The relationship between employee satisfaction and organisational performance: Evidence from a South African government department

Authors:

Chengedzai Mafini¹ David R.I. Pooe¹

Affiliations:

¹Logistics Department, Vaal University of Technology, South Africa

Correspondence to:

Chengedzai Mafini

Email:

chengedzai@hotmail.com

Postal address:

Private Bag X021, Vanderbijlpark 1900, South Africa

Dates:

Received: 28 Jan. 2013 Accepted: 11 June 2013 Published: 12 July 2013

How to cite this article:

Mafini, C., & Pooe, D.R.I. (2013). The relationship between employee satisfaction and organisational performance: Evidence from a South African government department. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 39(1), Art. #1090, 9 pages. http://dx.doi.org/10.4102/saijp.v39i1.1090

Copyright:

© 2013. The Authors. Licensee: AOSIS OpenJournals. This work is licensed under the Creative Commons Attribution License.

Read online:



Scan this QR code with your smart phone or mobile device to read online.

Orientation: There appears to be a dearth of literature that addresses the relationship between employee satisfaction and organisational performance in South African public organisations.

Motivation for the study: This study attempted to contribute to the discourse on the influence of human resources to organisational performance.

Research purpose: The aim of this study was to analyse the relationship between employee satisfaction and organisational performance in a public sector organisation.

Research design: A three-section survey questionnaire was used to collect data from a conveniently recruited sample of 272 members of a South African government department. Pearson's correlation test as well as a regression analysis were employed to test the existence of a relationship between employee satisfaction and organisational performance. The mean score ranking technique was used to compare the impact of the individual employee satisfaction factors on organisational performance.

Main findings: Positive correlations were observed between organisational performance and all five employee satisfaction factors, namely *working conditions, ability utilisation, creativity, teamwork* and *autonomy*. Amongst the five factors, *teamwork* had the greatest impact on organisational performance, followed by *ability utilisation, creativity, autonomy*, with *working conditions* exerting the least influence.

Practical and/or managerial implications: Strategic interventions involving positive adjustments on the five employee satisfaction dimensions examined in this study may be initiated and applied to improve overall organisational performance in public organisations.

Contributions and/or value add: The study endorses the notion that a satisfied workforce could be the key to enhanced organisational performance.

Introduction

Public organisations in South Africa face immense pressure to excel in their performance, notwithstanding the highly unstable and competitive environment in which they operate. This environment is characterised by factors such as increased globalisation, demanding stakeholders, shortages of critical skills, increased workforce diversity as well as technological innovations (Mayfield & Mayfield, 2002). These factors compel public sector organisations to develop and implement strategies for improving their performance (Yee, Yeung & Cheng, 2008). One such strategy is to have employees who are highly satisfied with their work (Okanya, 2007). This calls for organisations to place more emphasis on recognising and enhancing all components of work linked to higher levels of employee satisfaction. At the same time, organisations need to identify and lessen the effects of those facets associated with high levels of employee dissatisfaction (Ferguson, Ashcroft & Hassell, 2011).

The subject of organisational performance within South Africa's public sector has received significant research attention from a number of scholars (e.g. Hornback, 2006; Minnaar, 2006; Molefe, Roodt, & Schurink, 2011; Van der Waldt, 2004). Questions relating to the performance of public organisations are based on the expectation that Government should supply public goods and services more effectively and efficiently (Carrim, 2009; Mulder & Collins, 2007; Putu, Mimba, Van-Heden & Tillema, 2007).

Nilsson (2010) holds the view that public sector organisations in South Africa find it difficult to overcome the challenge of underperformance in most disciplines of their operations. As a result, they continue to receive constant criticism for poor service delivery, internal wrangles,

bureaucracy, financial mismanagement, corruption and poor corporate governance (Van der Heijden & Mlandi, 2005). Certainly these malpractices, perceived or real, do not bode well for a public sector which seeks to support the ideals of a government that strives to be a developmental state. It has been argued that low institutional capacities, limited stakeholder participation, high levels of corruption and high levels of informality are amongst some of the reasons for underperformance in the public sector (Putuetal., 2007). Other factors include the lack of demographic representation, poor accountability, centralised control systems and conflicting labour relations (Schwella, 2001).

In view of the above, it is imperative that the question of underperformance in public sector organisations be well understood. Since the advent of democracy in 1994, government put in place various constitutional and legislative frameworks which were meant to enable public sector organisations to improve their delivery of public goods and services. The 1995 White paper on transforming public service delivery and the development of a code of conduct for public servants are cases in point (cited in Draai, 2008; Schwella, 2001). However, underperformance continued despite these interventions (Carrim, 2009; Nilsson, 2010; Van der Heijden & Mlandi, 2005). To this extent, there have been very few interventions that have enjoyed widespread or sustainable success (Molefe et al., 2011). There is thus a serious need to correct the situation as failure to address the problems associated with underperformance impacts negatively on the South African economy and the societies served by public sector organisations, as well as other stakeholders and international relations (Local Government Research Centre, 2009).

Previous studies which sought to shed light on performance issues within the public sector in South Africa did so from socio-economic perspectives rather than specific dimensional aspects of human behaviour. This study is intended to occupy this gap; therefore, the purpose of this study is to analyse the underlying relationship between employee satisfaction and organisational performance in the context of a South African government department.

Review of related literature

Employee satisfaction

Throughout the history of organisational and behavioural research, the subject of employee satisfaction has always attracted widespread empirical examination, leading to a number of interesting definitions. Price (2001) defines employee satisfaction as the effective orientation that an employee has towards his or her work. It may also be recognised as the individual's perception and evaluation of the overall work environment (Sempane, Rieger & Roodt, 2002). Lu, While and Barriball (2005) define employee satisfaction as a global feeling about one's work or a related cluster of attitudes about various facets of the work environment. Employee satisfaction may also be perceived as a 'positive emotional state resulting from the appraisal

of one's job or job experiences' (Islam & Siengthai, 2009:4). A common aspect that connects these definitions is that employee satisfaction is concerned with what people in an organisation feel about their overall work.

A study conducted by Ellickson and Logsdon (2001) gives emphasis to environmental factors and personal characteristics as the two most influential variables that determine the level of employee satisfaction. Lambert, Edwards and Cabic (2003) also found low employee satisfaction levels amongst employees whose expectations fell short. Ganguly (2010) maintains that the personenvironment fit paradigm has been widely recognised as the most appropriate explanation for employee satisfaction. Additionally, other researchers uphold that employee satisfaction is influenced by the interaction of a family of factors such as recognition, communication, co-workers, fringe benefits, working conditions, the nature of the work itself, the nature of the organisation itself, organisational systems, policies and procedures, compensation, personal development, promotion, appreciation, security, and supervision (Ilies, Wilson & Wagner, 2009; Irving & Montes, 2009; Koonmee, Singhapakdi, Virakul & Lee, 2010). For most management scientists, meeting the needs of employees remains the prime employee satisfaction-enhancement strategy (Giannikis & Mihail, 2011). However, contemporary research advances have challenged this view, which attests to the multi-factorial character of employee satisfaction.

In order to improve employee satisfaction, it is important to measure and establish the existing levels first (Wright, Gardner, Moynihan & Allen, 2005). However, due to its multi-faceted nature, the measurement of employee satisfaction varies from one organisation to the other. Some organisations use anonymous employee satisfaction surveys which are administered periodically to measure the levels of employee satisfaction (Deshpande, Arekar, Sharma & Somaiya, 2012). In other organisations, meetings are held between management and small groups of employees where the latter are asked questions pertaining to their satisfaction (Ybema, Smulders & Bongers, 2010). However, in other organisations, exit interviews are the primary employee satisfaction measurement tools (Schulz, 2001). The importance of these methods lies in that they elicit satisfaction sentiments from employees themselves (Schneider, Hanges, Smith & Salvaggio, 2003). Employee satisfaction has thus been widely recognised as a predictor of productivity and performance in organisations (Dawal, Taha & Ismail, 2009; Silvestro, 2002).

Organisational performance

The body of research on the relationship between employee satisfaction and organisation performance continues to grow. Organisational productivity and efficiency are attained by satisfying employees and being sensitive to both their physiological and socio-emotional needs in a holistic manner (Schneider *et al.*, 2003). A study conducted by Cole and Cole (2005) reports that there is a positive correlation between the job attitudes of individuals and their performance. A meta-

analysis conducted by Judge, Thoresen, Bono, and Patton (2001) also found a positive relationship between individual employee satisfaction and factors such as motivation, job involvement, organisational citizenship and job performance. In another meta-analysis conducted by Harter, Schmidt and Hayes (2002), it was found that there is a positive relationship between employee satisfaction and productivity, profit, turnover and customer satisfaction in nearly 8000 business units in 36 organisations across the five continents of the world.

Studies conducted by Schneider et al. (2003) and Zohir (2007) confirm that there is a positive correlation between overall employee satisfaction with the organisation's financial and market performance. Corporate Leadership Council (2003) also conducted an employee satisfaction survey of over 40% of the companies that are listed in the top 100 of Fortune 500 companies. The study concluded that employee satisfaction, behaviour and turnover predicted the following year's profitability, and that these are even more strongly correlated with customer satisfaction. A survey conducted by Price Waterhouse Coopers (2002) which involved several multinational companies sustains that employee satisfaction as well as decreased turnover are major contributors of long-term shareholder returns. Conversely, employee dissatisfaction resulting from poor workplace environments can also lead to a decrease in productivity leading to poor organisational performance (Chandrasekar, 2011).

It is important for management in organisations to create a work environment that facilitates higher employee satisfaction levels. This is because employee satisfaction has a stimulus effect on the loyalty and confidence of employees, improves the quality of outputs and also increases productivity (Surujlal & Singh, 2003; Yee et al., 2008). Satisfied employees tend to perceive that the organisation will be more satisfying in the long run, they care about the quality of their work and are more committed to the organisation, leading to a demonstration of organisational citizenship behaviours (Fraser, 2001; Sempane et al., 2002; Yoon & Suh, 2003). Goslin (2005) is also of the opinion that satisfied employees have higher retention rates and are more productive. When employees are dissatisfied, their physical and mental health is negatively affected (Faragher, Cass & Cooper, 2005). Consequently, organisational performance will also deteriorate as more production time will be lost because dissatisfied employees are likely to take more leave (Judge, Piccolo, Podsakoff, Shaw & Rich, 2010; Shields, 2006); therefore, if steps are taken to improve employee satisfaction, overall success of the organisation is enhanced and the results can be reflected through happier employees, enhanced workforce productivity, reduced workdays and higher profits. This also typifies the importance of people in organisations, since people are the promoters of excellent organisational performance.

In the context of the service industry, substantial research evidence reveals that there is a positive association between employee satisfaction and customer satisfaction (Bernhardt, Donthu & Kennett, 2000; Wangenheim, Evanschitzky & Wunderlich, 2007). Providing employees with an outstanding internal working environment is likely to lead to satisfied employees who are both loyal to the organisation and are capable of providing customers with an exceptional service experience (Chi & Gursoy, 2009). Customers will naturally recognise and value the excellent service offered to them, leading to an exhibition of loyalty behaviours, such as repeat purchases and increased referrals (Koys, 2003). These behaviours suggest; therefore that satisfied employees will create satisfied and loyal customers, which will result in better organisational performance. It is important then for service organisations to direct sufficient resources towards employee satisfaction programmes.

Research design and methodology Research design

The study adopted a quantitative approach using the survey design. The survey method was selected due to its ability to facilitate the collection of data from large groups of respondents. It is also inclusive in the number of variables that can be studied, requires minimum investment to develop and administer, and is relatively easy for making generalisations (Glasow, 2005; Zikmund, Babin, Carr & Griffin, 2009).

Research method

Participants and sampling

In this study, the sample (n = 272) was composed of conveniently selected managers and staff in a South African government department. To determine the sample size, Green's (1991) rule of thumb which states that no less than 50 participants are suitable for a correlation or regression with the number increasing with larger numbers of Independent Variables (IVs), was used. In addition, previous studies (Ericksen & Dyer, 2005; Katou & Budhwar, 2007; Watson, Maxwell & Farquharson, 2007) in which similar sample sizes were used to investigate organisational performance in public sector organisations, were also used as reference points that provided direction in determining the sample size for this study.

Table 1 shows the demographic representation of the respondents.

In terms of the demographic profile of the respondents, 55% (150) of the respondents were male and 45% (122) were female. Approximately 58% (185) of the respondents were aged below 35 years and 74% (200) of the respondents had been employed in the department for periods less than five years. With regard to the type of employment, 82% (223) of the respondents were under permanent employment within the department. In terms of the qualifications held, 43% (117) of the respondents were holders of a first degree and approximately 15% (40) of the respondents were holders of a postgraduate degree. Furthermore, 1.5% (4) of the respondents were executive managers, 7% (18) were senior managers, 9% (24) were middle managers, 18% (48) were

TABLE 1: Sample demographic characteristics

Parameter	f	%
Gender		
Male	150	55.15
Female	122	44.85
Total	272	100
Age Group		
≤25	023	08.46
26-35	135	49.63
36-45	075	27.57
46-55	029	10.66
≥56	010	03.68
Total	272	100
Employment Period		
≤2 years	111	40.81
2-5 years	089	32.72
6-9 years	039	14.34
≥9 years	033	12.13
Total	272	100
Type of Employment		
Permanent	223	81.99
Contract	038	13.97
Part Time	011	04.04
Total	272	100
Academic Qualifications		
Matric	015	05.51
Certificate	029	10.66
Diploma	069	25.37
Degree	117	43.01
Postgraduate degree	040	14.71
Other (e.g. professional qualifications)	002	00.74
Total	272	100
Current Position		
Executive manager	04	01.47
Senior manager	18	06.62
Middle manager	24	08.82
Line manager	48	17.65
Specialist staff	74	27.21
Clerical/ Administrative	70	25.74
Other (e.g. general worker)	34	12.50
·		

f, frequency.

line managers, 27% (74) were specialist staff, 26% (70) were clerical or administrative staff and 13% (34) occupied other auxiliary positions such as internships, security and general work.

Data collection procedure and measuring instruments

Primary data were collected by means of a three-section questionnaire. Section A elicited the respondents' demographic information. Section B sought information regarding employee satisfaction while section C elicited the respondents' views regarding performance of their department. A five-point Likert scale anchored by 1 (strongly disagree) and 5 (strongly agree) was used in Sections B and C, respectively.

The items used in the measuring instrument were adapted from Ittner, Larcker and Meyer (2003); Jenkins, Gupta, Mitra and Shaw (1998); the Minnesota Satisfaction Questionnaire (Fields, 2002) as well as Lau and Sholihin (2005). The adapted questionnaire was pretested using a conveniently selected sample of 20 respondents in order to identify and eliminate problems as well as to determine the time for the completion of the questionnaire (Presser et al., 2004). Feedback from the pre-test sample was used to make minor revisions to the questionnaire (Radhakrishna, 2007). Ethical considerations such as the participants' right to anonymity, confidentiality, privacy or non-participation, informed consent and protection from discomfort, harm and victimisation were adhered to during the administration of the questionnaire. Out of the 500 questionnaires that were initially distributed, 272 were eventually used in the study, thereby representing a response rate of 54.4%.

Validity and reliability of the measuring instrument

Table 2 illustrates the internal consistency estimates of the current study.

Five factors namely working conditions, ability utilisation, teamwork, creativity and autonomy, which influence an individual's level of satisfaction at work, were identified. These factors were computed through the Principal Component Analysis (PCA) using Varimax rotation. Notably, reliabilities of all five factors were above the recommended 0.7 threshold (Hair et al., 2010), which indicates that the internal consistency estimates for the entire scale were acceptable. The reliability of the scale as measured using the Cronbach alpha was 0.72, which was also acceptable since it fell beyond the 0.7 standard recommended by Fraering and Minor (2006).

The five employee satisfaction factors reflected distinct dimensions with a high level of communalities showing cohesiveness of each factor. Convergent validity was assessed through the computation of correlations between the five employee satisfaction sub-scales and organisational performance. The results (reported in Table 3) indicate positive relationships between these five sub-scales and organisational performance, thereby providing evidence of convergence. Predictive validity was assessed through regression analysis. All five factors showed positive casual relationships with organisational performance.

Data analysis

The aim of this study was to determine relationships between employee satisfaction and organisational performance in a government department. Descriptive and inferential statistical analyses were conducted using the Statistical Package of the Social Sciences (SPSS version 20.0). Pearson's correlation and multiple linear regression analysis were used to determine the relationships between variables. Significance values were set at $p \le 0.05$.

Correlation analysis: Employee satisfaction and organisational performance

In order to establish the relationship between employee satisfaction and organisational performance, the five employee satisfaction dimensions were correlated with organisational performance. The Pearson correlation coefficient (*r*), which assesses the degree to which quantitative variables are linearly related in a sample, was used (Maxwell & Moores, 2007). These results are reported in Table 3.

An analysis of the correlation matrix (refer to Table 3) reveals that there were strong positive correlations anchored by (r = .462; p < 0.05) and (r = .611; p < 0.05) between organisational performance and all five employee satisfaction factors. In terms of inter-factor correlations, it is interesting to note that there were strong positive correlations ranging between (r = .507; p < 0.05) and (r = .583; p < 0.05) among all five employee satisfaction factors. As such, an increase in any one factor can trigger increases in any of the other employee satisfaction factors. Conversely, any decrease in any employee satisfaction factor may stimulate a decrease in any of the other factors as well.

Regression analysis: Employee satisfaction and organisational performance

In this study multiple linear regression analysis was performed to identify the variables that predicted or provided the best explanation for the portion of the total variance in the scores of the dependent variables (Malhotra, 2010). The results are reported in Table 4.

In this study, employee satisfaction (adjusted $R^2 = 0.453$) explained approximately 45.3% of the variance in overall organisational performance. In terms of evaluating the assumptions of multicollinearity, if the variance inflation factor (VIF) is greater than 10 then collinearity is a cause for concern (Field, 2005). Multicollinearity suggests that several of the independent variables are closely linked in some way, which causes strange results when attempting to study how well individual independent variables contribute to an understanding of the dependent variable (Field, 2009). The VIF for the five sub-scales were acceptable since they

ranged between 1.769 and 1.971. The effect of this value is that it reduces multicollinearity problems. In terms of tolerance, larger tolerance values of more than 0.5 are more desirable as they are more indicative of lesser problems with multicolllinearity (Denis, 2011); therefore, the tolerance values obtained in the regression analysis are within an acceptable range.

In the regression analysis (refer to Table 4), three factors, namely working conditions (p = 0.000), teamwork (p = 0.000) and ability utilisation (p = 0.001) were statistically significant at p < 0.05 and contributed to 45.3% of the explained variance in organisational performance. In terms of Beta weights, three factors namely, working conditions ($\beta = 0.351$), teamwork ($\beta = 0.224$) and ability utilisation ($\beta = 0.129$), contributed significantly towards organisational performance, respectively. These findings are congruent to the results of previous studies conducted by Cooke (2000) and Mohamad, Lo and La (2009) which found that the same employee satisfaction factors contributed significantly towards the variance in organisational performance. However, creativity ($\beta = 0.086$) and autonomy ($\beta = 0.016$) did not contribute significantly to the variance in organisational performance; therefore, the performance of an organisation is likely to be determined by the extent to which employees within that organisation are satisfied.

Mean score ranking of factors

Table 5 is an illustration of the means, medians and standard deviation associated with each of the five factors. The mean score ranking of each factor is shown in the last column.

The summated means for the five employee satisfaction sub-scales (refer to Table 5) indicate average scores that lie between agree and strongly agree on the Likert Scale for all five factors. Teamwork (mean = 4.924) was ranked highest, followed by ability utilisation (mean = 4.812), creativity (mean = 4.693), autonomy (mean = 4.520) with working conditions

TABLE 2: Internal consistency estimates (Cronbach alpha) and operational definitions for employee satisfaction sub-scales.

Factor	Reliability (Cronbach Alpha)	Operational Description
Working conditions	0.782	This factor is concerned with the conditions under which an individual works. It involves promoting a work environment conducive to the satisfaction of employees' needs.
Ability utilisation	0.854	This factor is concerned with the individual's opportunity to do something in the organisation that makes use of his or her abilities
Teamwork	0.787	This factor is concerned with the individual's ability to get along and execute tasks with other individuals in the organisation
Creativity	0.712	This factor is concerned with the extent to which the individual is able to use his or her own initiative, innovativeness and methods in the tasks allocated to him or her
Autonomy	0.813	This factor is concerned with the level of freedom and discretion an individual enjoys in his or her job. It is also concerned with an individual's ability to make decisions regarding the tasks allocated to him or her.

TABLE 3: Correlations: Employee satisfaction and organisational performance.

Factors	Working conditions	Ability utilisation	Teamwork	Creativity	Autonomy	Organisational performance
Working conditions	1	_	-	-	-	-
Ability utilisation	.582**	1	_	-	-	-
Teamwork	.591**	.546**	1	-	-	-
Creativity	.507**	.568**	.516**	1	-	-
Autonomy	.556**	.579**	.583**	.565**	1	-
Organisational performance	.611**	.514**	.556**	.462*	.466*	1



^{*,} Correlation is significant at the 0.05 level (2-tailed)
**, Correlation is significant at the 0.01 level (2-tailed)

TABLE 4: Regression analysis: Employee satisfaction and organisational performance.

Independent variable: Employee satisfaction	Dependent variable: Organisational performance					
	В	t	t Significance Collinearity Statistics		/ Statistics	
			_	Tolerance	VIF	
Working conditions	.351	5.605	.000	.824	1.910	
Ability utilisation	.129	2.027	.044	.611	1.959	
Teamwork	.224	3.575	.000	.725	1.904	
Creativity	.086	1.426	.155	.665	1.769	
Autonomy	.016	.259	.796	.707	1.971	

B, unstandardised beta; t, t-statistic; VIF, variance inflation factor.

R = 0.673, Adjusted $R^2 = 0.453$ F = 44.006

TABLE 5: Factor, number of respondents, mean, median and standard deviation for the employee satisfaction sub-scales.

Factor	Number of items	Mean (\bar{x})	Median	Standard Deviation	Mean Ranking
Working conditions	5	4.443	3.200	0.743	5
Ability utilisation	5	4.812	3.800	0.701	2
Teamwork	5	4.924	3.600	0.704	1
Creativity	4	4.693	3.500	0.769	3
Autonomy	3	4.520	3.667	0.669	4

(mean = 4.443) trailing the list. These findings denote that amongst these five factors, *teamwork* had the greatest impact on organisational performance with *working conditions* exerting the least impact.

Discussion

The Pearson correlation analysis (refer to Table 3) reveals that there was a significant positive correlation between $working\ conditions$ and organisational performance (r=.611; p<0.01). This finding depicts that organisational performance increases with an improvement in working conditions and decreases with the deterioration of working conditions. These findings are consistent with previous research conducted by Lee, Singhapakdi and Sirgy (2007) which substantiates that $working\ conditions$ have a positive impact on job satisfaction, organisational commitment, and comradeship amongst employees. Moreover, $working\ conditions$ have a positive impact on employee and job-related outcomes such as worker's welfare, health, team spirit, morale, efficiency, and productivity (Koonmee $et\ al.$, 2010; Mike, 2010).

In contrast, poor *working conditions* make employees uncomfortable, thereby reducing the pace of work. This situation may demand extra efforts to keep everything organised, which is tantamount to time-wasting (Chandrasaker, 2011). In addition, inconvenient timetables influence labour productivity in that repetitive long working hours get workers exhausted (Chadha, 2007). Moreover, poor *working conditions* also lead to the deterioration of the relationships between managers and employees (Estes & Wang, 2008). Such an unfriendly atmosphere may undermine self-esteem, co-operation and the ability of employees to come up with creative ideas. It appears then that *working conditions* are an instrumental factor in enhancing the performance of both the individual employee as well as the organisation in general.

A further analysis of the correlation matrix indicated a strong positive relationship between ability utilisation and

organisational performance (r = .514; p < 0.01). This finding illustrates that organisational performance may be enhanced through structural improvements in the use of the abilities of employees. As proposed by Liu and White (2011), ability utilisation is a predominant component of employee satisfaction. Clark (2001) also acknowledges that if a job is interesting and provides the opportunity for an individual to utilise his or her skills, the individual is bound to enjoy the job and the likelihood of that individual leaving the organisation is significantly reduced. Furthermore, ability utilisation facilitates the recruitment and retention of staff, and helps the organisation to benefit from improved motivation and superior business performance (SQW Consulting, 2010). Conversely, when employees feel that their abilities are under-utilised, they may become de-motivated and may seek employment elsewhere; leading to increased employee turnover in the organisation (Hassanain, 2006). It is an important supposition then that increased opportunities for members of the department to apply their abilities may result in higher levels of organisational performance within the organisation.

Teamwork and organisational performance were positively correlated (r = .556; p < 0.01). This finding suggests that an increase in teamwork could trigger an increase in organisational performance whereas a decrease in teamwork results in a decrease in organisational performance. Research has provided evidence that a higher level of teamwork is associated with greater employee satisfaction, which motivates employees to exert more effort at work (Nickerson & Nagle, 2005; Sumer & Knight, 2001). Abolghasemi and Varaniyab (2010) also found that teamwork is positively related to both resilience as well as perceived positive stress. As such, an increase in teamwork within the organisation will have a snowball effect on the resilience of employees in addition to enabling an individual to feel better and to develop resources for coping with life. The findings of this study suggest that teamwork within the organisation is vital to the enhancement of individual employee satisfaction, which directly influences organisational performance.

A moderate correlation (r = .462; p < 0.05) was found between *creativity* and organisational performance. This finding suggests that an increase in creativity will inspire a moderate increase in organisational performance. These results are supported by a number of previous studies (Martins & Martins, 2002) which reveal that employee *creativity* is critical for improving organisational performance. *Creativity* is also an important driver of sustainable organisational growth through innovation (Hogan, 2003). It may therefore be suggested that in organisational turnaround strategies, the issue of *creativity* should not escape attention during the diagnosis of performance-related problems. Various creativity-oriented strategies are available (Lee & Choi, 2003) which can be implemented to ensure that organisational performance is increased.

The autonomy factor and organisational performance were moderately correlated (r = .466; p < 0.05). This finding illustrates that an increase in autonomy results in the enrichment of organisational performance. The degree to which a job provides substantial freedom, independence and discretion of the employee in his or her job influences the level of job satisfaction that the employee experiences (Brunetto & Farr-Wharton, 2004). Giving task autonomy to employees is generally expected to result in higher motivation, satisfaction, and performance (Langfred & Moye, 2004). Evidence from a study conducted by Exworthy et al. (2010) further suggests that an unwillingness to exercise autonomy because of centralising tendencies, risk-averse behaviours and an uncertain policy environment results in decreased organisational performance; therefore, the performance of public organisations would be enhanced significantly if employees become more autonomous on their jobs.

Summary of findings

In reviewing the findings of the study, two streams of observations are evident. Firstly, employee satisfaction was encapsulated through five factors, namely working conditions, ability utilisation, teamwork, creativity and autonomy. The impact of employee satisfaction on organisational performance was established by conducting Pearson's correlation analysis as well as multiple linear regression analysis between the five employee satisfaction sub-scales and organisational performance. All five factors were positively correlated to organisational performance. The fact that all of the five employee satisfaction sub-dimensions were positively correlated with organisational performance signifies that on the overall, employee satisfaction contributes positively to organisational performance in a public organisation. When employee satisfaction is optimised and expedited, it acts as an incentive to enhance organisational performance. On the contrary, when employees are dissatisfied, organisational performance will diminish.

Secondly, the mean score-ranking technique was applied to measure the strength of each of the five factors relative to each other, with regard to their impact on organisational performance. The findings of the study reveal that *teamwork* had the strongest impact on organisational performance, followed by *ability utilisation*, *creativity*, *autonomy*, with *working conditions* exerting the least influence.

Managerial implications

The findings of this study have managerial implications. At a micro level, organisational performance may be accelerated by positively adjusting the levels of employee satisfaction factors such as teamwork, ability utilisation, creativity, autonomy and working conditions, which are predictors of organisational performance. In addition, these factors qualify as diagnostic mechanisms for organisational performance problems in organisations. Management practitioners and turnaround strategists would be able to address performance problems by checking to see if there are any shortfalls within any of the five employee satisfaction factors used in this study. An identical approach could be adopted at the macro level, where performance issues in the entire South African public sector may be partially resolved by placing special emphases on such behavioural aspects of employees within public organisations.

Limitations and suggestions for further research

Several limitations associated with this study are acknowledged. The findings of this study are based on data elicited from a limited sample size composed of 272 respondents whose geographic location was restricted to Gauteng Province, South Africa. Caution should be exercised when generalising these findings to other contexts and environments. In addition, the use of the convenience sampling technique also increased the susceptibility of the study to sampling bias (Whitley & Kite, 2009).

This study is not without implications for further research. Firstly, it would be interesting to refine the findings of the current study by conducting similar studies along sociodemographic characteristics such as age, gender and educational levels of respondents. Secondly, similar studies could also be conducted using an amplified scope that includes more public organisations. Thirdly, additional factors that influence organisational performance could also be examined in future studies. This could lead to the uncovering of any omissions within the dimensions tested in this study. Furthermore, since the current study focused on employee satisfaction organisational performance nexus within a public organisation, comparative investigations could also be conducted in other environments such as private enterprises and non-profitable organisations.

Conclusion

The purpose of this study was to establish the relationship between employee satisfaction and organisational performance in a public sector organisation. The study employed a quantitative design in which a survey questionnaire was administered to employees of a South African government department. Using a combination of correlation and regression analyses, positive and significant relationships were observed between organisational performance and five employee satisfaction factors namely teamwork, ability utilisation, creativity, autonomy and working conditions. These results suggest that increases in organisational performance may be achieved by increasing each of the five employee satisfaction factors. Additionally, the fine employee satisfaction factors used in the study may be used to predict the future performance of public organisations. Using the findings of this study, managers in public organisations may be able to improve organisational performance by optimising employee satisfaction along the dimensions proposed in this study.

Acknowledgements

The authors would like to acknowledge the contribution made by the Faculty of Management Sciences at Vaal University of Technology, South Africa which provided financial resources needed during the study.

Competing interest

The authors declare that they have no financial or personal relationship(s) which may have inappropriately influenced them in writing this article.

Author contributions

C.M. (Vaal University of Technology) collected the data and completed the statistical analysis and interpretation. D.I.R. (Vaal University of Technology) conducted the literature review and the language editing.

References

- Abolghasemi, A., & Varaniyab, S.T. (2010). Resilience and perceived stress: Predictors of life satisfaction in the students of success and failure. *Procedia Social and Behavioral Sciences*, 5, 748–752. http://dx.doi.org/10.1016/j.sbspro.2010.07.178
- Bernhardt, K.L., Donthu, N., & Kennett, P.A. (2000). A longitudinal analysis of satisfaction and profitability. *Journal of Business Research*, 47, 161–171. http://dx.doi.org/10.1016/S0148-2963(98)00042-3
- Brunetto, Y., & Farr-Wharton, R. (2004). A case study examining the impact of public sector nurses perception of workplace autonomy on their job satisfaction: Lessons for management. International Journal of Management and Organisational Behaviour, 8(5), 521–539.
- Carrim, Y. (2009, October). Addressing the financial challenges in municipalities in the context of a review of the local government model. Keynote address of the Deputy Minister of Cooperative Governance and Traditional Affairs to the Institute of Municipal Finance Officers Annual Conference, Johannesburg. Retrieved January 21, 2013, from http://www.cogta.gov.za/index.php/news/174-yunus-carrim/264-financial-challenges-in-context-of-review-of-lg-model-imfo-conference-6-oct-09.
- Chadha, P. (2007). The orderly workplace: An exploration into holistically disciplined work life. India: Macmillan Publishers.
- Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. *International Journal of Enterprise Computing and Business Systems*, 1(1), 1–16.
- Chi, C.G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28, 245–253. http://dx.doi.org/10.1016/j.ijhm.2008.08.003
- Clark, A.E. (2001). What really matters in a job? Hedonic measurement using quit data. Labour Economics, 8, 223–242. http://dx.doi.org/10.1016/S0927-5371(01)00031-8
- Cole, L.E., & Cole, M.S. (2005). Employee satisfaction and organisational performance: A summary of key findings from applied psychology. Retrieved September 02, 2011, from http://www. Teammax.net/files/LiteratureReview.pdf
- Cooke, F.L. (2000). Human resource strategy to improve organisational performance: A route for British firms. *ESRC Future of Work Programme*. Working Paper No 9. October.
- Corporate Leadership Council (2003). Linking employee satisfaction with productivity, performance, and customer satisfaction, Retrieved July 20, 2011, from http://www.corporateleadershipcouncil.com

- Dawal, S.Z., Taha, Z., & Ismail, Z. (2009). Effect of job organization on job satisfaction among shop floor employees in automotive industries in Malaysia. *International Journal of Industrial Ergonomics*, 39(1), 1–6. http://dx.doi.org/10.1016/j.ergon.2008.06.005
- Deshpande, B., Arekar, K., Sharma, R., & Somaiya, S. (2012). Effect of employee satisfaction on organization performance: An empirical study in hotel industry. Paper presented at the Ninth AIMS International Conference on Management held at Pune, India, January 1–4.
- Draai, E. (2008). A knowledge driven South African public sector. Paper presented at the Institute of Public Administration Australia (IPAA). National conference held at Luna Park, Sydney, Australia, 8–20, June.
- Denis, D.J. (2011). Multiple linear regression using SPSS. Retrieved August 20, 2012, from http://psychweb.psy.umt.edu//denis/datadecision/front/stat_II_2011/psyx_521_multiple_regression_part_II.pdf
- Ellickson, M.C., & Logsdon, K. (2001). Determinants of job satisfaction of municipal government employees. *State* & *Local Government Review, 33*(3), 173–184. http://dx.doi.org/10.1177/0160323X0103300302
- Ericksen, J., & Dyer, L. (2005). Toward a strategic human resource management model of high reliability organisational performance. *International Journal of Human Resource Management*, *16*(1), 907–913. http://dx.doi.org/10.1080/09585190500120731
- Estes, B., & Wang, J. (2008). Workplace incivility: Impacts on individual and organizational
- performance. Human Resource Development Review, 7, 218–240. http://dx.doi. org/10.1177/1534484308315565
- Exworthy, M., Frosini, F., Jones, L., Peckham, S., Powell, M., Greener, et al. (2010). Decentralisation and performance: autonomy and incentives in local health economies. Executive Summary Produced for the National Institute for Health Research Service Delivery and Organisation program. Retrieved August, 20, 2012, from http://www.netscc.ac.uk/hsdr/files/project/SDO_ES_08-1618-125_V01.pdf
- Faragher, E.B., Cass, M., & Cooper, L.C. (2005). The relationship between job satisfaction and health: A meta-analysis. *Journal of Occupational and Environmental Medicine*, 62, 105—112. http://dx.doi.org/10.1136/oem.2002.006734
- Ferguson, J., Ashcroft, D., & Hassell, K. (2011). Qualitative insights into job satisfaction and dissatisfaction with management among community and hospital pharmacists. Research in Social and Administrative Pharmacy, 7(3), 306–316. http://dx.doi.org/10.1016/j.sapharm.2010.06.001, PMid: 21454135.
- Fields, D.L. (2002). Taking the measure of work: A guide to validated scales for organizational research and diagnosis. Thousand Oaks, CA: Sage.
- Field, A. (2005). Discovering statistics using SPSS. (2nd edn.). London: Sage Publications.
- Field, A. (2009). Discovering statistics using SPSS (and sex and drugs and rock 'n' roll). Los Angeles, CA: Sage.
- Fraering, M., & Minor, M.S. (2006). Sense of community: An exploratory study of US consumers of financial services. *International Journal of Bank Marketing*, *24*, 284–306. http://dx.doi.org/10.1108/02652320610681738
- Fraser, J.A. (2001). White-collar sweatshop: The deterioration of work and its rewards in corporate America. New York: Norton and Company.
- Ganguly, R. (2010). Quality of work life and job satisfaction of a group of university employees. *Asian Journal of Management Research*, 1(1), 209–216.
- Giannikis, S.K., & Mihail, D.M. (2011). Modeling job satisfaction in low-level jobs: Differences between full-time and part-time employees in the Greek retail sector. European Management Journal, 29(2), 129–143. http://dx.doi.org/10.1016/j.emj.2010.12.002
- Glasow, P.A. (2005). Fundamentals of survey research methodology. Retrieved January 18, 2013, from http://www.mitre.org/work/tech_papers/tech_papers_05/05_0638/05_0638.pdf
- Goslin, P.A. (2005). Managing employee satisfaction of volunteers in South African sport. *African Journal for Physical Health Education*, 12(1), 30–40.
- Green, S.B. (1991). How many subjects does it take to do a regression analysis? Multivariate Behavioral Research, 26, 499–510. http://dx.doi.org/10.1207/s15327906mbr2603_7
- Hair, J.F., Black, B., Babin, B., Anderson, R.E., Tatham, R.L., & Black, W.C. (2010). Multivariate data analysis: A global perspective. NY: Pearson Education Inc. http://dx.doi.org/10.1016/j.jmva.2009.12.014
- Harter, J.K., Schmidt, F.L., & Hayes, T.L. (2002). Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268–279. http://dx.doi. org/10.1037/0021-9010.87.2.268, PMid: 12002955
- Hassanain, M.A (2006). Factors affecting the development of flexible workplace facilities. *Journal of Corporate Real Estate, 8,* 213–220. http://dx.doi.org/10.1108/14630010610714880
- Hogan, S.J. (2003). An investigation into creative and innovative organisational cultures and firm performance. Honours Thesis, School of Business: The University of Queensland. Retrieved August, 20, 2012, from http://espace.library.uq.edu.au/ view/UQ:218485
- Hornbaek, K. (2006). Current practice in measuring usability: Challenges to usability studies and research. *International Journal of Human-Computer Studies*, 11(2), 35–46.
- Ilies, R., Wilson, K.S., & Wagner, D.T. (2009). The spillover of daily job satisfaction onto employees' family lives: The facilitating role of work-family integration. Academy of Management Journal, 52(1), 87–102. http://dx.doi.org/10.5465/ AMJ.2009.36461938
- Irving, P.G., & Montes, S.D. (2009). Met expectations: The effects of expected and delivered inducements on employee satisfaction. *Journal of Occupational and Organizational Psychology*, 82(2), 431–451. http://dx.doi.org/10.1348/096317908X312650

- Islam, M.Z., & Siengthai, S. (2009). Quality of work life and organisational performance: empirical evidence from Dhaka Export Processing Zone. Paper presented at the ILO Conference on 'Regulating for Decent Work', held at the International Labour Office. Geneva. July 8–10.
- Jenkins, G.D., JR., Gupta, N., Mitra, A. & Shaw, J.D. (1998). Are financial incentives related to performance? A meta-analytic review of empirical research. *Journal of Applied Psychology*, 83, 777–787. http://dx.doi.org/10.1037/0021-9010.83.5.777
- Judge, T.A., Piccolo, R.F., Podsakoff, N.P., Shaw, J.C., & Rich, B.L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature, Journal of Vocational Behavior, 77(2), 157–167. http://dx.doi.org/10.1016/j.jvb.2010.04.002
- Judge, T.A., Thoresen, C.J., Bono, J.E., & Patton. G.K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376–407. http://dx.doi.org/10.1037/0033-2909.127.3.376
- Katou, A.A., & Budhwar, P.S. (2007). Human resource management systems and organisational performance: Atestofa mediating model in the Greek manufacturing context. The International Journal of Human Resource Management, 17(7), 1223– 1253. http://dx.doi.org/10.1080/09585190600756525
- Koonmee, K., Singhapakdi, A., Virakul, B., & Lee, D. (2010). Ethics institutionalization, quality of work life, and employee job-related outcomes: A survey of human resource managers in Thailand. *Journal of Business Research*, 63(1), 20—26. http://dx.doi.org/10.1016/j.jbusres.2009.01.006
- Koys, D. (2003). How the achievement of human-resources goals drives restaurant performance. Cornell Hotel and Restaurant Administration Quarterly, 44(1), 17– 24. http://dx.doi.org/10.1016/S0010-8804(03)90042-5
- Langfred, C.W., & Moye, N.A. (2004). Effects of task autonomy on performance: an extended model considering motivational, informational, and structural mechanisms. *Journal of Applied Psychology*, 89(6), 934–945. http://dx.doi. org/10.1037/0021-9010.89.6.934, PMid: 15584833.
- Lambert, L.S., Edwards, J.R., & Cabic, D.M. (2003). Breach and fulfillment of the psychological contract: A comparison of traditional and expanded views. *Personnel Psychology*, 56(4), 895–934. http://dx.doi.org/10.1111/j.1744-6570.2003. tb00244.x
- Lau, C.M., & Sholihin, M. (2005). Financial and nonfinancial performance measures: How do they affect job satisfaction? *The British Accounting Review*, 37, 389–413. http://dx.doi.org/10.1016/j.bar.2005.06.002
- Lee, H., & Choi, B. (2003). Knowledge management enablers, processes, and organisational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, 20(1), 179–228.
- Lee, D.J., Singhapakdi, A., & Sirgy, M.J. (2007). Further validation of a need-based quality-of-work-life measure: Evidence from marketing practitioners. *Applied Research in Quality of Life*, 2, 273–287. http://dx.doi.org/10.1007/s11482-008-9042-x
- Liu, C.S., & White, L. (2011). Key determinants of hospital pharmacy staff's job satisfaction. Research in Social and Administrative Pharmacy, 7(1), 51–63. http:// dx.doi.org/10.1016/j.sapharm.2010.02.003, PMid: 21397881
- Local Government Research Centre. (2009). SA Local Government Briefing: September.
 Retrieved November 21, 2010, from http://news.mobilitate.co.za/tag/local-government-research-centre/
- Lu, H., While, A.E., & Barriball, K.L. (2005). Job Satisfaction among Nurses: A Literature Review. *International Journal of Nursing Studies*, 42(2), 211–227. http://dx.doi.org/10.1016/j.ijnurstu.2004.09.003, PMid: 15680619
- Malhotra, N.K. (2010). Marketing research: An applied orientation. (6th edn.). New Jersey: Prentice-Hall.
- Martins, E., & Martins, E. (2002). An organisational culture model to promote creativity and innovation. South African Journal of Industrial Psychology, 28(4), 56=–65.
- Maxwell, J.P., & Moores, E. (2007). The development of a short scale measuring aggressiveness and anger in competitive athletes. *Psychology of Sport and Exercise*, *8*, 179–193. http://dx.doi.org/10.1016/j.psychsport.2006.03.002
- Mayfield, J., & Mayfield, M. (2002). Leader communication strategies: Critical paths to improving employee commitment. *American Business Review*, *6*, 41–49.
- Minnaar, F. (2006). Integrated performance management: The evolving South African management model. *Journal of Public Administration*, 41(21), 177–190.
- Molefe, G.N. Roodt, G., & Schurink, W.J. (2011). High performance organisation: A quantitative inquiry at a specific metropolitan municipality in the Gauteng Province. African Journal of Business Management, 5(3), 699—712.
- Mohamad, A.A., Lo, M., & La, M. (2009). Human resource practices and organisational performance incentives as moderator. *Journal of Academic Research in Economics*, 1(2), 229–244.
- Mulder, M., & Collins, K. (2007). Competence Development in Public and Private Organisations: A Survey of Its Use in Practice in Selected EU Member States. Paper presented at the ECER Conference in Gent, Belgium. September 19. Retrieved November 23, 2010, from http://www.mmulder.nl/wp-content uploads/2011/12/2007-09-19-Competence-Development-in-P-and-Porganisations pdf
- Nickerson, A., & Nagle, R.J. (2005). Parent and peer attachment in late childhood and early adolescence. *Journal of Early Adolescence*, 25, 223–249. http://dx.doi. org/10.1177/0272431604274174

- Nilsson, J. (2010). What's the problem? Local officials' conceptions of weaknesses in their municipalities' crisis management capabilities. *Journal of Contingencies and Crisis Management*, 18(2), 83–95. http://dx.doi.org/10.1111/j.1468-5973.2010.00607.x
- Okanya, S.P. (2007). Reconciling organisational performance and employee satisfaction through training: The case of Soroti District Local Government. Unpublished master's thesis, Institute of Social Studies, The Hague, The Netherlands.
- Presser, S., Couper, M.P., Lessler, J.T., Martin, J., Rothgeb, J.M., & Singer, E. (2004). Methods for testing and evaluating survey questions. *Public Opinion Quarterly*, *68*(1), 109–130. http://dx.doi.org/10.1093/poq/nfh008
- Price, J.I. (2001). Reflections on the determinants of voluntary turnover. International Journal of Manpower, 22(7), 660–624. http://dx.doi.org/10.1108/EUM0000000006233
- Price Waterhouse Coopers. (2010). South African Budget 2010-11. Retrieved September 24, 2012, from http://www.pwc.com/za/en/budget/index./
- Putu, N.I., Mimba, S.H., Van-Heden, J., & Tillema, S. (2007). Public sector performance measurement in developing countries: A literature review and research agenda. Journal of Accounting and Organisational Change, 3(3), 16–17.
- Radhakrishna, R.B. (2007). Tips for Developing and Testing Questionnaires/ Instruments. *Journal of Extension*, 45(1). Retrieved January 21, 2013, from http://www.joe.org/joe/2007february/tt2.php
- Schneider, B., Hanges, P.J., Smith, D.B., & Salvaggio, A.N. (2003). Which comes first:
- Employee attitudes or organizational financial and market performance? *Journal of Applied Psychology*, 88, 836–851. http://dx.doi.org/10.1037/0021-9010.88.5.836, PMid: 14516248
- Schulz, M. (2001). The uncertain relevance of newness: Organisational learning and knowledge flows. Academy of Management Journal, 44(4), 661–681. http:// dx.doi.org/10.2307/3069409
- Schwella, E. (2001). Public sector policy in the new South Africa: A critical review. Public Performance & Management Review, 24(4), 367–38. http://dx.doi. org/10.2307/3381225
- Sempane, M.E. Rieger, H.S., & Roodt, G. (2002). Job satisfaction in relation to organisational culture. *Journal of Industrial Psychology*, *28*(2), 23–30.
- Silvestro, R. (2002). Dispelling the modern myth: Employee satisfaction and loyalty drive service profitability. *International Journal of Operations and Production Management*, 22(1), 30–49. http://dx.doi.org/10.1108/01443570210412060
- Shields, M. (2006). Unhappy on the job. Health Report, 17(4), 82-83.
- SQW Consulting. (2010). Best strategies in skills utilisation. Retrieved July, 7, 2011, from http://www.scottish-enterprise.com/~/media/SE/Resources/Documents/ABC/Best-strategies-In-skills-utilisation-summary.ashx
- Sumer, H., & Knight, P.A. (2001). How do people with different attachment styles balance work and family? A personality perspective on work-family linkage. *Journal of Applied Psychology*, 86, 653–663. http://dx.doi.org/10.1037/0021-9010.86.4.653, PMid: 11519649
- Surujlal, J., & Singh, P. (2003). Human resources management of professional sport coaches in South Africa. *African Journal for Physical, Health Education, Recreation and Dance,* Special Edition, October 2003, 50–58.
- Van der Heijden, T., & Mlandi, M. (2005). Organisational success and failure in the public sector. *Journal of Public Administration*, 6(4), 20–22.
- Van der Waldt, G. (2004). Managing performance in the public sector: concepts, considerations and challenges. Lansdowne: Juta and Company Ltd.
- Wangenheim, F.W., Evanschitzky, H., & Wunderlich, M. (2007). Does the employee–customer satisfaction link hold for all employee groups? *Journal of Business Research*, 14(3), 304–48.
- Watson, S., Maxwell, G.A., & Farquharson, L. (2007). Line managers' views on adopting human resource roles: The case of Hilton (UK) hotels. *Employee Relations*, *29*(1), 30–49. http://dx.doi.org/10.1108/01425450710714469
- Whitley, B.E., & Kite, M.E. 2009. *The psychology of prejudice and discrimination*. Hampshire: Cengage Learning.
- Wright, P.M., Gardner, T.M., Moynihan, L.M., & Allen, M.R. (2005). The relationship between HR practices and firm performance: Examining causal order. *Personnel Psychology*, 58, 409–446. http://dx.doi.org/10.1111/j.1744-6570.2005.00487.x
- Ybema, J.F., Smulders, P.G.W., & Bongers, P.M. (2010). Antecedents and consequences of employee absenteeism: A longitudinal perspective on the role of job satisfaction and burnout. *European Journal of Work and Organizational Psychology*, 19(1), 102–124. http://dx.doi.org/10.1080/13594320902793691
- Yoon, M.H., & Suh, J., (2003). Organisational citizenship behaviors and service quality as external effectiveness of contact employees. *Journal of Business Research*, 56(8), 597–611. http://dx.doi.org/10.1016/S0148-2963(01)00290-9
- Yee, R.W. Y., Yeung, A.C.L., &, Cheng, T.C.E. (2008). The impact of employee satisfaction on quality and profitability in high-contact service industries. *Journal of Operations Management*, 26(5), 651–668. http://dx.doi.org/10.1016/j.jom.2008.01.001
- Zikmund, W.G. Babin, B.J., Carr, J.C., & Griffin, M. (2009). Business research methods. (8th ed.). Mason: South Western College.
- Zohir, S.C. (2007). Role of Dhaka export processing zone: Employment and empowerment. Research Report, Bangladesh Institute of Development Studies, Dhaka, People's Republic of Bangladesh.