Job Satisfaction as a Moderator of the Relationship between Work-Family Conflict and Stress among Female Civil Service Managers

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Abstract

The main objective of the study was to investigate job satisfaction as a moderator of the relationship between work-family conflict and stress among female civil serve managers in the education department. The study was conducted in the geographical outlying town of King William's Town, and the data was collected from a sample of 100 employees in the education department using: (i) a self-designed biographical and occupational data questionnaire; (ii)to measure occupational stress, Eum, Lee and Paek's (2007) 23-item Effort-Reward Imbalance questionnaire was used; (iii) Bedenia, Burke and Moffat's (1998) Short-form Work-family conflict questionnaire was used; and to measure job satisfaction, Halpern's (1966) 10-item seven-point Likert-type rating scale was used. Data analysis was done by means of the Pearson Product Moment Correlation Technique, Analysis of Variance, and Multiple Regression Analysis. The results indicated that job satisfaction does not moderate the relationship between work-family conflict and occupational stress. The study also indicated a significant positive correlation between work-family conflict and job satisfaction. The results further showed that both work-family conflict and job satisfaction for a significant proportion of variance in occupational stress.

Keywords: job satisfaction, work-family conflict, occupational stress

1. Introduction

Much research has been done with regard to the relationship between work-family conflict and stress, and there is evidences suggest that job satisfaction can be regarded as a moderator of this relationship Kossek and Ozeki (1998). Spector (2000) supported this statement by arguing that job satisfaction is a reflection of good treatment in the organisation. It is of great importance for managers of organisations to know whether this in indeed the case. Knowing this will help managers to create conditions that are favorable for the development of job satisfaction in their organisations in order to reduce both work-family conflict and the resulting occupational stress.

Job satisfaction can be defined as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience. Job has also been defined as a pleasurable emotional state resulting from the appraisal of one's job, an effective reaction to one's job, and an attitude towards one's job. Lim and Ployhart (2004) argue that job satisfaction in an attitude that clearly distinguishes the objects of cognitive evaluation which are effects, beliefs and behaviours. Job satisfaction refers to a variety of aspects of the job that influence a person's level of satisfaction with it.

The term job satisfaction was described by (Lim & Ployhart 2004) who observed it as a combination of psychological, physiological and environmental circumstances that will lead a person to say, "I am satisfied with my job". Job satisfaction is described as how people feel about their job and its different aspects. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs (Sekaran & Uma 1999). However, a more direct definition is provided by Temple and Gillespie (2009) who defines job satisfaction as the end state of feeling, the feeling that is experienced after a task is accomplished. This feeling could be negative or positive depending on the outcome of the task undertaken.

In today's world the effects of work-family conflict on females in the workplace are rather significant and have a larger impact on how much effort employees put into their job and how work-family conflict results in stress. This occurs as a result of conflict between one's job and one's family life. One may go on to examine how work-family conflict results

in one becoming stressed due to the many roles which many women have to fulfill, such as the role of a mother, wife and bread winner

Greenhaus and Beutell (1985), as cited in Daalen, Willemsen and Sanders, (2006) define work-family conflict as conflict in which the role pressure from the work and family domains are mutually incompatible in some respect. Conflict is understood to arise when an individual has to perform multiple roles, such as worker, spouse, and parent. Each of these roles imposes demands on their incumbents, requiring time, energy and commitment. They report that, as work family conflict originates from various conditions, different forms of conflict are distinguished.

Work-family conflict is a form of inter-role conflict in which the role pressure from work and family domains are mutually incompatible in some respect (Greenhaus & Beutell, 1985), such that participation in oe domain becomes more difficult due to the demands of participation in the other domain and vice versa. Work-family conflict is considered to be bi-directional, that is, work can interfere with family (work-to-family conflict, WFC) and family can interfere with work (family-to-work, FWC).

There are essentially three different, but overlapping approaches to the definition and study of occupational stress (Larazus, 1966; Aryee, Srinivas & Tan, 2005; Cox, 1990; Cox & Mackay, 1981; Fletcher, 1988; Cox, 1993). The first approach conceptualizes occupational stress as an aversiveor noxious characteristic of the work environment and in related studies; it is treated as an independents variable – the environmental cause of ill health. The second approach defines occupational stress in terms of the common physiological effects of a wide range of aversiveor noxious stimuli. It treats occupational stress as a dependent variable as a particular physiological response to a threatening or demanding environment. This has been termed the 'physiological approach'. The third approach conceptualizes occupational stress in terms of the dynamic interaction between the person and their work environment. When studied, stress is either inferred from the existence of problematic person-environment interactions or measured in terms of the cognitive processes and emotional reactions which underpin those interactions. This final approach has been termed the 'psychological approach'. The engineering and physiological approaches are obvious among the earlier theories of stress, while the more psychological approaches characterize contemporary stress theory.

In light of the discussion above, the objectives of the study were:

- 1. To determine whether job satisfaction is a moderator of the relationship between work-family conflict and occupational stress among female civil service managers
- To determine to what extent job-satisfied and job-dissatisfied female civil service managers are experiencing occupational stress
- 3. To determine to what extend female civil service managers experiencing and not experiencing work-family conflict, also experience occupational stress.

1.1 Hypotheses

The following hypotheses were tested

- 1. There is a significant positive correlation between work-family conflict and occupational stress
- 2. There is a significant negative correlation between work-family conflict and occupational stress
- 3. There is a combined effect between job satisfaction and work-family conflict whereby the two put together account for a higher proportion of variance in occupational stress than each of them separately.
- 4. Job satisfaction moderates the relationship between work-family conflict and occupational stress.

This means that: (i) high work-family conflict and low job satisfaction will result in high occupational stress; (ii) low work-fmaily conflict and high job satisfaction will result in low occupational stress; (iii) low work-family conflict and low job satisfaction will result in a medium level of occupational stress; and (iv) high work-family conflict and high job satisfaction will also result in a medium level of occupational stress.

2. Research Methodology

2.1 Research approach

The study was descriptive in nature. A quantitative research approach was used to analyse the hypothesised relationships.

2.2 Research method

Female management (junior, middle & senior) from the education department in the district of King William's Town were used in this study.

2.3 Sample

The necessary sampling frame was obtained from office of HR in the department of education and a total of 100 female employees participated in the study. On marital status, the results indicated that 49 (49%) of the respondents are either divorced or separated. Married managers constituted 32% (32) of the respondents, and single managers constituted 19% (19). In terms of occupational positions of respondents, 40% (40) of the respondents are assistant managers, 38% (38) deputy managers and only 22% (22) are managers. Number of children of respondents, the results indicated that 46% (46) of the respondents had three to five children, 28% (28) of respondents have one or two, while 20% (20) of the respondents had more than five and only 6% (6) had no children.

2.4 Measures

A four-part questionnaire was used for data collection. The first part tapped data related to biographical and occupational variables. This data was tapped with a view to obtaining a clear understanding of the sample used in the study. The Effort Reward Imbalance (EMI) questionnaire to measure occupational stress has been operationalised as a standardized self-report measure consisting of 23-items Likert-type scale in its established short version. The items defined three one-dimensional scales: effort (6-items), reward (11-items) and over commitment (6-items) with each item rated on a 5-point (effort and reward) and 4-point (over commitment) Likert-scale. Bedenia, Burke and Moffat's (1998) 12-item Likert-scale, Short-form Work-family conflict questionnaire was used. The work-family conflict subscale consisted of 8-items and family-work conflict subscale consisted of 4-items. To measure job satisfaction, Halpern's (1966) 10-item seven-point Likert-type rating scale was used. The revised Effort Reward Imbalance stress scale, work-family scale and job satisfaction scale had cronbanch alpha coefficients of 0.73, 0.71 and 0.71 respectively, which were regarded as satisfactory.

2.5 Data analysis

Data analysis was done by means of the Pearson Product Moment Correlation Technique, Analysis of Variance, and Multiple Regression Analysis.

2.6 Ethical consideration

Permission was sought and granted by the top management of the department of education in King William's Town district. Voluntary informed consent was sought from the participants. In addition, confidentiality was maintained at all times and participants were informed through a letter send via email from HR office which communicated essential information about the research.

3. Findings and Discussion

The revised Effort Reward Imbalance Stress scale, Work-family Conflict scale and job satisfaction instruments had Cronbach alpha coefficients of 0.73, 0.71 and 0.71 respectively, which were regarded as satisfactory.

3.1 Hypotheses Testing

3.1.1 Hypothesis 1

The first null hypothesis of the study (H_0) was: "there is no significant positive correlation between work-family conflict and stress" and the corresponding alternative hypothesis (H_1) was that: "there is a significant positive correlation between work-family conflict and stress". The hypothesis was tested by means of the Pearson correlation technique. The

correlation coefficient between work-family conflict and stress was found to be (r = 0.22; p< .003), which is highly significant. The leads to acceptance of the alternative hypothesis that, "there is a significant positive correlation between work-conflict and stress" and the rejection of the null hypothesis.

3.1.2 Hypothesis 2

The second hypothesis was also tested by means of the Pearson Correlation Technique. The null hypothesis (H_0) was that, "there is no significant negative relationship correlation between job satisfaction and stress" and the corresponding alternative hypothesis (H_1) was that "there is a significant negative correlation between job satisfaction and stress". The correlation between overall job satisfaction and stress was found to be (r = -0.152; p < 0.1311). This shows that there is a negative but not significantly association between job satisfaction and stress. This leads to acceptance of the null hypothesis and rejection of the alternative hypothesis.

The two main components of overall job satisfaction, that is, intrinsic and extrinsic job satisfaction were found to be highly inter-correlated. The correlation coefficient between the two was (r = 0.73; p < 0.001). This suggests that both are also not significantly correlated with occupational stress. The results also indicated that there is a highly significant relationship between overall job satisfaction and extrinsic job satisfaction (r = 0.53; p < 0.01). There was also a highly significant positive relationship between overall job satisfaction and intrinsic job satisfaction (r = 0.52; p < 0.01). These results also suggest that both extrinsic and intrinsic job satisfaction are not significantly correlated with occupational stress.

3.1.3 Hypothesis 3

The third null hypothesis of the study (H₀) was that "there is no combined effect of job satisfaction and work-family conflict whereby the two put together account for a higher proportion of variance in occupational stress than each of them separately". The alternative hypothesis (H₁) was that "there is a combined effect of job satisfaction and work-family conflict whereby the two put together account for a higher proportion of variance in occupational stress that each of the separately". This hypothesis was tested by means of Multiple Regression Analysis.

Table 1: Multiple regression between job satisfaction and work-family (independent variables) and occupational stress (dependent variable)

Multiple R	0.70		
R-squared	.47		
Adjusted R-squared	0.46		
Standard Error	0.44		
F	44.00		
Sig. F	0.000*		
Variable	Beta	T	Sig. T
Job satisfaction	0.48	5.90	0.000
Work-family conflict	0.32	3.95	0.000

Table 1 presents the results of the regression analysis, regressing stress (dependent variable) against the independent variables, overall job satisfaction and work-family conflict. The results indicate that the multiple correlation is 0.70, with the R-squared value being 0.47. This indicates that approaximately 0.47 of the variance in occupational stress can be attributed to the independent variables (job satisfaction and work-family conflict) entered into the regression. The F-statistics of 0.44 is significant to the 0.001 level indicating that this is highly significant.

Table 1 further shows a Beta weight of 0.48; p < 0.0001 for the relationship between job satisfaction and occupational stress. This means that job satisfaction accounts for 0.48 of the variance in occupational stress and that this is highly significant proportion of variance. It also shows a Beta weight of 0.32; p < 0.0001 for the relationship between work-family conflict and occupational stress. This means that work-family conflict accounts for 0.32 of the variance in occupational stress, and that this is a highly significant proportion of variance. While job satisfaction accounts for a higher amount of variance in occupational stress than in work-family conflict, both account for a highly significant proportion of variance.

Job satisfaction and work-family conflict account for 0.47 of the variance in occupational stress. This result is in

support of the null hypothesis, though 0.47 is higher than the Beta weight for work-family conflict (0.32), it is lower than that for job satisfaction (0.48). The two independent variables do not have a combined effect that result in them accounting for a greater proportion of variance in stress than the two of them independently. The reason for the lack of a combined effect of job satisfaction and work-family conflict is probably due to the high correlation between the two variables (r = 0.30; p < 0.006).

3.1.4 Hypothesis 4

The fourth null hypothesis of the study (H₀) was that "job satisfaction does not moderate the relationship between work-family conflict and occupational stress", while the corresponding alternative hypothesis (H₁) was that "job satisfaction moderates the relationship between work-family conflict and occupational stress". This means that: (i) high work-family conflict and low job satisfaction will result in high occupational stress; (ii) low work-family conflict and high job satisfaction will result in a medium level of occupational stress, and (iv) high work-family conflict and high job satisfaction will also result in medium level of occupational stress. This hypothesis was tested by means of Analysis of Variance (ANOVA).

Table 2: Analysis of Variance; results for the effect of work-family conflict, overall job satisfaction on occupational stress

Source term	Df	Sum of square	Mean square	F-Ratio	Prob level
A: WFC	1	13.34072	13.34072	0.31	0.579494
B: Total JS	1	4.045757	4.045757	0.09	0.760120
AB	1	67.03879	67.03879	1.55	0.215648
S	96	4142.64	43.1525		
Total (Adjusted)	99	4226.19		=	
Total	100		= '		

Significance level: Alpha = 0.05

Table 3: results of the effect of work-family conflict and intrinsic job satisfaction on occupational stress

Source term	Df	Sum of square	Mean square	F-Ratio	Prob level
A: WFC	1	11.51311	11.51311	0.26	0.609698
B: Total JS	1	5.984893	5.984893	0.00	0.970619
AB	1	0.7011424	0.7011424	0.02	0.899683
S	96	4213.181	43.8873		
Total (Adjusted)	99	4226.19		•	
Total	100		-		

Significance level: Alpha = 0.05

Table 4: results for the effect of work family conflict and extrinsic job satisfaction on occupational stress

Source term	Df	Sum of square	Mean square	F-Ratio	Prob level
A: WFC	1	2.980718	2.980718	0.07	0.791984
B: Total JS	1	121.8967	121.8967	2.86	0.094028
AB	1	0.306585	0.306585	0.01	0.932582
S	96	4091.051	42.61512		
Total (Adjusted)	99	4226.19		•	
Total	100		-		

Significance level: Alpha = 0.05

The results appearing in tables 2 to 4 shows that job satisfaction is not a significant moderator of the relationship between work-family conflict and occupational stress because there is no significant intervention between work-family conflict and job satisfaction on occupational stress. This is shown by row AB in each table. To be more specific, table 2 shows that there is no interaction effect between work-family conflict and overall job satisfaction on occupational stress (F = 1.55; F = 1.55; F

between work-family conflict and extrinsic job satisfaction on occupational stress (F = 0.01; df = 1/99; p < 0.93). Under these circumstances, it would have fruitless to conduct the pair-wise comparisons by H_1 .

The purpose of this study was to examine job satisfaction as a moderator of the relationship between work-family conflict and stress, using a sample of female civil servants in the education department. The present study attempt to make some contributions to the existing preliminary findings of these particular topics in the literature.

Results from this research study reinforce previous findings that showed a significant positive association between work-family conflict and occupational stress. Poelmans (2001) investigated the relationship between work-family conflict as a moderator of the work stress using a sample of public mental health workers. The study showed that there is a moderate positive correlation between work-family conflict and occupational stress. O'Reilly and Chatman (1986) reported that work-family conflict is an outcome of psychological commitment to an organisation. They argue that employees who display high levels of job satisfaction and less of occupational stress may be the least likely to engage in voluntary turnover.

In line with most of the findings regarding the relationship between occupational stress and job satisfaction (Beehr et al., 1976; Cotton et al., 2002; Hawe et al., 2000; Ulleberg & Rundmo, 1997), also found an inverse relationship between the constructs. Overall, stressors related to lack of organizational support seem to have a greater impact on job satisfaction than stressors relate to the job itself. In terms of P-E Fit theory, this finding suggests lack of fit between the individual and the environment (i.e lack of support in the environment), although there is no enough evidence to indicate whether this misfit is related to demands and abilities or to objective and subjective representations of the environment. However, the high negative correlations between occupational stress and overall job satisfaction provide convincing support for assertions by Edwards and colleagues (1998) that dissatisfaction is an outcome of high levels of stress.

Visser et al. (2003) confirm that job satisfaction has a protective effect against the negative consequences of occupational stress. They suggest that when stress is high and satisfaction is also low, hence the risk of low energy in the workplace. Conflict between work and family is important for organisations and individuals because it is linked to negative consequences. For example, conflict between work and family is associated with increased absenteeism, increased turnover, decreased performances, and poorer physical and mental health.

Wassen et al, (2010) suggested that stress was linked to job satisfaction and that years of experience were also related to job satisfaction. In other words, as the professional experience increases, strategies for coping with stress are developed more. In the study of Sesanga and Garrett (2005), it was found that mainly extrinsic factors of job satisfaction contributed to the dissatisfaction of academic professionals, while the intrinsic aspects generally led to job satisfaction. While many studies support a negative association between job satisfaction, work-family conflict and occupational stress, the causal ordering between these variables are both controversial and contradictory (Martin & Bennett, 1996). Although day to day events in the workplace may affect an employee's level of satisfaction, such transitory events should not cause an employee to re-evaluate seriously his/her attachment to the overall organisation.

Lallukka et al, (2009) in their study argue that job satisfaction does not moderate the relationship between wrk-family conflict and occupational stress. They argue that occupational stress and work-family conflict are not causally related to each other but are correlated because they are both determined by similar causal variables, such as task characteristics. The task characteristics requires employees to think more universally and it takes longer to develop and are not sensitive to short-term variations in working conditions.

Job satisfaction on the other hand represents the employee's more current reactions to the specifics of the work situation and employment conditions. Subsequent analyses revealed that job satisfaction play an important role in mediating the relationship between work values, occupational stress and work-family conflict. It was further anticipated that improving various work related attitudes would result in reduced turnover and absenteeism and more effective service delivery.

One explanation for higher perceived levels of occupational stress in women may be due to different family circumstances. If women have children and a spouse, they need to balance different roles such as wife, mother and work. Another explanation is the fact that women have more management responsibilities in their work place. There is a growing body of literature addressing the conflict that individuals experience as a result of work responsibility interfering with family responsibility and vice versa. When conflict arises it can be increasingly difficult for individuals to accomplish tasks associated with each domain. For instance, leaving work early and not finishing a project under a deadline pressure, may interfere with work responsibilities that an individual might otherwise have accomplished if the employee had not left early because of a family conflict. Such experience is an example of work-family conflict.

In summary the study investigated job satisfaction as a moderator of the relationship between work-family conflict and stress among female civil managers in the department of education. The results indicated that job satisfaction does

not moderate the relationship between work-family conflict and occupational stress. The study also indicated a significant positive correlation between work-family conflict and job satisfaction. The results further showed that both work-family conflict and job satisfaction respectively accounts for a significant proportion of variance in occupational stress.

4. Limitations and Delimitations of the Study

The study was limited to the sampled of female mangers in the department of education King William's Town district. The representative sample also delimits the researcher for wide coverage of views and to the other male managers. The time and budget were among the other constraints, which limited the scope and subject coverage of the research. The universe of the research is still less documented, which may deviate to some extent from the characteristics of sampled respondents. The secondary data, related to subject is not available, which undermines literature contribution of this perspective.

5. Future Research

The study attempted a detail analysis of empirical investigation and secondary research findings under limited scope, period and sample. The analysis identifies number of issues, should be researched by the academicians in future. This study has collected the views of female civil service managers in the education department; locate Eastern Cape Province of South Africa. In future other provinces could be sampled in South Africa or other countries to enhance the generalization of the findings. The management perspective also could be added along with other departments. The future research also should incorporate the qualitative method of inquiry along with quantitative survey. The other scales of satisfaction and stress may reveal more significant insights of the phenomena, if used in future research.

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