Proceedings International Conference of Technology Management, Business and Entrepreneurship 2012 (ICTMBE2012),

Renaissance Hotel, Melaka, Malaysia 18-19 Dec 2012

THE IMPACT OF EMPLOYEES' JOB SATISFACTION AND **STRESS ON WORK QUALITY**

Nor Kamariah Kamaruddin Norhazana Abdullah Alina Samsuddin

Faculty of Technology Management, Business and Entrepreneurship Universiti Tun Hussein Onn Malaysia 86400 Parit Raja Batu Pahat Johor Malavsia nkamariah@uthm.edu.my

ABSTRACT

Work quality is an important organizational aspect because it reduces the organizational costs and ensures good performance. Realizing the importance of work quality, it is important to investigate whether job satisfaction and stress effect work quality. However, there are limited studies focusing job satisfaction and stress on work quality. Therefore, the research objective is to determine the relationship of job satisfaction, stress, and work quality. The research design of this study was multiple case studies using a quantitative approach. The study was carried out in two companies in Masai City, where standardized established questionnaires by Spector and NIOSH's Generic were distributed to all of the employees in the companies. Pilot test was conducted before distribution and the rate return is 93.0% after collected. Pearson correlation coefficient test was used to determine the relationship among the variables. The questionnaire data was analysed by using Statistical Package for Social Science (SPSS). The findings showed that there were insignificant relationship between job satisfaction and stress on work quality. This research enables the selected companies to understand their employees' job satisfaction and stress, and the result can be used as a reference to improve their efficiency.

Keywords: Job satisfaction, stress, work quality

1.0 Introduction

The idea of simultaneously improving both quality and productivity now holds the attention of companies throughout the world. Companies or organizations must concern about their work quality. This is because when the work quality of a company is poor, the whole organization suffers. Poor work quality will lead to high costs, resulting in much wasted time and resources. There are many factors affecting work quality such as job satisfaction, stress, working hours, the relationship between management and employees (Certo, 2005). However, numerous researches have shown that the job satisfaction and stress are the most important factors in affecting the work quality. Hence, this study is undertaken to identify the effect of job satisfaction and stress of employees to the work quality.

1.1 Work Quality

Work quality is more related to conscientiousness and personal satisfaction than work load. Energetic and active individuals affect productivity positively (Halkos & Bousinakis, 2010). Work quality is part of job performance. According to Porter and Lawler (1968), there are three types of performance:

- I. The measure of output rates, amount of sales over a given period of time, the production of a group of employees reporting to manager.
- II. The measure of performance involves ratings of individuals by someone other than the person whose performance is being considered.
- III. The third type of performance measures is self-appraisal and self- ratings.

1.3 Effect of Stress on Work Quality

The term "stress" originated in the field of physics and was transferred into psychology. Basically, the idea is that human beings tend to resist external forces acting upon them, just as do physical materials and bodies (Hobfull, 1989). It refers to the interaction between the person and the environment. In reviewing studies pertaining to job stresses Kahn and Byosiere (1992) perceive as recurring themes role conflict, role ambiguity and work overload, such factors have negative implications for workers, both psychologically and physically.

Job stress has received substantial attention in past research on professionals, included in the study of (Fisher, 2001; Bernardi, 1997; Patten, 1995; Choo, 1987). Stress can be dysfunctional for the organization's work quality. Sutherland and Cooper (2000) summarized a range of behaviors displayed by people who are experiencing excessive stress such as: arrive to work late or leave early, take extended breaks, make more errors as a result of poor decision making, more rejects in quality inspections, less innovative and creativity. All these behaviors will not only impact on the productivity of the people who are experiencing excessive stress, but also on colleagues whose stress are likely to be affected.

It shows that there is some significant impact of stress on performance. There has been a growing awareness of a phenomenon known as "presenteeism" which means that people go to work even though they feel too unwell to work. This is a critical cost associated with stress and has a great impact on performance. Previous studies conducted in the US also suggested an important link between health and well-being, and productivity. When people are experiencing hyper-stress and distress, not only the volume of work will suffer but also the quality of the work undertaken (Ward and Abbey, 2005).

Stress is likely to have an impact on people's thought processes, leading to a lack of clear thinking, poor concentration and attention to detail, and, in turn, people are more likely to make mistakes. Mistakes in themselves can be costly but in addition there is the time taken to put things right. Thus, there is clearly an impact on work quality. However, stress can be positive and help people to achieve exceptional performance, provided it is appropriately managed. This means the regular stress levels of that person has not reached exhaustion level. As pressure increases, performance levels increased, this is due to people often experience the stimulation of positive stress (Ward and Abbey, 2005).

1.4 Effect of Job Satisfaction on Work Quality

Job satisfaction plays an important role in a positive emotional state that occurs when a person seems to fulfill important job values provided these values are compatible with one's needs. It reflects the individual's emotional reaction to the job itself. Arnold and Feldman (1986) said that an individual has high job satisfaction, meaning that the individual generally likes and values his job highly and feels positively toward it.

Furthermore, job satisfaction can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job. Generally, such facets of jobs are appreciation, communication, coworkers, fringe benefits, job conditions, nature of the work itself, organization itself, policies and procedures, pay, personal growth, promotion, recognition, security, and supervision. The facet approach is used to find out which parts of job produce satisfaction or dissatisfaction

Job satisfaction has been widely studied over the last four decades of organizational research (Currivan, 1999). Job satisfaction has been defined and measured both as a global construct and as a concept with multiple dimensions or facets (Locke, 1969, 1970; Price, 1997; Scarpello and Campbell, 1983). In general, overall job satisfaction has been defined as "a function of perceived relationship between what one wants from one's job and what one perceives it as offering: (Locke, 1969).

Job satisfaction mediates the relationships between one individual worker with work conditions, and organizational and individual outcomes (Dormann and Zapf, 2001; Jex, 2002; Judge and Church, 2000). In general, job satisfaction is more highly correlated to performance in complex jobs, in relevance to the relationship in less complex jobs (Johnson and Johnson, 2000; Judge and Church, 2000).

Several determinants of job satisfaction have been established in prior research. They include organizational reward systems, factors such as power distribution and centralization, and individual differences such as self esteem and the need for achievement (Lankau and Scandura, 2002; Lefkowitz, 1994). There are many behaviors and employee outcomes that have been hypothesized to be result of job satisfaction or dissatisfaction. Conventional wisdom says that job satisfaction should be related to job performance.

People who are happy with their jobs might be more motivated, work harder, and therefore perform better. There is stronger evidence that people who perform better like their jobs better because of the rewards that are often associated with good performance. Evidence exists for the hypothesis that job satisfaction is the result of good job performance. Jacobs and Solomon (1977) hypothesized that the correlation between job satisfaction and job performance would be higher in jobs where good performance was rewarded than in jobs where it was not. It seems somehow natural that more positive feelings about work would lead to greater output and higher work quality.

A review of the literature in 1985 suggested that the statistical correlation between job satisfaction and performance was about 0.17 (Iaffaldano & Muchinsky,1985). However, further research does not agree with this conclusion, Organ (1988) suggests that the failure to find a strong relationship between job satisfaction and performance is due to the narrow

means often used to define job performance. In the relationship of job satisfaction and work quality, there are other factors besides job satisfaction.

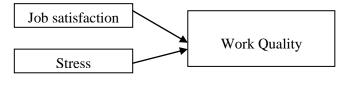
2. Conceptual Framework

Williams *et al.* (2001) stressed that short-term outcomes of job stress have both physiological and behavioral effects leading to poor job performance. As expected, increased stress leads to reduced productivity and increased satisfaction leads to increased productivity (Halkos and Bousinakis. 2010).

Theories during the neo-classical period (1920-1950) supported the proposition that employee satisfaction directly affects productivity. They believed that there existed a cause-effect relationship between satisfaction and productivity. This was the reason why organizations used various means in order to increase employee work quality and thus increase productivity. In this study our effort focuses on the investigation and analysis of the effect of the stress and satisfaction on work quality. According to Siegrist (1996), there must be a balance between what employees "invest" in the job and what they get back. In opposite cases, they feel oppressed and dissatisfied. As reciprocation, employees get financial remuneration from the job, the potential to sustain or upgrade their working position, expectation satisfaction, security etc.

According to Herzberg's (1966) theory, positive stances towards work which lead to satisfaction are related to the work content, e.g. achievement, recognition, responsibility, development potential, and the nature of the work. These factors were named motivators as they contribute to the urging of the individual towards greater performance and effort.

To indicate the relationship of satisfaction with work quality that there is a relationship, Porter and Lawler (1986) created a model in order to examine the matter of activation. The model is based on the assumption that rewards create satisfaction and that sometimes performance leads to remuneration of various kinds, which create satisfaction in workers. As a result, the work quality outcome is related to satisfaction through the notion of rewards.



Independent variables

Dependent variable

The conceptual framework showed that how job satisfaction and stress impact on work quality. There were few elements that job satisfaction impacted on work quality such as pay, superior, promotion, colleagues and the work- itself. As for stress the elements it involved psychological and physiological of the employees.

3. Methodology

3.1 Instrument reliability and validity

From the literature review of literatures; an instrument was developed with the aim of covering the basic research objectives. The questionnaires survey was divided into 2 sections. Section 1 captured data about respondent's demography. Section 2 covered information about job satisfaction, stress and work quality. Before data been analysed, upon testing hypotheses, some of the preliminary steps need to be completed. These helps to ensure data are reasonably good and assured quality for further analysis. For good quality data, the reliability and validity of a data should be tested. This study analysed the reliability of each construct using Cronbach's alpha coefficient. In general, a questionnaire's Cronbach's alpha coefficient of the Job Satisfaction is 0.909 and the Cronbach's alpha coefficient of the stress is 0.772. The Cronbach's alpha coefficient for work quality is 0.684. Therefore, this study was acceptable in reliability.

Variables	Alpha Cronbach	N – No of Questions	N – No of Respondents
Job Satisfaction	0.909	20	80
Stress	0.772	9	80
Work Quality	0.684	6	80
Total	0.752	35	80

 Table I

 The Cronbach's alpha coefficient of the constructs

Before distributing questionnaire to the respondents, three experts were asked to modify the questionnaire in the pilot test. Subsequently, 10 respondents have been selected to examine the credibility of the questions. They were asked to fill the questionnaire and identify the ambiguities in terms, meanings and issues. Moreover, the study referred to the past literature design questionnaire items. Therefore, this study was acceptable in content validity.

3.2 Data collection

The population for this study are 110 workers in printing and publication company at Masai City, Johor Bahru and a total of 86 samples needed. Sample size of 86 workers for this study is based on the sample tabled by Krejcie and Morgan (1970). The sample is determined using simple random sampling. A survey package was distributed to 86 respondents. However, due to several factors, only 80 had replied which response rate of 93.0 percent.

4. **Result and analysis**

This section discusses the tests that are used to test hypotheses of this study and the results obtained. A Pearson correlation analysis was performed between work quality with the other two variables, namely job satisfaction and stress. The result of the correlation analysis is presented in Table II, which are used to answer H1 and H2.

H1 suggest that there is significant relationship between job satisfaction and work quality. From the figure presented in Table II, it shows that job satisfaction has insignificant

relationship with the work quality. The r-value and p-value for job satisfaction with work quality are r = 0.142 and p = 0.212. Since the p-value was greater than 0.05, thus, there is insignificant relationship between job satisfaction and work quality. Thus, H1 is rejected. Likewise, the results for stress and work quality also showed insignificant relationship between them. The r-value and p-value for stress with work quality are r = 0.053 and p = 0.641. Since the p-value was greater than 0.05, hence, there is insignificant relationship between stress and work quality. Therefore *H2* that suggest there is significant relationship between stress and work quality is rejected.

Table II

Correlations coefficient between independent variables and dependent variable

		Satisfaction	Stress	Work Quality
Satisfaction	Pearson Correlation	1	525**	.142
	Sig. (2-tailed)		.000	.212
Stress	Pearson Correlation	525**	1	.053
	Sig. (2-tailed)	.000		.641
Work Quality	Pearson Correlation	.142	.053	1
_	Sig. (2-tailed)	.212	.641	

** Correlation is significant at the 0.01 level (2-tailed).

However, the results showed that job satisfaction has a significant relationship with stress. As the p-value for job satisfaction and stress are 0.000 which smaller than 0.05. This means that the level of job satisfaction has an effect towards level of the stress.

5. Discussion and Implication

Work quality and job satisfaction has been a point of contention and highly debated in many studies. Previous studies, showed there are difficulties in determining relationship between job satisfaction and work quality (Bono *et al.*, 2001). The findings of this study showed that job satisfaction and stress were not associated with work quality. This is parallel to the findings in previous studies Organ (1998) who suggest that the failure to find a strong relationship between job satisfaction and performance is due to the narrow means often used to define job performance. However, this finding does not support the findings by Grace Davis (2004) who found that relationships between job satisfaction and work were significantly positive. This is in line with Halkos and Bousinakis (2010), who in a survey of 425 employees working in private enterprises and public organizations found that work quality is seriously affected by the two qualitative factors, which are stress and satisfaction. Whereas, Judge and Church, (2000) claimed job satisfaction is more highly correlated to performance in complex jobs.

As stated in the literature review, there is some significant impact of stress on performance or work quality. A finding on correlation analysis in this study shows a insignificant relationship between stress and work quality. This finding appears to support the research conducted by Bolhari et.al (2012) who found a negative relationship between job stress and work quality. Nevertheless, this finding does not in line with Motowidlo, Packard & Manning (1986) who found that stress related problems cause a poor quality of performance, lower job satisfaction, high turnover and increased work absence. Ward and Abbey (2005) asserted when people are experiencing hyper-stress and distress it effect the volume of work and quality of the work undertaken.

This research enables the selected companies to understand their employees' job satisfaction and stress, and the result can be used as a reference to improve their efficiency. However, this study examined the relationship between two variables which are job satisfaction and stress towards work quality. Since the cause and effect relationship cannot be established, generalizing the result of the present study remains one of its limitations. Thus, there is need for further research to examine other mediating variables on the relationship between job satisfaction and stress towards work quality, including components of the job satisfaction or stress, in order to establish whether there are other factors which act as a source of work quality in a Malaysian context.

References

- Arnold, H. J., and Feldman, D. C., (1986). "Organizational Behavior". United States of America: McGraw-Hill Book Company, pp. 85-109.
- Bernardi, R.A. (1997), "The relationships among LOC, perceptions of stress, and performance", *Journal of Applied Business Research*, Vol. 13 No. 4, pp. 1-8.
- Bolhari, A., Rezaeean, A., Bolhari, J., Zare, F. (2012). The impact of occupational stress on quality of work life among the staff of e-workspace. World Academy of Science, Engineering and Technology, pp. 314-318.
- Bono, J.E., Judge, T.A., Patton, G.K. and Thoresen, C.J. (2001), "The job satisfactionjob performance relationship: a qualitative and quantitative review", Psychological Bulletin, Vol. 127 No. 3, pp. 376-407.
- Certo, S. C. (2005), "Supervision *Concepts & Skill-building:* Ensuring High Quality and Productivity." (5th Ed). Irwin Professional Pub, pp. 30-60.
- Choo, F. (1987), "Accountant's personality typology and perceptions of job-related stress: an empirical study", *Accounting and Finance*, Vol. 27 No. 2, pp. 13-23.
- Currivan, D. B. (1999), "The casual order of job satisfaction and organizational commitment in models of employee turnover", *Human Resource Management Review*, Vol. 9, pp. 495-524
- Davis, G. (2004). Job satisfaction survey among employees in small business. Journal of Small Business and Enterprise Development, 11(4), 495-5
- Dormann, C. and Zapf, D. (2001), "Job satisfaction: a meta-analysis of stabilities", *Journal of Organizational Behavior*, Vol. 22, pp. 483-504.
- Fisher, R.T. (2001), "Role stress, the type A behavior pattern, and external auditor job satisfaction and performance", *Behavioral Research in Accounting*, Vol. 13, pp. 143-69.
- Halkos, G., and Bousinakis, D. (2010). "The effect of stress and satisfaction on productivity". International Journal of Productivity and Performance Management, 59(5), 415-431.
- Herzberg, F. (1968), Work and the Nature of Man, World, New York, NY.
- Hobfull, E.S. (1989), "Conversation of resources: a new attempt at conceptualizing stress", *American Psychology*, Vol. 44 No. 3, pp. 513-24.

- Iaffaldano, M.T. and Muchinsky, P.M. (1985), "Job satisfaction and job performance: a meta-analysis", *Psychological Bulletin*, Vol. 97, pp. 251-273.
- Jacobs, R., & Solomon, T. (1977). "Strategies for enhancing the prediction of job performance from job satisfaction." *Journal of Applied Psychology*, 62, 417-412.
- Jex, S. (2002), Organizational Psychology, John Wiley & Sons, New York NY.
- Johnson, G.J. and Johnson, W.R. (2000), "Perceived over-qualification and dimensions of job satisfaction: a longitudinal analysis", *Journal of Psychology*, Vol. 134 No. 5, pp. 537-56.
- Judge, T.A. and Church, A.H. (2000), "Job satisfaction: research and practice", in Cooper, C.L. and Locke, E.A. (Eds), *Industrial and Organizational Psychology: Linking Theory with Practice*, Blackwell Business, Malden, MA, pp. 166-98.
- Kahn, R.L. and Byosiere, P. (1992), "Stress in organizations", in Dunnette, M.D. (Ed.), Handbook of Industrial and Organizational Psychology, Vol. 3, Consulting Psychologists Press, Palo Alto, CA, pp. 571-650.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lankau, M.J. and Scandura, T.A. (2002), "An investigation of personal learning in mentoring relationships: content, antecedents, and consequences", Academy of Management Journal, Vol. 45, pp. 779-90.
- Lawler, E.E. (1990), High Involvement Management, Jossey-Bass, San Francisco, CA.
- Lefkowitz, J. (1994), "Sex-related differences in job attitudes and dispositional variables: now you see them", *Academy of Management Journal*, Vol. 37, pp. 323-49.
- Locke, E. A. (1969), "What is job satisfaction?", *Organizational Behavior and Human Performance*, Vol. 4, pp. 309-36.
- Motowidlo, S. J., Packard, J. S and Manning, M. R. "Occupational stress: its causes and consequences for job performance", *Journal of Applied Psychology*, 71(4): 618-629, 1986.
- NIOSH Generic Job Stress Questionnaire (1988). National Institute for Occupational Safety and Health. Division of Behavioral and Biomedical Sciences. Motivation and Stress Research Section, Cincinnati, Ohio 45226 (513) 533-8293.
- NIOSH (1998). "STRESS...AT WORK", National Institute for Occupational Safety and Health. U.S. *DEPARTMENT OF HEALTH AND HUMAN SERVICES*. Columbia Parkway Cincinnati, OH 45226.
- Organ, D. W. (1988). A restatement of the satisfaction-performance hypothesis. Journal of Management, 14, pp. 547–557.

- Patten, D. (1995), "Supervisory actions and job satisfaction: an analysis of differences between large and small public accounting firms", *Accounting Horizons*, Vol. 9 No. 2, pp. 17-28.
- Porter, L.W. and Lawler, E.E. (1968), *Managerial Attitudes and Performance*, Irwin-Dorsey, Homewood, IL.
- Price, J.L. (1997), "Handbook of organizational measurement", *International Journal of Manpower*, Vol. 18 Nos 4/5/6, pp. 303-558.
- Scarpello, V. and Campbell, J. P. (1983), "Job satisfaction: are all the parts there?", *Personnel Psychology*, Vol. 36, pp. 577-600.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*. United Stated of America: John Wiley & Sons, Inc.
- Siegrist, J. (1996), "Adverse health effects of high-effort low-reward conditions", Journal of Occupational Health Psychology, Vol. 1 No. 1, pp. 27-41.
- Williams, E.S., Konrad, T.R., Scheckler, W.E., Pathman, D.E., Linzer, M., McMurray, J.E., Gerrity, M. and Schwartz, M. (2001), "Understanding physicians' intentions to withdraw from practice: the role of job satisfaction, job stress, mental and physical health", *Health Care Manage Review*, Vol. 26 No. 1, pp. 7-19.