Once resources interfere the relationship between job demand and burnout, they act as buffer or shield and moderate the relationship between job demand and burnout. In other words, if there are resources, then the intensity of job demands will be reduced, resultantly less symptoms of burnout will be developed. This will be due the buffering role of resources on the relationship between job demands and burnout.

Different studies have been conducted in order to know the effects of resources on job demand and burnout, findings of such studies proves that resources have acted as moderators. For example Karatepe (2011) [61] in his study on the relationship of emotional dissonance and burnout. He found that resources like Autonomy and organizational support buffer the relationship between emotional dissonance and burnout symptoms. Schaufeli, Bakker and Rhenen (2009) [80] in their study on the relationship of job demand and burnout found that resources like autonomy, learning opportunities, performance feedback and social support moderated the positive relationship between workload, emotional demand and burnout symptoms. Another study conducted by Rodriguez-Muñoz, *et al.* [82] found that work autonomy, feedback and recovery opportunities were negatively related with job demands and burnout in such a way that these resources moderated the

relationship between job demand and burnout. like the prevous studies, recent studies also support the theory of the moderating effect of resources. It is interesting to know that the recent studies have examined the new types of resources and also explored new dimension of job demands. in this regard LI, Jiang, Yao and Li (2013) [83] found that psychological and physical job demands had negative relationship with and job resources like decision latitude, supervisor support and coworker support and these resources affected emotional exhaustion and safety compliance, as factor of burnout in negative way, where burnout symptoms were minimized after the appearance of resources [84].

CONCLUSION

It has been therefore concluded that the organizations should proved a favorable working environment to its employees, where they could not only be protected from the effects of unwanted job demands but also they are provided enough resources, which could help them to combat burnout in times of crisis. In this regard the employees should be given trainings to develop awareness about the unwanted job demands and also should be provided opportunities where they can attain not only get fully utilize the existing resources around them. In this way the organizations could be saved from the overwhelming effect of burnout. As once these effects of burnout are settled then institute will focus on the further improvement of the employees which will better for the betterment of the society [85-87].

REFERENCES

1. Maslach and M.P. Leiter, 2008. Early Predictors of Job Burnout and Engagement. Journal of Applied Psychology, 93(3): 498-512.
2. Schwab, Maslach C. and S.E. Jackson, 1993. Maslach Burnout Inventory Manual.
3. Maslach, Jackson S.E. and M.P. Leiter, 1996. Maslach Burnout Inventory Manual (Third ed.): Palo Alto, CA: Consulting Psychologists Press.
4. Burisch, M., 2006. Das Burnout-Syndrom: Springer.
5. Fisher, 1994. Stress in academic life: The mental assembly line. Guildford, England: Society for Research into Higher Education; Maidenhead, BRK, England: Open University Press, pp: 106.
6. Gillespie, N.A., M. Walsh, A.H. Winefield, J. Dua and C. Stough, 2001. Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. Work and Stress, 15(1): 53-72.
7. Winefield, Gillespie N., C. Stough, J. Dua, J. Hapuarachchi and C. Boyd, 2003. Occupational Stress in Australian University Staff: Results From a National Survey. International Journal of Stress Management, 10(1): 51-63.
8. Fevre, M.L., J. Matheny and G.S. Kolt, 2003. Eustress, Distress and interpretation in occupational Stress. Journal of Managerial Psychology, 18(7): 726-744.
9. Chaplain, R.P., 2008. Stress and psychological distress among trainee secondary teachers in England. Educational Psychology, 28(2): 195-209.
10. Janssen, P.P.M., J. De Jonge and A.B. Bakker, 1999. Specific determinants of intrinsic work motivation, burnout and turnover intentions: a study among nurses. Journal of Advanced Nursing, 29(6): 1360-1369.
11. Kyriacou, C., 2001. Teacher Stress: Directions for future research. Educational Review, 53(1): 27-35.
12. Moya-Albiol, L., M.Á. Serrano and A. Salvador, 2010. Burnout as an important factor in the psychophysiological responses to a work day in Teachers. Stress and Health, 26(5): 382-393.
13. Winefield, Boyd C., J. Saebel and S. Pignata, 2008. Job Stress in University Staff: An Australian Research Study: Australian Academic Press.
14. Jepson, E. and S. Forrest, 2006. Individual contributory factors in teacher stress: The role of achievement striving and occupational commitment. British Journal of Educational Psychology, 76(1): 183-197.
15. Tytherleigh, M.Y., C. Webb, C.L. Cooper and C. Ricketts, 2005. Occupational stress in UK higher education institutions: a comparative study of all staff categories. Higher Education Research and Development, 24(1): 41-61.
16. Abouserie, R., 1996. Stress, Coping Strategies and Job Satisfaction in University Academic Staff. Educational Psychology, 16(1): 49-56.
17. Boyd., S. and C. Wylie, 1994. Workload and stress in New Zealand universities. Wellington: New Zealand Council for Educational Research and The Association of University Staff of New Zealand.

18. Bakker and E. Demerouti, 2007. The Job Demands-Resources model: state of the art. Journal of Managerial Psychology, 22(3): 309-328.

19. Cherniss, C., 1980. Professional burnout in human service organizations: Praeger.

20. Bakker, Demerouti, E. and W. Verbeke, 2004. Using the job demands-resources model to predict burnout and performance. Human Resource Management, 43(1): 83-104.

21. Bakker, Demerouti, E. and W. Schaufeli, 2003b. Dual processes at work in a call centre: An application of the job demands–resources model. European Journal of Work and Organizational Psychology, 12(4): 393-417.

22. Demerouti, E., A.B. Bakker, F. Nachreiner and W.B. Schaufeli, 2001. The Job Demand - Resource Model of Burnout. Journal of Applied Psychology, 86(3): 499-512.

23. Hakanen, J.J., A.B. Bakker and W.B. Schaufeli, 2006. Burnout and work engagement among teachers. Journal of School Psychology, 43(6): 495-513.

24. Chen, C.F. and S.C. Chen, 2012. Burnout and Work Engagement Among Cabin Crew: Antecedents and Consequences. The International Journal of Aviation Psychology, 22(1): 41-58.

25. Schaufeli and A.B. Bakker, 2004. Job demands, job resources and their relationship with burnout and engagement: a multi-sample study. Journal of Organizational Behavior, 25(3): 293-315.

26. Byrne, B.M., 1994. Burnout: Testing for the Validity, Replication and Invariance of Causal Structure Across Elementary, Intermediate and Secondary Teachers. American Educational Research Journal, 31(3): 645-673.

27. Wilkerson, K. and J. Bellini, 2006. Intrapersonal and Organizational Factors Associated With Burnout Among School Counselors. Journal of Counseling & Development, 84(4): 440-450.

28. Korabik, K., D.S. Lero and D.L. Whitehead, 2011. Handbook of work-family integration: research, theory and best practices: Access Online via Elsevier.

29. Lee and B.E. Ashforth, 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. Journal of Applied Psychology, 81(2): 123-133.

30. Leiter and C. Maslach, 1999. Six Areas Of Worklife AModel of the organizational context of burnout. Journal of Health and Human Services Administration, 22: 472-489.

31. Mullins, L.J., 2005. Management and organisational behaviour: Prentice Hall/Financial Times.

32. Teven, J.J., 2007. Teacher Temperament: Correlates with Teacher Caring, Burnout and Organizational Outcomes. Communication Education, 56(3): 382-400.

33. Goldenberg, D. and J. Waddell, 1990. Occupational stress and coping strategies among female baccalaureate nursing faculty. Journal of Advanced Nursing, 15(5): 531-543.

34. Drazin, R. and C.B. Schoonhoven, 1996. Community, Population and Organization effects on innovation: A Multilevel perspective p.1081. Academy of Management Journal, 39(5): 1065-1083.

35. Eckert, R.E. and H.Y. Williams, 1972. College faculty view themselves and their jobs: University of Minnesota.

36. Michie, S. and S. Williams, 2003. Reducing work related psychological ill health and sickness absence: a systematic literature review. Occupational and Environmental Medicine, 60(1): 3-9.

37. Kuzsman., F.L. and H. Schnall, 1987. Managing teachers' stress: Improving discipline. The Canadian School Executive, 6: 3-10.

38. Cockburn, A.D., 1996. Primary teachers' knowledge and acquisition of stress relieving strategies. British Journal of Educational Psychology, 66(3): 399-410.

39. Gupta, N., 1981. Some Sources and Remedies of Work Stress among Teachers: Southwest Educational Development Laboratory, 211 East Seventh Street, Austin, TX 78701 ($3.00).o. Document Number.

40. Fimian, M.J. and T.M. Santoro, 1983. Sources and Manifestations of Occupational Stress as Reported by Full-Time Special Education Teachers. Exceptional Children, 49(6): 540-543.

41. Terry, P.M., 1997. Teacher burnout: Is it real? Can we prevent it?. Paper presented at the Annual meeting of the North Central Association of Colleges and Schools. from http://www.eric.ed.gov/PDFS/ED408258.pdf.

42. Fullan, 1999. Change Forces: The Sequel: Taylor and Francis.

43. Hargreaves, A., 2002. Sustainability of educational change: The role of social geographies. Journal of Educational Change, 3(3-4): 189-214.

44. Özer, N. and K. Beycioglu, 2010. The relationship between teacher professional development and burnout. Procedia - Social and Behavioral Sciences, 2(2): 4928-4932.

45. Correnti, R., 2007. An Empirical Investigation of Professional Development Effects on Literacy Instruction Using Daily Logs. Educational Evaluation and Policy Analysis, 29(4): 262-295.

46. Desimone, L.M., 2009. Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures. Educational Researcher, 38(3): 181-199.

47. Desimone, L.M., A.C. Porter, M.S. Garet, K.S. Yoon and B.F. Birman, 2002. Effects of Professional Development on Teachers' Instruction: Results from a Three-year Longitudinal Study. Educational Evaluation and Policy Analysis, 24(2): 81-112.

48. Garet, M.S., A.C. Porter, L. Desimone, B.F. Birman and K.S. Yoon, 2001. What Makes Professional Development Effective? Results From a National Sample of Teachers. American Educational Research Journal, 38(4): 915-945.

49. Rizzo, House and Lirtzman, 1970. Role Conflict and Ambiguity in Complex Organizations Administrative Science Quarterly, 15(2): 150-163.

50. Butler, S. and M. Constantine, 2005. Collective Self-Esteem and Burnout in Professional School Counselors. Professional School Counseling, 9(1): 55-62.

51. Lambie, G.W., 2007. The Contribution of Ego Development Level to Burnout in School Counselors: Implications for Professional School Counseling. Journal of Counseling & Development, 85(1): 82-88.

52. Pretorius, T.B., 1994. Using the Maslach Burnout Inventory to assess educator's burnout at a university in South Africa. Psychological Reports, 75(2): 771-777.

53. Usman, A., Z. Ahmed, I. Ahmed and Z. Akhtar, 2011. Work Stress Experienced by the Teaching Staff og University of the Punjab, Pakistan: Antecedents and consequences. International Journal of Business and Social Science, 2(8): 202-210.

54. Jourdain, G. and D. Chênevert, 2010. Job demands–resources, burnout and intention to leave the nursing profession: A questionnaire survey. International Journal of Nursing Studies, 47(6): 709-722.

55. Mastenbroek, Jaarsma, Scherpbier, Beukelen and Demerouti, 2012. The role of personal resources in explaining well-being and performance: A study among young veterinary professionals. European Journal of Work and Organizational Psychology, pp: 1-13.

56. Demerouti, E. and A. B. Bakker, 2011. The Job Demands–Resources model: Challenges for future research. SA Journal of Industrial Psychology, 37(2): 1-9.

57. Bakker, Demerouti, E., E.D. Boer and W.B. Schaufeli, 2003a. Job Demands and Job Resources as Predictors of Absence Duration and Frequency. Journal of Vocational Behavior, 62(2): 341-356.

58. Williams, S., 2011. Potential unique causes of burnout for chiropractic professionals. Journal of Chiropractic Humanities, 18(1): 86-93.

59. Yong, Z. and Y. Yue, 2007. Causes of burnout among secondary and elementary school teachers and preventative strategies. Chinese Education and Society, 40(5): 78-85.

60. Bakker Hakanen, J.J., E. Demerouti and D. Xanthopoulou, 2007. Job Resources Boost Work Engagement, Particularly When Job Demands are High. Journal of Educational Psychology, 99(2): 274-284.

61. Karatepe, O.M., 2011. Do job resources moderate the effect of emotional dissonance on burnout?: A study in the city of Ankara, Turkey. International Journal of Contemporey Hospitality Management, 23(1): 44-65.

62. Shirom, 1989. Burnout in work organizations. In Cooper and I. Robertson. (Eds.), International review of industrial and organizational psychology, pp: 25-48. New York: Wiley.

63. Maslach, 2003. Job Burnout: New Directions in Research and Intervention. Current Directions in Psychological Science, 12(5): 189-192.

64. Maslach and Leiter, 2008. The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It: Wiley.

65. Emener, W.G.W., 1979. Professional burnout: rehabilitation's hidden handicap. J. Rehabil, 45(1): 55-58.

66. Julieta, N., 2005. Paraiba Valley university teachers occupational stress: Burnout, depression and sleep evaluation-Thesis Campinas. Arquivos deneuro Psiquiatria, 3(2-A): 367.

67. Xanthopoulou, D., A.B. Bakker, E. Demerouti and W.B. Schaufeli, 2007. The Role of Personal Resources in the Job Demands-Resources Model. International Journal of Stress Management, 14(2): 121-141.

68. Unterbrink, T., R. Pfeifer, L. Krippeit, L. Zimmermann, U. Rose, A. Joos, *et al*., 2012. Burnout and effort–reward imbalance improvement for teachers by a manual-based group program. International Archives of Occupational and Environmental Health, 85(6): 667-674.

69. Cordes, C.L. and T.W. Dougherty, 1993. A Review and an Integration of Research on Job Burnout. The Academy of Management Review, 18(4): 621-656.

70. Maslach., Schaufeli W.B. and M.P. Leiter, 2001. Job Burnout. Annual Review of Psychology, 52: 397-422.

71. Demerouti, E., K. Mostert and A.B. Bakker, 2010. Burnout and work engagement: A thorough investigation of the independency of both constructs. Journal occupational health Psychology, 15(3): 209-222.

72. Anbar, A. and M. Eker, 2007. The relationship between demographic characteristics and burnout among academicians in Turkey. Journal of Academic Studies, 34: 14-35.

73. Lloyd, C. and R. King, 2004. A survey of burnout among Australian mental health occupational therapists and social workers. Social Psychiatry and Psychiatric Epidemiology, 39(9): 752-757.

74. Maslach and J. Goldberg, 1998. Prevention of burnout: New perspectives. Applied & Preventive Psychology, 7: 63-74.

75. Pines, A.M. and G. Keinan, 2005. Stress and burnout: The significant difference. Personality and Individual Differences, 39(3): 625-635.

76. Smith, K.J., J.A. Davy and G.S. Everly, 2006. An Assessment Of The Construct Distinctiveness Of Stress Arousal And Burnout. Psychological Reports, 99(2): 396-406.

77. Jenkins, R. and P. Elliott, 2004. Stressors, burnout and social support: nurses in acute mental health settings. Journal of Advanced Nursing, 48(6): 622-631.

78. Demerouti, E., A.B. Bakker, I. Vardakou and A. Kantas, 2003. The convergent validity of two burnout instruments: A multitrait-multimethod analysis. European Journal of Psychological Assessment, 19: 12-23.

79. Leiter, 1993. Burnout as a developmental process: consideration of models. In S. W.B., C. Maslach and T.E. Marek (Eds.), Professional Burnout Recent Developments in Theory and Research, pp: 237-250. Washington, DC: Taylor & Francis.

80. Schaufeli, W.B., A.B. Bakker and W. Van Rhenen, 2009. How changes in job demands and resources predict burnout, work engagement and sickness absenteeism. Journal of Organizational Behavior, 30(7): 893-917.

81. Huynh, J.Y., A.H. Winefield, D. Xanthopoulou and J.C. Metzer, 2012. Burnout and Connectedness in the Job Demands–Resources Model Studying Palliative Care Volunteers and Their Families. American Journal of Hospice and Palliative Medicine, 29(6): 462-475.

82. Rodriguez-Muñoz, A., A.I. Sanz-Vergel, E. Demerouti and A.B. Bakker, 2012. Reciprocal Relationships Between Job Demands, Job Resources and Recovery Opportunities. Journal of Personnel Psychology, 11(2): 86-94.

83. Li, F., L. Jiang, X. Yao and Y. Li, 2013. Job demands, job resources and safety outcomes: The roles of emotional exhaustion and safety compliance. Accident Analysis and Prevention, 51(0): 243-251.

84. Johnson, S., C. Cooper, L. Donald, P. Taylor and C. Millet, 2005. The experience of work-related stress across occupations. Journal of Managerial Psychology, 20(2): 178-187.

85. Pattanayak, Monalisa and P.L. Nayak, 2013. Green Synthesis of Gold Nanoparticles Using Elettaria cardamomum (ELAICHI) Aqueous Extract World Journal of Nano Science & Technology, 2(1): 01-05.

86. Chahataray, Rajashree and P.L. Nayak, 2013. Synthesis and Characterization of Conducting Polymers Multi Walled Carbon Nanotube-Chitosan Composites Coupled with Poly (P-Aminophenol) World Journal of Nano Science and Technology, 2(1): 18-25.

87. Parida, Umesh Kumar, S.K. Biswal, P.L. Nayak and B.K. Bindhani, 2013. Gold Nano Particles for Biomedical Applications World Journal of Nano Science & Technology, 2(1): 47-57.