

Impact of Quality of Work Life on Mental Health among Teaching Professionals in Indian Higher Learning Institutions: An Empirical Analysis

K.G. Senthilkumar, ** Dr. S. Chandrakumaramangalam, ***Dr. L. Manivannan, ****Dr. S. Malliga

* Associate Professor, Department of MBA, CMS College of Engineering, Namakkal – 637 003.
Tamilnadu, India. Mail: kgsenthil.mba@gmail.com

** Associate Professor, School of Management studies, Anna University of Technology, Coimbatore, Tamilnadu, India. Mail: ckmaucbe@gmail.com

*** Associate Professor, Department of Corporate Secretaryship, Erode Arts College, Erode, Tamilnadu, India.
Mail: lm_erode@yahoo.co.in

**** Professor, Department of CSE, Kongu Engineering College, Perundurai, Erode, Tamilnadu, India.
Mail : mallisenthil@yahoo.com

Abstract: The rationale behind this study is to determine the level and relationship between Quality of Work Life (QWL) and Mental Health among teaching professionals in higher learning institutions of Tamilnadu, India. A survey instrument was used to measure the perception of teaching professionals concerning their level of QWL and its relationship to mental health. A total of 320 sets of questionnaire were distributed to teaching professionals in selected faculties and 164 useable questionnaires were used for statistical analysis. Based upon the study, the levels of QWL were found to be favorable and Mental Health among staff members was moderate. Practical implications, limitations of the study and suggestions for future research are offered.

[K.G. Senthilkumar, S. Chandrakumaramangalam, L. Manivannan, S. Malliga. **Impact of Quality of Work Life on Mental Health among Teaching Professionals in Indian Higher Learning Institutions: An Empirical Analysis.** *Life Sci J* 2012; 9(4):3398-3404]. (ISSN: 1097-8135). <http://www.lifesciencesite.com>. 504

Key words: Quality of Work Life, Mental Health, Higher learning Institutions, and Teaching Professionals

1. Introduction

Today, the higher education systems, especially technical education in India has undergone a remarkable changes including the establishment of new private universities as well as the penetration of foreign universities. India's rendezvous with technical education began in 1847, with the establishment of Civil Engineering College at Roorkee for training engineers. But today, India has 31,324 colleges with approved intake of 8.5 lakh in engineering and 1.5 lakh in the management sector respectively. Indian higher education perhaps has the biggest Private Public Partnerships in the world. Much of the infusion of private funds in higher education has been through private colleges affiliated to a public university. In this model, the university provides overall academic supervision, sets the curriculum and conducts the examination. The quality of higher educational institutions is ensured through accreditation. According to Houston D et al. (2006) all such changes demonstrate the complexity of academic work in an increasingly demanding environment. While these changes will create more opportunities leading to an increase in nation's supply of qualified workforce, the role played by teaching professionals is becoming more complex, challenging and demanding. In this situation, finding and positioning faculty is a difficult task. Because, the inability of staff members to balance the equally challenging demands of their work and

personal life has contributed to the escalating stress and conflict in today's workforce (Edwards et.al., 2000). This in turn escorts to momentous increase in stress related to health problem, which is going to have a consequence financially on both the employer as well as the government (Frone, et.al., 1997, Johnson, et.al., 1997).

Quality of Work Life (QWL) has assumed increasing interest and importance in both industrialized as well as developing countries of the world. It has become critical in the last two decades because of the changed business environment and family structure (Akdere, 2006). According to Ganlinsky & Stein, (1990) the combination of fluctuating work environment with competing work and family commitments has negatively affect employees in many ways, such as lowered employee morale, reduced productivity and increased employee turnover. As QWL is a multidimensional concept there is no commonly accepted definition for it. Several researchers agree in general that quality of work life (QWL) is a construct that deals with the well being of employees.

Although most researches have been done on QWL, the majority of them have been focused on western settings. Only very few studies have been conducted in the Asian setting (Daud, 2008; Mat Zin, 2004; Saklani, 2004; Wyatt and Chay, 2000). Till today, the literature on QWL is widespread yet

reasonably little work in this area relates to the field of higher education and still less on Indian higher learning institutions. The purpose of this study was to determine factors that can effectively represent the conception of a quality of work life in higher learning institutions in India. More specifically, the objectives of the study were: 1) to identify the level of QWL among teaching professionals in the private engineering colleges in India and, 2) to investigate whether there is any relationship between the QWL and Mental Health among the teaching professionals. Based on the objectives above, the present study has formulated the following research questions: (1) what are the dimensions that represent the QWL among teaching professionals? and (2) is there any relationship between QWL and Mental Health among the teaching professionals?

2. Review of Literature

2.1 Quality of Work Life.

The term quality of work life (QWL) originated from the concept of socio-technical system design in the 1970s that emphasizing the human dimensions of work by focusing on the quality of the relationship between the worker and the working environment. In 1972, Louis Davis introduced the term 'Quality of Work Life' (QWL) in an attempt to establish that performance is linked to involvement and satisfaction of employees at workplaces. Numerous works on QWL thereafter provides variety of definitions and suggestions of what constitutes QWL. The comprehensive demarcation of the QWL concept is found in the important works of Walton (1974), Taylor (1978) and Levine et al. (1984). Walton (1974) has proposed eight major conceptual categories relating to QWL as adequate and fair compensation, safe and healthy working conditions, immediate opportunity to use and develop human capacities, opportunity for continued growth and security, social integration in the work organization, constitutionalism in the work organization, work and total life space and social relevance of work life. There appears plethora of definitions for quality of work life but no commonly accepted one. Lawler (1982) highlighted that the core dimension of the entire QWL in the organization is to improve employees' well-being and productivity. The most common interaction that relates to improvement of employees' well-being and productivity is the design of the job. He defined QWL in terms of job characteristics and work conditions. Robbins (1989) also conceptualized in the same manner. According to him, QWL is a process by which an organization responds to employee needs by developing mechanisms to allow them to share fully in making decisions that designs their lives at work.

Generally, QWL reflects the relationship that exists between the workers and their work

environment. It refers to the favourableness or unfavourableness of a job environment for people. The basic concept underlying the QWL is "humanization of work". It means the provision of security, equity, individualism and democratic rights to workers. Havlovic (1991) revealed that among other dimensions of QWL, the key dimensions were job security, better reward system, higher pay, opportunity for growth, and participative groups. In the Health care industry Brooks and Anderson (2005) developed the construct of QWL with four dimensions such as, work life/home life dimension, work design dimension, work context dimension, and work world dimension. A study of QWL among academicians by Winter, Taylor and Sarros (2000) viewed QWL with five work environment domains such as, role stress, job characteristics to directly and indirectly shape academic staff's experiences, attitudes and behaviour. In another study in Malaysia by Mohd.Hanefah et al. (2003) developed QWL measures for professionals with seven dimensions, viz. growth and development, participation, physical environment, supervision, pay and benefits, social relevance and workplace integration. The same dimensions were used by Daud N (2010) to study the QWL among academic staff in Malaysian higher learning institutions.

Saklani (2010) has used thirteen factors (dimensions) for the analysis of the QWL among non-managerial employees in India. These include adequate and fair compensation; fringe benefits and welfare measures; job security; physical working environment; work load and job stress; opportunity to use and develop human capacity; opportunity for career growth; human relations and social aspect of life; participation in decision-making; reward and penalty administration; equity, justice and grievance handling; work and total life space (balance in life) and image of organization in the society (social relevance of work life). He contended that non-managerial employees in India, although look for both financial and non-financial incentives, place greater emphasis on their economic goals. It is learned from the review of literature that several researches so far conducted on QWL have examined varied QWL dimensions across countries. This study was also conducted to develop dimensions of QWL among teaching professionals working in higher learning institutions of India. QWL in higher learning institutions has several significant dimensions. Most important of these dimensions in an educational setting are; teaching and learning process, learning opportunity, work load, compensation, leadership, professional relationship, employee support services, feedback on performance, communication and attitude towards change.

2.2. Mental Health.

Since the core competence of any organization is the real performance of their human resources, modern age companies must be built around human resources. Even, relatively low level of health problems will affect the organizational effectiveness and employees' performance. Hence, to be competitive, organizations must focus on their employees' overall physical and mental health. Mental health can be defined as the ability to adjust to new situations and to handle personal problems without marked distress and still have enough energy to be a constructive member of society. Mental health is also defined as the feelings of someone toward oneself, world, life location and surrounding people, our responsibility to others, how to cope the income and time/place recognition (Levinson et al 1962). According to Karl Menninger, mental health is someone's adaptation to his/her around world in the best possible choice so that it causes his/her happiness as well as a useful and efficient perception.

In today's globalised business environment, the most part of employees' lives are spent at workplaces. Work can have a significant impact, either detrimental or enhancing, on an individual's mental and physical health (Warr, 1987). A comprehensive body of research suggests that an increasing percentage of the people suffers from work-related stress (e.g. Edwards and Burnard, 2003; Smith et al., 2000). Stress has become one of the most serious health issues of the 21st century. The occupational stress can be more prevalent in developing countries like India. This occupational stress can be best understood by the Karasek's occupational stress model (Karasek, 1979) with two dimensions: demand and discretion. Based on these dimensions, Karasek classified jobs into four types: high-strain jobs, low-strain jobs, active jobs and passive jobs. According to him, the high occupational stress supposed more common in the high-strain jobs (high work demand but without the benefit of high work control). Mental and emotional health problems of employees will lead to absenteeism and decreased productivity that in turn affect employers. Employers may be able to improve productivity in the workplace by promoting the mental health of their employees. It is obvious that the work environment plays pivotal role in the employee well-being, specifically, the mental health of employees.

The results of several studies concluded that the perception of roles, particularly role conflict and overload, is related to women's psychological health and overall wellbeing. According to McBride (1990), the competing demands of multiple roles will lead to role overload and subsequent strain. Concomitantly, Tiedje and Wortman (1990), in their study among married professional women, found that women who experienced high role conflict were more depressed

and less satisfied. Likewise, Paden and Buehler (1995) found that both the role conflict and role overload were associated with physical and emotional affects among dual-income families. Similarly, Lease (1999) found that role overload was a powerful predictor of many types of strain in academic faculty. Currently, many people are losing their jobs as a result of the economic recession. The result of this is the work intensification i.e., less individuals have to do more work. In today's business scenario, the 'survivors' of organizational downsizing were more likely to experience poor mental health because of work intensification (Dragano, Verde and Siegrist 2005). Pearson (1998), in his study on investigating the relationship of both work and leisure to a comprehensive measure of psychological health, found that the combination of job satisfaction and leisure satisfaction was a stronger predictor of psychological health than job satisfaction alone.

Actually, the mental health research began with Jahoda (1958), who believed that positive mental health could be reviewed by six fundamental variables: self-acceptance, personal growth, autonomy, environmental mastery, personality integration, and an accurate perception of reality. In many ways, Jahoda's analysis has served as a yardstick for later researchers. Ryff (1989, 1995) drew from Jahoda's work and developed a general context-free model of well-being with her six basic dimensions: self-acceptance, personal growth, autonomy, environmental mastery, positive personal relationships, and a sense of meaning and purpose in life. Finally, Coan (1974, 1977) created a five-dimensional model of well-being: efficiency, relatedness, inner harmony, creativity, and self transcendence. Unlike Ryff, Warr (1994) developed context-specific model of well-being, as the relationship with job-related antecedents are stronger for job-related well-being, with four dimensions: affective well-being, aspiration, autonomy and competence.

According to the study conducted by William (2001) among undergraduate and graduate to measure psychological well-being resulted in three factor models. His study supported the hypothesis that psychological well-being can be conceptualized by a tripartite model that contains factors for subjective well-being, personal growth and a style of religiosity that is characterized by other-centeredness. Parviz Ahmadi et al. (2012), in their research in studying the relationship between job performance and employees' mental health in one of Iranian natural gas refinery concluded that there was a significant relationship between employees' job performance and mental health. Any increase in mental health aspects promotes job performance and low mental health level among employees can reduce job performance.

Researches indicated that employees should experience high levels of quality of work life as well as mental health in order to realize their full potential, and become an asset to the organization. The nature of the job could prevent the worker from attaining full mental health. The workplace itself may contribute to distress and, ultimately to mental disorders (Thomas & Hersen, 2002). According to D'Souza, et al. (2006) both high work demands and job insecurity will lead to poor mental health. It is learned from these studies that the elements such as nature of job, work place environment, high work demands and job insecurity will have an impact on one's mental health. These elements represent the QWL of employees. Hence, it is understood that there is a strong positive relationship between QWL and employees' mental health.

3. Methodology

The study makes use of responses to a questionnaire survey conducted among teaching professionals in Anna University affiliated self financing engineering colleges in Coimbatore region of Tamilnadu, India. The research design for this study is a correlation study and a stratified random sampling method was utilized. A total of eight faculties were identified and a total of 40 questionnaires were randomly distributed to every faculty, which brings to a total of 320 questionnaires and in all, 164 responses were received and analyzed, which represented a 51.25% response rate.

3.1 Measures and Analysis of Data.

Items included in the "Quality of Work Life Survey" were selected after a review of the literature. The instrument was tested through pilot study on a small group of teaching professional. A 92 item questionnaire derived and adapted from an earlier QWL study by Curtin University (2006) and modified according to the Indian education sector were used to represent the twelve dimensions of the quality of work life such as teaching and learning process, learning opportunity, compensation, work load, feedback on performance, leadership, professional relationship, employee support services, physical environment, resources and equipment, communication and attitude towards change. Respondents were asked to indicate their agreement or disagreement about each QWL question with anchors ranging from strongly disagree (1) to strongly agree (5).

The measures for mental health used in this study were adapted from Warr's Mental Health Measures (1990). This instrument has been widely tested by researchers and making provision for 16 items consisting of three dimensions viz., work competence, work aspiration and negative work transfer. The same instrument with modifications which consists of 20 items with three dimensions viz., work competence, work aspiration, and work environment were adapted.

Respondents were asked to indicate their agreement or disagreement on each mental health question with anchors ranging from strongly disagree (1) to strongly agree (5).

4. Results

Based on the demographic and other personal background information obtained and presented in the Table 1, majority of respondents were male (58.5%) and 41.5 percent were female. The majority of the respondents were belongs to the age category of 36 to 45 years (35.4%) followed by the 46 to 55 years age group (25.6%). More than three fourth of the respondents (84.1%) were belongs to 26 to 55years. The majority of the respondents (57.9%) were belongs to married category. The majority held Masters Degree (72.0%), and 28.0 percent with a PhD.

Majority of the respondents belongs to Assistant Professor, Assistant Professor (SG) and Associate Professor Category. They make up nearly three quarter (72.0%) of the respondents for the study. Majority of the respondents (70%) do not hold any administrative position. Majority of the respondents has teaching hours of between 12 – 21 hours (72.0%), while 28.0% has teaching hours of 8 to 10 hours. This is usually seen in faculty members those hold administrative positions.

Table 1. Respondents Profile

Respondents profile	Total number of respondents		Percentage of Respondents	
Gender				
Male	96		58.5	
Female	68		41.5	
Age				
26- 35 years	42		25.6	
36- 45 years	58		35.4	
46-55 years	38		23.2	
Above 55 years	26		15.8	
Marital status				
Married	95		57.9	
Unmarried	69		42.1	
Qualification				
Masters Degree	118		72.0	
Masters Degree with Ph.D	46		28.0	
Designation		%	Administrative Position	%
Assistant Professor	33	20.1	Nil	0.0
Assistant Professor (SG)	36	22.0	Nil	0.0
Associate Professor	49	29.9	15	9.0
Professor	46	28.0	35	21.0
Teaching hours/week				
Assistant Professor	21		Average hours/ week 11-12	
Assistant Professor (SG)	18			
Associate Professor	12-16			
Professor	8-10			

A factor analysis technique was performed separately for items indicating QWL and Mental Health variables. The 92 items QWL measure were subjected to principal component factor analysis with varimax rotation to determine if there were any underlying dimensions within the data on the attitude to the Quality of Work Life statements. From the output, twelve factor solutions emerged with Eigen values exceeding 1. Results of factor analyses indicated that the QWL measure was found to be consisted of twelve dimensions. The factor loadings in the twelve factors range from .59 to .89. From the analysis it is revealed that the mean of all QWL variables fall between 4.67 and 5.92. From the results it is concluded that the teaching and learning process, learning opportunity, work load, compensation, leadership, professional relationship, employee support services and feedback on performance contributed highly to the QWL of teaching professionals in higher learning institutions.

All the 20 items of Mental Health measure were examined using principal component factor analysis with varimax rotation to determine the dimensions. Results of factor analyses revealed that the Mental Health measure was fitted with the three dimensions. The factor loadings in the three factors range from .76 to .91.

Table 2. Impact of QWL on Mental Health (Regression Analysis)

QWL Factors	Regression coefficients		
	Work Competence	Work Aspiration	Work Environment
Teaching & Learning Process	0.1883*	0.1667*	0.1664*
Learning Opportunity	0.2417*	0.2334*	0.2634*
Compensation	0.1021	0.1408*	0.1786*
Workload	0.1887*	0.1818*	0.2034*
Feed Back	0.1216*	0.1489*	0.1029
Leadership	0.1902*	0.1017	0.1717*
professional relationship	0.1904*	0.1673*	0.1408*
Employee Support Services	0.0996	0.1022	0.1443*
Physical Environment	-0.0344	0.0164	-0.0341
Resources and Equipment	0.0717	-0.0213	0.0667
Communication	0.0884	0.0164	0.0739
Attitude toward change	0.0991	0.0242	0.0818
Constant	0.7349	0.8939	0.6145
R ²	0.8317	0.7426	0.8233
F	13.0919*	8.048*	13.0944*
* Significant at Five Percent Level			

4.1 Impact of QWL factors on Mental Health

To analyse the impact of QWL on Mental Health a multiple regression analysis was done. Table 2

exhibits the results of regression analyses of QWL factors on the four dimensions of Mental Health among the teaching professionals. The fitted regression model is given in Equation (1).

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + b_{11}x_{11} + b_{12}x_{12} + e \quad (1)$$

Here, the Y represents the score on Mental Health among teaching professionals and x_1 to x_{12} shows the perception on QWL variables among teaching professionals. The QWL factors such as, Teaching and Learning Process, Learning Opportunity, Compensation, Work Load, Feedback, Leadership, Professional Relationship and Employee Support Services were conceived to have a significant and positive relationship with Mental Health.

4.2 Impact of QWL on Work Competence

From the Table 2 it is learned that the QWL variables significantly and positively influencing work competence dimension of Mental Health among the teaching professionals. The variables such as Teaching and Learning Process ($\beta=0.1883$), Learning Opportunity ($\beta=0.2417$), Work Load ($\beta=0.1887$), Feedback ($\beta=0.1216$), Leadership ($\beta=0.1902$), and Professional Relationship ($\beta=0.1904$) were significantly influencing as their regression coefficients were significant at 5% level. A unit increase in the perception on the above QWL variables result in an increase in Mental Health among teaching professionals in higher learning institutions by 0.1883, 0.2417, 0.1887, 0.1216, 0.1902 and 0.1904 units respectively. The changes in the perception of QWL variables explain the changes in Mental Health of teaching professionals to the extent of 83.17% ($R^2 = 0.8317$, $F = 13.0919$).

4.3 Impact of QWL on Work Aspiration

From the Table 2 it is observed that the QWL variables significantly influencing work Aspiration dimension of Mental Health among the teaching professionals. The variables such as Teaching and Learning Process ($\beta=0.1667$), Learning Opportunity ($\beta=0.2334$), Compensation ($\beta=0.1408$), Work Load ($\beta=0.1818$), Feedback ($\beta=0.1489$), and Professional Relationship ($\beta=0.1673$) were significantly influencing as their regression coefficients were significant at 5% level. A unit increase in the perception on the above QWL variables result in an increase in Mental Health among teaching professionals in higher learning institutions by 0.1667, 0.2334, 0.1408, 0.1818, 0.1489 and 0.1673 units respectively. The changes in the perception of QWL variables explain the changes in Mental Health of teaching professionals to the extent of 74.26% since its R^2 is 0.7426 and $F = 8.048$.

4.4 Impact of QWL on Work Environment

From the Table 2 it is highlighted that the QWL variables significantly influencing work environment

dimension of Mental Health among the teaching professionals. The seven QWL factors such as Teaching and Learning Process ($\beta=0.1664$), Learning Opportunity ($\beta=0.2634$), Compensation ($\beta=0.1786$), Work Load ($\beta=0.2034$), Leadership ($\beta=0.1717$), Professional Relationship ($\beta=0.1408$), and Employee Support Services ($\beta=0.1443$) were significantly and positively influencing Mental Health as their regression coefficients were significant at 5% level. A unit increase in the perception on the above QWL variables result in an increase in Mental Health among teaching professionals in higher learning institutions by 0.1664, 0.2634, 0.1786, 0.2034, 0.1717, 0.1408 and 0.1443 units respectively. The changes in the perception of QWL variables explain the changes in Mental Health to the extent of 82.33% ($R^2=0.8233$, $F=13.0944$)

5. Conclusion

This study investigated the level of QWL and Mental Health and also the relationship between QWL and Mental Health among the teaching professionals in higher learning Institutions of Tamilnadu, India. The present study divulged that majority of teaching professionals have considered all the twelve dimensions of QWL as favourable. It is also revealed that the mental health of teaching professionals were moderate. The results of the regression analysis confirmed that teaching and learning process, learning opportunity, work load, feedback on performance, leadership, and professional relationship have been indicated by the respondents as significant predictors to work competence dimension of mental health. Teaching and learning process, learning opportunity, compensation, work load, feedback on performance, and professional relationship have a positive relationship with the work aspiration dimension of mental health.

Teaching and Learning Process, Learning Opportunity, Compensation, Work Load, Leadership, Professional Relationship, and Employee Support Services were significantly and positively influencing work environment dimension of Mental Health. It is concluded with these findings that there is a relationship between QWL and the three dimensions of Mental Health. This research study has highlighted the attitudes of teaching professional towards QWL, especially, how they view their work environment. Hence, it is paramount for any higher learning institution, to attract and retain highly qualified academic staff members, to provide QWL measures to their employees.

Although this study provides valuable information about the relationship between QWL and Mental Health, there exist some limitations. First, the sample derived for this study belongs to particular

region of the state that raises the issue of generalizing the research findings. Second, similar study should be conducted on state level or national level as the present results of this study are not conclusive. This empirical study of the impact of QWL on Mental Health must be regarded as tentative.

Despite these limitations, the study has contributed to the present literature by providing empirical evidence on the twelve dimensions of QWL as compared to the seven dimensions of Mohd. Hanefah et al. (2003) and Daud N (2010). Another important contribution of this research study was that it empirically examined the relationships between QWL and the three dimensions of Mental Health among teaching professionals in higher learning institutions.

REFERENCES

1. Akdere, M.. "Improving Quality of Work-Life: Implications for Human Resources." *The Business Review*, Cambridge, 6(1), December 2006, 173- 177.
2. Brooks, B. A. & Anderson, M. A. "Defining quality of nursing work life." *Nursing Economics*, Vol. 23 (6), Nov – Dec 2005. 319 – 326
3. Curtin University of Technology, "Quality of Working Life (QWL) Survey Report 2006." Curtin, Perth.
4. Daud, N. "Investigating the relationship between quality of work life and organizational commitment amongst employees in Malaysian firms." *Proceedings of the 7th International Conference of the Academy of HRD. Ethics and Quality of Work life for Sustainable Development*. 3-6 November, 2008. Bangkok, Thailand.
5. Daud, N. "Quality of Work Life and Organizational Commitment amongst Academic Staff: Empirical Evidence from Malaysia." *International Conference on Education and Management Technology, 2010 (ICEMT 2010)*.
6. Dragano, N., P. Verde and J. Siegrist "Organisational downsizing and work stress: testing synergistic health effects in employed men and women." *Journal of Epidemiology and Community Health*, 59, 2005. pp. 694–699.
7. D'Souza, R.M., Strazdins, L., Broom, D.H., Rodgers, B., & Berry, H.L. "Work demands, job insecurity and sickness absence from work. How productive is the new, flexible labour force?" *Australian and New Zealand Journal of Public Health*, 30(3), 2006. 205-212.
8. Edward, J.R., Rothband, N.P "Mechanism linking work and family: clarifying the relationship between work and family construct." *Academy of Management Journal*, 25, 2000. pp. 178-199.
9. Edwards, D. and P. Burnard "A systematic review of stress and stress management interventions for mental health nurses." *Journal of Advanced Nursing*, 42, 2003. pp. 169–200.
10. Frone, M., Russell, M., & Cooper, "Relation of work-family conflict to health outcomes: a four year longitudinal study of employed parents." *Journal of*

- Occupational and Organizational Psychology*, 670, 1997. pp. 325-335.
11. Galinsky, E., Stein, P.J. "The impact of human resource policies on employees: balancing work/family life", *Journal of Family Issues*, Vol. 11 No.4, 1990. pp.368-83.
 12. Havlovic, S. J. "Quality of work life and human resource outcomes." *Industrial Relations*, Vol. 30, No. 3, 1991. Fall. 469-479
 13. Houston, D, Meyer, LH & Paewai, S "Academic staff workloads and job satisfaction: expectations and values in academe." *Journal of Higher Education Policy and Management*, vol. 28, no. 1, 2006. pp. 17-30.
 14. Jahoda, M. "Current concepts of positive mental health." New York: Basic Books, 1958.
 15. Johnson, K., Duxbury, L., & Higgins, C. "Making work and lifestyle initiatives work: Beyond best practices." Ottawa: Industry Canada, 1997.
 16. Karasek, R. "Job demands, job decision latitude and mental strain: implications for job redesign." *Administration Science Quarterly*, 24, 1979. pp. 285-307.
 17. Lawler, E. E. (1982). "Strategies for Improving the Quality of Working Life." *American Psychologist*, 37(3): 1982:486-493.
 18. Lease, S. H. "Occupational role stressors, coping, support, and hardiness as predictors of strain in academic faculty: An emphasis on new and female faculty." *Research in Higher Education*, 40, 1999:285-307.
 19. Levine, M., Taylor, J., & Davis, L. "Defining quality of work life." *Human Relations*, 37, 1984:81-104.
 20. Levinson, H., Price, C. R., Munden, K. J., & Solley, C. M. "Men, Management and Mental Health. Cambridge." MA: Harvard University Press, 1962.
 21. McBride, A. B. "Mental health effects of women's multiple roles." *American Psychologist*, 45, 1990: 381-384.
 22. Mohd. Hanefah, M., Md Zain, A.Y., Mat Zain, R., & Ismail, H. "Quality of work life and organizational commitment among professionals in Malaysia." *Proceedings of the 1st International Conference of the Asian Academy of Applied Business: Narrowing the competitive gap of emerging markets in the global economy*, 10-12 July 2003 Sabah, Malaysia.
 23. Paden, S. L., & Buehler, C. "Coping with the dual-income lifestyle." *Journal of Marriage and the Family*, 57, 1995:101-110.
 24. Parviz Ahmadi, Alireza Bakhshizadeh & Hossein Balouchic "Studying the impact of mental health on job performance of managers and staff." *Management Science Letters* 2 (2012) 1579-1588.
 25. Pearson, Q. M. "Job satisfaction, leisure satisfaction, and psychological health." *The Career Development Quarterly*, 46, 1998: 416-426.
 26. Robbins, S. P. "Organizational Behavior: Concepts, Controversies, and Applications." NJ: Prentice Hall, 1989.
 27. Ryff, C.D. "Happiness is everything, or is it? Explorations on the meaning of psychological well-being." *Journal of Personality & Social Psychology*, 57(6), 1989: 1069-1081.
 28. Ryff, C.D. "Psychological well-being in adult life." *Current Directions in Psychological Science*, 4(4), 1995: 99-104.
 29. Saklani, D. R. "Quality of Work Life in the Indian Context: An Empirical Investigation." *Decision*, 31(2): 2004: 101-135.
 30. Saklani, D. R. "Non-managerial Perspective of Quality of Work Life." *Journal of Management Research*, Vol. 10, No. 2, August 2010, pp. 87-102
 31. Smith, A., S. Johal, E. Wadsworth, G. Davey Smith and T. Peters "The Scale of Perceived Stress at Work: The Bristol Stress and Health at Work Study." Contract Research Report 265/2000. Sudbury: HSE Books.
 32. Taylor, J. "An empirical examination of the dimensions of quality of working life." *Omega: International Journal of Management Science*, 6, 1978:153-160.
 33. Thomas, J.C., & Hersen, M., "Handbook of Mental Health in the Workplace." California: Sage Publications, 2002.
 34. Tiedje, L. B., & Wortman, C. B. "Women with multiple roles: Role-compatibility perceptions, satisfaction, and mental health." *Journal of Marriage and the Family*, 52, 1990:63-72.
 35. Walton, R. E. "QWL indicators: prospects and problems. In Portugal, A.H. (Eds.). *Measuring the quality of working life. A symposium on Social Indicators of Working Life*. Ottawa, March, 1974:19-20.
 36. Warr, P. *Work, unemployment and mental health*. Oxford: Oxford University Press, 1987.
 37. Warr, P.B. "A conceptual framework of the study of work and mental health." *Work and stress*, 8, 1994:84-87.
 38. William C.Compton "Toward a Tripartite Factor Structure of Mental Health: Subjective Well-Being, Personal Growth, and Religiosity." *The Journal of Psychology*, 2001, 135(5), 486-500.
 39. Winter, R., Taylor, T. & J. Sarros. "Trouble at mill: quality of academic work life issues within a comprehensive Australian university," *Studies in Higher Education*, 25, 3, 2000. Pp.279-294.
 40. Wyatt, T. A., & Chay, Y. W. "Perceptions of QWL; A study of Singaporean employees' development." *Research and Practice in Human Resource Management*, 9(2), 2001:59-76.