Full Length Research Paper

The relationship between people-related total quality management (TQM) practices, job satisfaction and turnover intention: A literature review and proposed conceptual model

Jing-Wen Yue, Keng-Boon Ooi* and Choong Chee Keong

Faculty of Business and Finance, University Tunku Abdul Rahman, Malaysia.

The purpose of this paper is to establish a conceptual model to examine the different dimensions of people-related TQM practices and its relationship with job satisfaction and turnover intention. The theory of total quality management (TQM) principles and the concept of job satisfaction and turnover intention provide as preliminary points to construct the integrated conceptual model, connecting TQM practices, job satisfaction and turnover intention aspects. Using a wide-range of literature review, six people-related practices of TQM (that is leadership, training and development, employee empowerment, employee involvement, teamwork, and reward and recognition), job satisfaction and turnover intention are linked in a structured manner to investigate their relationships. The findings provide a basic guideline for establishing an improved and revised model to advance the TQM, job satisfaction and turnover intention literatures. This study serves to be beneficial for managers in any organization, who desire to enhance the level of job satisfaction and reduce the level of turnover intention in their firms, through an effective implementation of the relevant people-related TQM practices.

Key words: People-related, total quality management (TQM) Practices, job satisfaction, turnover intention.

INTRODUCTION

Sophisticated technology and world-class management system will be reduced to nothing without the toil of its workforce. Undoubtedly, a committed and productive workforce brings about organizational performance, which is the ultimate aim of any organization, especially in this era of steep competition.

Recognizing the driving force of a committed workforce, scores of organizations have adopted total quality management (TQM). Basically, TQM is a management approach that involves concerted effort of all employees dedicated to achieving organizational quality endeavors (Lin and Ogunyemi, 1996; Lin and Clousing, 1995). According to the big five schools of TQM, namely, Deming, Juran, Feigenbaum, Crosby and Ishikawa, TQM is an integrated approach that gears towards synergizing all the functional activities across an organization with the primary objectives of improving quality of products and

services as well as increasing customer satisfaction (Crosby, 1979; Feigenbaum, 1983; Ishikawa, 1985; Deming, 1986; Juran, 1988).

Since its inception two decades ago, the world of business has witnessed the adoption of TQM in primarily manufacturing sector and later widespread to service and other sectors. Ooi et al. (2006) emphasizes that TQM is significant because its implementation brings about positive impact on the organization and its employees. The notable list of benefits claimed through the dynamic implementation of TQM includes increased customer satisfaction (Yang, 2006; Singh and Smith, 2006, Miyagawa and Yoshida, 2005; Sit et al., 2009), improved employees' job satisfaction and work-related attitudes (Harber et al., 1991; Guimaraes, 1996; Karia et al., 2006; Ooi et al., 2007), lower manufacturing costs and higher productivity (Garvin, 1983; Lam, 1996), enhanced knowledge management efforts (Ooi, 2009) and better strategic performance (Zhang et. al., 2000; Prajogo and Sohal, 2004; Flynn et al., 1994).

Although there is a widespread consensus that TQM is

*Corresponding author. Email: ooikengboon@gmail.com.

a way of managing organizations to improve quality of products and services, there is less agreement as to whether TQM practices can contribute to the improvement in employees' job satisfaction and turnover intention. Hence, the present study is of utmost importance because it serves as an indication of whether employees, as important organizational stakeholders, benefit from the organizational transformations led by TQM implementation. Ultimately, the present study seeks to fill the lacuna by conducting a detailed investigation of the association between multidimensionality of TQM practices and employees' job satisfaction and turnover intention.

This study unfolds four main objectives. Firstly, it aims to identify a set of people-related TQM practices that would be used as a guide in the evaluation of employees' job satisfaction and turnover intention. Secondly, to present a model as a systematic way to assess the degree of impact employees' perceptions on the implementation of people-related TQM practices on employees' job satisfaction and turnover intention. Thirdly, it is to explore the relationship between people-related TQM practices, employees' job satisfaction and turnover intention. Lastly, it also aims to analyze which people-related TQM practice is strongly related with job satisfaction and turnover intention.

This paper is constructed as follows: Firstly there is a literature review on TQM practices, theory of job satisfaction and turnover intention, and relationship between the three variables, namely, TQM practices, job satisfaction and turnover intention. This leads to the hypotheses development and conceptual framework. A brief discussion on both the theoretical and managerial implications and avenue for further research is presented as conclusions for this study.

LITERATURE REVIEW AND PROPOSITIONS DEVELOPMENT

People-related TQM practices

Several authors categorized TQM elements into two discrete groups, that is, soft TQM and hard TQM (Vouzas and Psyhogios, 2007; Lau and Idris, 2001; Wilkinson et al., 1994). Hard TQM refers to the various quality tools and techniques whereas the soft aspects emphasize the management of human resources (Wilkinson et al., 1994). In other words, the soft aspects deal mainly with people.

Luthans (1995) defined TQM as a participative system whereby all employees are empowered to take responsibility and contribute towards quality management in the organization. In the quest for organizational excellence, TQM captures the quintessence of the people-related practices such as teamwork, employee empowerment and involvement, extensive training, management commitment, as well as reward and recognition to be

implemented together with its quality improvement tools and techniques.

Fotopoulos and Psomas (2009) noted that both soft and hard TQM elements have varied impact on the quality management results and they opined that quality improvement is influenced primarily by soft TQM elements and secondarily by hard TQM elements. Brah et.al., (2000) found that intangible features such as top management support, teamwork, employee empowerment and employee involvement, play a significant role in ensuring success of TQM in improving company's performance. This underscores the importance of analyzing the soft elements, more accurately, the people-related practices of TQM.

Morrison and Rahim (1993) and Hoogervorst et al. (2005) noted succinctly that effective management of human resources is the core ingredient of success in TQM. This statement is further supported by both Yang (2006) and Jimenez and Costa (2009) whose empirical research revealed that synergy between HRM and TQM practices yielded positive tangible and intangible results.

Since job satisfaction and turnover intention are the major outcomes of this study, the scope of TQM elements is centralize on people-related TQM practices. In retrospect, the present study intends to evaluate the performance of the people-related TQM practices.

Previous researches (Prajogo and Cooper, 2009; Ooi et al., 2006, 2007; Karia and Asaari, 2006; Boselie and Wiele, 2002; Guimaraes, 1996, 1997) have investigated various basic TQM elements in relation to employees' work-related attitudes. The people-related TQM elements used in the above studies included teamwork, reward and recognition, customer focus, organizational trust, organizational culture, training and education, communication, continuous improvement, management commitment, employee involvement, and empowerment.

In this study, the discussion of people-related TQM practices is based on an enhanced version of Prajogo and Cooper's (2009) identification of TQM key practices that sustain an organization's business strategy towards job satisfaction. Thus, the six people-related TQM practices selected in relation to employee outcome focus are leadership, training and development, employee empowerment, employee involvement, teamwork, and reward and recognition.

Job satisfaction

People devote a third of their lives, specifically the prime years of their lives, to work. Thus, it is not surprising that people tend to rigorously seek satisfaction in their job and will subsequently change job if the job does not fit their expectations, needs and wants.

So, what is job satisfaction? Locke (1976) came up with a highly influential definition of job satisfaction. He stated that job satisfaction is a positive emotional feeling

deriving from acceptable assessment of his/her experience towards the job. Greenberg and Baron (1997) defined job satisfaction as the psychological, emotional, and evaluative response an individual has towards his/her jobs. Cranny, Smith and Stone (1992) asserted that job satisfaction is a multidimensional construct that comprises overall job satisfaction as well as a range of job satisfaction components.

To sum it up, job satisfaction is basically identified as a multifaceted construct that captures employees' feelings towards and satisfaction with a spectrum of job elements that are directly and not directly related to the job content (Chang and Chang, 2007).

Researchers have shown that there are numerous factors affecting job satisfaction. For example, Irvine and Evans (1995) reported the importance of work characteristics that included routine, autonomy and feedback, role stressors specifically role conflict and role ambiguity and work environment that included leadership, stress, advancement opportunities and participation, in determining job satisfaction. Spector (1997) identified factors that influence job satisfaction included pay, benefits, co-workers, supervisors, the nature of the work itself and the organization. However, the list of factors influencing job satisfaction may not be exhaustive. In a nutshell, job satisfaction is practically a multifaceted job-related attitudinal variable.

Employees' job satisfaction is an important goal for organization to achieve as it has been shown that job satisfaction is strongly related to higher productivity (McNeese-Smith, 1997), better performance and efficiency (Sousa-Pouza and Sousa-Pouza, 2000), improved organizational commitment (Porter, Steers, and Mowday, 1974), positive organizational citizenship behaviors (Organ and Ryan, 1995), increased customer satisfaction (Burke, Graham and Smith, 2005) and contribute to an organization's competitive advantage (Lee and Mowday, 1987).

Furthermore, Kivimaki and Kalimo (1994) noted that satisfied employees demonstrated positive involvement in quality management practices such as contributing innovative ideas in quality improvement and participating actively in decision-making.

In a meta-analysis on employees' job satisfaction and organizational outcomes conducted by Harter, Schmidt and Hayes (2002), it is of interest to note that employees' job satisfaction has been proven to be one of the key determinants of an organization's progress and success.

Turnover intention

Mobley (1977) defined turnover intention as the motive to leave a job voluntarily. Tett and Meyer (1993) described turnover intention as a purposive plan to leave the organization. It is noted that an employee's intention to leave includes a mere thinking of resigning and a declaration of the desire to leave the job by the employee. In a wider

definition, turnover intention can be interpreted as the employees' desire to voluntarily change companies or employers, or desire to willingly terminate the organizational membership that will end the employer-employee relationship.

A high voluntary turnover rate, especially of high performing employees, is detrimental to an organization. It leads to the loss of tacit knowledge of the leavers, and also drains on operating profits of the organizations and in turn affecting the bottom line figure (Amah, 2009). Studies found that a high turnover rate is linked to negative effects such as low productivity (Huselid, 1995), higher cost in recruiting and training (Rousseau, 1984) and weak future revenue performance (Baron, Hannan and Burton, 2001).

Although turnover intention may not be translated into actual turnover, it is generally accepted that an individual's turnover intention can be used to predict future actual turnover (Arnold and Feldman, 1982; Bullen and Flamholtz, 1985, Griffeth, Hom and Geatner, 2000; Lambert, Hogan and Barton, 2001; Price, 2001; Gregory et al., 2007). Fishben and Ajzen (1975) emphasized that behavioral intention is the primary antecedent to actual behavior and this model has established the turnover intention-voluntary turnover relationship. Bluedorn (1982) proved that turnover intention was highly associated with actual turnover behavior in thirteen out of fourteen empirical studies conducted.

Steel and Ovalle (1984), employing meta-analytic methods in comparing the relationships of job satisfaction, organizational commitment, and turnover intention with actual turnover, further confirmed that turnover intention were strong indicators of actual turnover. Since studies have established that turnover intention is a valid determinant of actual turnover behaviour, it is appropriate that the present study adopt turnover intention as one of the outcome variables.

Relationship between TQM practices and job satisfaction

The introduction of total quality management entails impact on many different aspects of the employees' work values and attitudes especially job satisfaction and turnover intention. Lam (1996) posited that TQM implementation brings about total change in an organization. These changes may range from new quality practices, new organizational structures, new operations procedures, and new methods of appraising performance, and they are likely to impose great implications on the employees' job.

Lam (1995) further listed the perceived changes in the front-line supervisors' jobs due to TQM programmes as higher workload that simultaneously demanded greater skill, accuracy and responsibility for the job. Thus, a successful TQM implementation requires employees'

whole hearted involvement in "extra-role behaviors" to carry out the additional responsibilities, tasks and demand (Yeh, 2003).

The implementation of organizational quality efforts necessitates an organizational change. Studies suggest organizational change exerts demand on both the organization and the employees (Grunberg, Moore and Greenberg, 2001).

It is noted that employees react in different way to organizational change (Barger and Kirby, 1995). Some employees may see change as an opportunity for self-development and in turn bring increased satisfaction. Others may resist even to a minor change. Consequently, the implementation of TQM will likely influence the work-related outcomes especially employees' job satisfaction.

Empirically, previous studies on the relationship between TQM practices and job satisfaction have demonstrated favorable and significant results. In a study conducted by Morrow (1997), three core TQM principles, that is, customer focus, continuous improvement and teamwork, were used to examine the link between the implementation of TQM principles and work-related attitudes such as job satisfaction, communications and perceptions of the work environment. Using a sample of 2,249 employees of a large organization, the research indicated that soft TQM principles have desirable consequences on work-related outcomes.

Yang (2006) concluded from his empirical study on Taiwanese high-tech companies that TQM complemented with HRM practices led to improvement in the satisfaction and quality awareness of employees. HRM practices such as training and education, incentive compensation, and employee development are dominant in producing the positive outcome.

Ooi et al. (2007b) conducted a research to examine 230 employees' perceptions of TQM practices and its implications on job satisfaction within a large Malaysian electronics firm.

The findings revealed that soft TQM practices such as organizational trust, customer focus, organizational culture and teamwork have significant effects on job satisfaction.

Similarly, in another study by Ooi et al. (2008) to investigate TQM practices and its relationship with production workers' job satisfaction in three major electrical and electronics companies in Malaysia, it was evidenced that there was a significant improvement in job satisfaction among production workers particularly when teamwork was perceived as a major TQM practice.

In a recent study, using a sample of 201 employees across 23 private-sector companies in Australia, Prajago and Cooper (2009) revealed that people-related aspects of TQM practices were positively associated with employees' job satisfaction.

Thus, the following proposition is proposed:

P_1: People-related TQM practices are positively associated with job satisfaction.

Relationship between TQM practices and turnover intention

It is of utmost importance to note that substantial empirical studies have been conducted regarding TQM practices that affect employees' turnover intention. For instance, Sommer and Merritt (1994) conducted a pre-test-post-test field study at a large rehabilitation hospital showed significant improvements in work attitudes that included job satisfaction, organizational commitment, group climate and competitiveness for TQM training recipients after one year implementation of TQM. Furthermore, a significant finding of the study showed that the turnover intention during that period had reduced almost 10%.

In another survey, Gardner and Carlopio (1996) used the sample of 228 employees of a large bank in Australia to study the employees' affective reactions that included job satisfaction, commitment, and turnover intention, towards organizational quality initiatives. The results indicated that employees' participation of organizational quality initiatives enhanced the employees' affective response and led to higher job satisfaction and greater intention to stay.

Guimaraes (1996; 1997) noted that the implementation of TQM has brought favorable changes to the working environment and consequently employees experienced increased satisfaction and posed lower turnover intention within the organization. In the similar vein, Jun et al. (2006) investigated the impact of TQM practices towards employee satisfaction and loyalty at two leading maquiladora companies that have implemented TQM for a long period.

The result indicated that HR-focused TQM practices such as employee empowerment, teamwork, and employee compensation, had positive and significant influence on employee satisfaction that further led to a higher level of employees' loyalty towards their companies and indirectly lower the turnover intention of employees.

All these studies are further supported by Ooi et al. (2006) with their findings that identified TQM practices, particularly soft TQM practices, such as customer focus, organizational trust, organizational communication, employee involvement and empowerment played a significant role in positively improving employees' propensity to remain.

Hence, it is proposed that:

P_2: People-related TQM practices are negatively associated with turnover intention.

Relationship between job satisfaction and turnover intention

Job satisfaction-turnover intention relationship has been found to be significant in studies among employees across industries and professions. Job satisfaction as a central factor in explaining employees' intention to leave

has gained much empirical and theoretical support (Peters et al., 1981; Mowday, Koberg and McArthur, 1984; Hom et al., 1992; Hellman 1997). All these studies have been strongly supported by a meta-analysis undertaken by Tett and Meyer (1993) that showed a mean correlation of -0.58 between job satisfaction and intention to quit. In addition, Hom et al. (1992) showed a mean correlation of -0.49 between the two variables.

In another study, Boselie and Wiele (2002) concluded from its 2300 survey of employees in The Netherlands that employees with positive perceptions on the TQM/HRM practices demonstrated higher level of overall satisfaction and lower tendency to resign from their jobs. Their study showed a correlation matrix of -0.38 between the employee satisfaction and turnover intention. The result confirmed that higher level of employee satisfaction is correlated with lower tendency to leave and change employer. It is of great interest to note that many researchers have also theorized the relationship between job satisfaction and actual turnover (Bluedorn, 1982; Griffeth et al., 2000).

Thus, the following proposition is proposed:

P_3: Job satisfaction is negatively related to turnover intention in the firm.

CONCEPTUAL RESEARCH FRAMEWORK

The aforementioned literature review provides the foundation for the establishment of a conceptual research framework to examine the effects of TQM practices on job satisfaction and turnover intention. The tridimensional relationship between people-related TQM practices, job satisfaction and turnover intention and the summary of the hypotheses developed are illustrated in Figure 1. People-related TQM practices are modelled as having direct effect on turnover intention in the organization and an indirect effect on turnover intention in the organization through job satisfaction. The proposed model shed new horizon of understanding for organizations which practice TQM to be aware of the substantial influence of people-related TQM practices on employees' job satisfaction and intention to leave the organization. The model proposes that higher job satisfaction and inversely lower turnover intention will be prevalent in organizations where greater extent of people-related TQM practices is present.

THEORETICAL IMPLICATION

This study has a potential contribution in the TQM literature by providing a better understanding of the effects of TQM practices, specifically, people-related TQM practices, on the improvement of employees' satisfaction, particularly, job satisfaction and turnover intention. This study will extend the limited previous research conducted related to this area whereby the conceptual model forms a theoretical basis for the analysis of the linkages between the three variables. It brings to spotlight the employee focus of TQM philosophy and strikes a balance in the TQM research domain that predominantly covers on the implications of TQM practices on organizational performance.

MANAGERIAL IMPLICATION

Employees' job satisfaction and loyalty towards an organization will create significant value to the organization. Thus, it is inevitable for management to analyze the effects of implementation of people-related TQM practices on job satisfaction and turnover intention. The research model will assist the management to identify which aspects of people-related TQM practices that have influence on employees' work attitudes. It also brings awareness to the management to constantly appraise their TQM implementation to be congruent with the promotion of quality of work life among the employees. As such, employees will be more likely to contribute wholeheartedly towards better performance and this will allow them to experience higher level of job satisfaction, hence resulting in lower turnover rate within the organization.

Conclusion

This study contributes to the TQM literature domain by establishing the structural linkages between people-related TQM practices and employees' job satisfaction as well as their turnover intention. Although people-related TQM practices have a substantial impact on employees' attitudes and performance towards their jobs and the organization, relatively few attempts have been made to analyze the linkages between TQM practices and job satisfaction and intention to remain. Thus, this study aims to build a conceptual model for the implementation of TQM principles in measuring job satisfaction and turnover intention. This study proposes a model to analyze the degree of leadership, level of training and development, degree of employee empowerment, extent of employee involvement, level of teamwork as well as the impact of reward and recognition in increasing the job satisfaction and turnover intention among the employees. These are the crucial factors that synergize employees' work outcomes with organizational excellence that leads to sustainable and successful TQM implementation. It is expected that positive perception of employees towards people-related TQM practices will bring about higher job satisfaction and lower turnover intention. This study is a preliminary attempt to investigate the relationship between people-related TQM practices and job satisfaction and turnover intention. Hence, to test and validate the model, further research will be conducted using Structural Equation Modelling (SEM) analysis. At present, the questionnaire is being designed to collect data from Malaysia's electrical and electronics (E&E) firms, in order to confirm the proposed framework shown in Figure 1
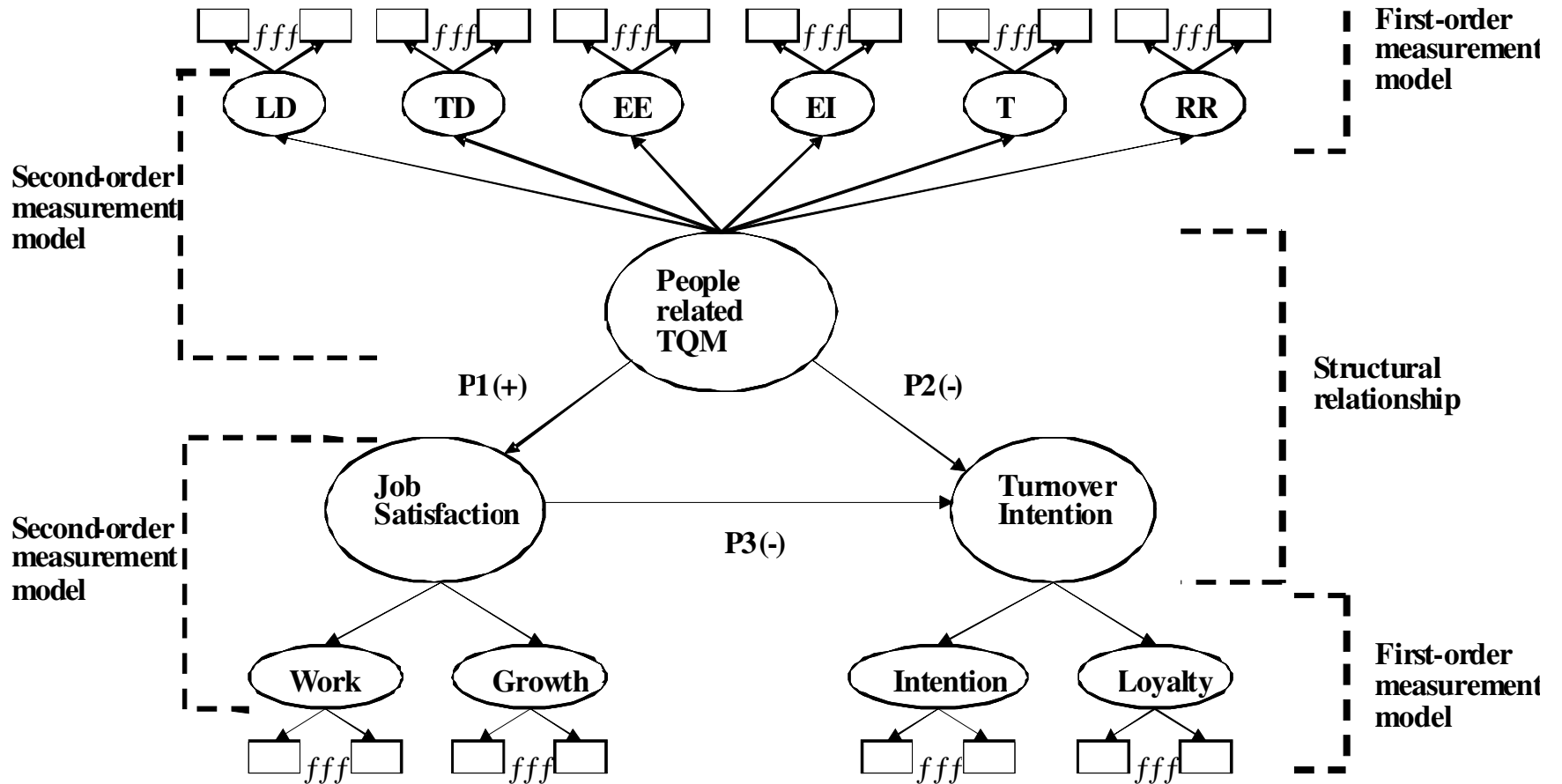
Figure 1. Tridimensional relationship between people-related TQM practices, job satisfaction and turnover intention and the summary of developed hypotheses.
LD = Leadership; **EI** = Employee Involvement; **TD** = Training and Development; **EE** = Employee Empowerment; **TW** = Teamwork.

and its propositions that was previously listed. The outcomes obtained will be reported in a future article.

REFERENCES

Amah OE (2009). "Job satisfaction and turnover intention relationship: The moderating effect of job role centrality and life satisfaction". Res. Pract. Hum. Resour. Manage., 17(1): 24-35.

Arnold HJ, Feldman DC (1982). "A multivariate analysis of the determinants of job turnover". J. Appl. Physiol., 67: 350-360.

Bluedorn AC (1982). "A unified model of turnover from organizations". Hum. Relat., 35: 135-153.

Barger NJ, Kirby LK (1995). The Challenge of Change in Organizations, Davies-Black Publishing, Palo Alto, CA.

Baron JN, Hannan MT, Burton MD (2001). "Labour pains: Change in organizational models and employee turnover in your high-tech firms". Am. J. Sociol., 106(4): 960-1012.

Boselie P, Wiele TVD (2002). "Employee perceptions of HRM and TQM and the effects on satisfaction and intention to leave", Manag. Serv. Qual., 12(3):165-72.

Brah SA, Wong JL, Rao BM, (2000). "TQM and business performance in the service sector: a Singapore study". Int. J. Oper. Prod. Manage. 20(11): 1293-1312.

Burke RJ, Graham J, Smith FJ (2005). "Putting the customer second". TQM Mag., 17(1): 85-91.

Chang, CS, Chang HH (2007). "Effects of internal marketing on nurse job satisfaction and organizational commitment: example of medical centers in Southern Taiwan". J. Nurs. Res., 15(4): 265-274.

Cranny CJ, Smith PC, Stone EF (1992). Job satisfaction: How people feel about their jobs and how it affects their performance, Lexington Books, New York, NY.

Crosby P (1979). Quality is Free, McGraw Hill, New York.

Deming WE (1986). Out of the Crisis, Cambridge University Press, Cambridge, MA.

Feigenbaum AV (1983). Total Quality Control, 3rd ed., McGraw-Hill, New York, NY.

Fishbein M, Ajzen I (1975). Belief, attitude, intention, and behaviour: An introduction to theory and research, Reading, NA: Addison-Wesley.

Flynn BB, Schroeder RG, Sakakibara S (1994). "A framework for quality management research and an associated measurement instrument". J. Oper. Manage. 11(4): 339-366.

Fotopoulos CB, Psomas EL (2009). "The impact of "soft" and "hard" TQM elements on quality management results". Int. J. Qual Reliab. Manage., 26(2): 150-163.

Gardner D,Carlopio J (1996). "Employee affective reactions to organizational quality efforts". Int. J. Qual. Sci. 1(3): 39-49.

Garvin DA (1983). "Quality on the line", Harv. Bus., Rev., 61: 64-75.

Greenberg J, Baron RA (1997). Behaviour in organizations: Understanding and managing the human side of work, 6th ed., Prentice-Hall, New Jersey.

Gregory DM, Way CY, LeFort S, Barrett BJ, Parfrey PS (2007). "Predictors of registered nurses' organizational commitment and intent to stay". Health Care Manage. Rev., 32(2): 119-27.

Griffeth RW, Hom PW, Geatner S (2000). "A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium". J. Manage. 26(3): 463-489.

Grunberg L, Moore SY, Greenberg E (2001). "Differences in psychological and physical health among layoff survivors: the effect of layoff contact". J. Occup. Health Psychol. 6(1): 15-25.

Guimaraes T (1996). "TQM's impact on employee attitude", TQM Mag., 8(5): 20-5.

Guimaraes T (1997) "Assessing employee turnover intention before/after TQM". Int. J. Qual. Reliab. Manage., 14(1): 46-63.

Harber D, Marriot F, Idrus N (1991). "Employee participation in TQC: the effect of job levels on participation and job satisfaction". Int. J. Qual. Reliab. Manage., 8(5): 35-54.

Harter JK, Schmidt FL, Hayes TL (2002). "Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes; a meta-analysis". J. Appl. Psychol. 87(2): 268-279.

Hellman CM (1997). "Job satisfaction and Intent to leave". J. Soc. Psychol., 137(6): 677-89.

Huselid MA (1995). "The impact of human resources management practices on turnover, productivity and corporate financial performance". Acad. Manage. J. 38(3):635-672.

Hom PW, Caranikas WF, Prussia GE, Griffeth RW (1992)."A meta-analytical structural equations analysis of a model of employee turnover", J. Appl. Psychol., 77: 890-909.

Hoogervorst JAP, Koopman PL, van der Flier H (2005) "Total quality management: the need for an employee-centred, coherent approach". TQM Mag., 17(1): 92-106.

Irvine DM, Evans MG (1995), "Job satisfaction and turnover among nurses: integrating research findings across studies". Nurs. Res., 44(4):246-53.

Ishikawa K (1985). What is Total Quality Control: The Japanese Way, Lu, D.J. (trans.), Prentice-Hall, London.

Jimenez DJ, Costa MM (2009). "The performance effect of HRM and TQM: a study in Spanish organizations". Int. J. Oper. Prod. Manage., 29(12): 1266-1289.

Jun M, Cai S, Shin H (2006). "TQM practice in Maquiladora: antecedents of employee satisfaction and loyalty". J. Oper. Manage. 24(1): 78-102.

Juran JM (Ed.) (1988). Quality Control Handbook, 4th eg., McGraw-Hill, New York, NY.

Karia N, Asaari MHAH. (2006), "The effects of total quality management practices on employees' work-related attitudes". TQM Mag., 18(1): 30-43.

Kivimaki M, Kalimo R (1994). "Contributors to satisfaction with management in hospital wards". J. Nurs. Manage., 2(5): 225-34.

Lam SK (1995), "Quality management and job satisfaction: an empirical study", Intern. J. Qual. Reliab. Manage. 12(4): 72-78.

Lam SK (1996). "Total quality management and its impact on middle managers and front-line workers". J. Manage. Dev., 15(7):37-46.

Lambert EG, Hogan NL, Barton SM (2001). "The impact of job satisfaction on turnover intent: A test of a structural measurement model using a national sample of workers". Soc. Sci. J., 38: 233-250.

Lau HC, Idris MA (2001). "Research and concepts: the soft foundation of the critical success factors on TQM implementation in Malaysia". TQM Mag., 13(1): 51-60.

Lee TW, Mowday RT (1987). "Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover", Acad. Manage. J., 31(5): 721-743.

Lin B, Clousing J (1995). "Total quality management in health care: a survey of current practices". Total Qual. Manage. J., 6(1): 69-78.

Lin B, Ogunyemi F (1996). "Implications of total quality management in federal services: the US experience". Int. J. Pub. Sec. Manage., 9(4): 4-11.

Locke EA (1976). "The nature and causes of job satisfaction: role of negative affectivity", Handbook of Industrial and Organizational Behavior, Rand, Chicago, IL, pp. 1297-3491.

Luthans F (1995). Organizational Behavior, 7th ed., McGraw-Hill, New York, NY.

McNeese-Smith DK (1997). "The influence of manager behavior on nurses' job satisfaction, productivity, and commitment". J. Nurs. Adm., 27(9): 47-55.

Miyagawa M, Yoshida K (2005). "An empirical study of TQM practices in Japanese-owned manufacturers in China", Int. J. Qual. Reliab. Manage., 22(6): 536-553.

Mobley WH (1977). "Intermediate linkages in the relationship between job satisfaction and employee turnover". J. App. Psychol., 62: 237-240.

Morrow PC (1997). "The measurement of TQM principles and work-related outcomes". J. Organ. Behav., 18(4): 363-96.

Morrison CM, Rahim MA (1993). "Adopt a new philosophy: the TQM challenge". Total Qual. Manage., 4(2): 143-149.

Mowday RT, Koberg CS, McArther AW (1984). The psychology of the withdrawal process: A cross-validation test of Mobley's Intermediate linkages Model of Turnover in two samples, Acad. Manage. J., 27: 79

Ooi KB, Arumugam V, Loke KY, Lorraine SV (2006). "Relationships of TQM practices and employees' propensity to remain: an empirical case study". TQM Mag., 18(5): 528-541.

Ooi KB, Arumugam V, Safa MS, Bakar NA (2007a) " HRM and TQM: association with job involvement". Pers. Rev., 36(6): 939-62.

Ooi KB, Bakar NA, Arumugam V, Vellapan L, Loke KY (2007b). "Does TQM influence employees' job satisfaction? An empirical case analysis". Int. J. Qual. Reliab. Manage. 24(1): 62-77.

Ooi KB (2009). "TQM and Knowledge Management: Literature review and proposed framework". Afr. J. Bus. Manage. 3(11): 633-643

Ooi KB, Arumugam V, Teh PL, Chong AYL (2008). "TQM practices and its association with production workers". Ind. Manage. Data Syst., 108(7): 909-927.

Organ DW, Ryan K (1995). "A meta-analytic review of attitudinal and dispositional predictors of organizational citizen behavior", Personal Psycho., 48(4): 775-802.

Peters L, Nhagat R, O'Connor EJ (1981). "An examination of the independent and joint contribution of organizational commitment and job satisfaction on employee intention to quit". Group Organ. Stud., 6: 73-82.

Porter LW, Steers RM, Mowday RT (1974). "Organizational commitment, job satisfaction, and turnover among psychiatric technicians". J. App. Psychol., 59(5): 603-609.

Prajogo ID, Sohal SA (2004). "Transitioning from total quality management to total innovation management: an Australian case". Int. J. Qual. Reliab. Manage., 21(8): 861-875.

Prajogo DI, Cooper BK (2009). "The effect of people-related TQM practices on job satisfaction: a hierarchical model", Production Planning & Control, First published on: 16 September (iFirst), 1-10.

Price JL (2001). "Reflections on the determinants of voluntary turnover". Int. J. Manpower, 22(7): 600-624.

Rousseau L (1984). "What are the real costs of employee turnover?". CA Mag., 117: 48-55.

Singh PI, Smith A (2006). "An empirically validated quality management measurement instrument", Benchmarking. Int. J. 13(4): 493-522.

Sit WY, Ooi KB, Lin B, Chong AYL (2009) "TQM and customer satisfaction in Malaysia's service sector". Ind. Manage. Data Syst., 109(7): 957-75.

Sommer SM, Merritt DE (1994). "The impact of a TQM intervention on workplace attitudes in a health-care organizations". J. Organ. Change Manage., 7(2): 53-62.

Sousa-Pouza A, Sousa-Pouza AA (2000). "Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction". J. Socio-Econ., 29: 517-38.

Spector PE (1997). Job Satisfaction: Application, Assessment, Causes and Consequences, Sage, London.

Steel RP, Ovalle, NK (1984). "A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover". J. Appl. Psychol., 69: 673-686.

Tett RP, Meyer JP (1993). "Job satisfaction, organizational commitment, turnover intentions and turnover; path analyses based on meta-analytical finding". Pers. Psychol., 46: 259-93.

Vouzas F, Psyhogios AG (2007). "Assessing managers' awareness of TQM". TQM Mag., 19(1): 62-75.

Wilkinson A, Marchington M, Daleuman B (1994). "Manufacturing more effective TQM: Implications for the Management of Human Resources". Res. Pract. Hum. Resour. Manage., 2(1): 69-88.

Yang CC (2006). "The impact of human resource management practices on the implementation of total quality management: an empirical study on high-tech firms". TQM Mag., 18(2): 162-173.

Yeh YJ (2003). "Implementing a sustainable TQM system: employee focus". TQM Mag., 15(4): 257-265.

Zhang ZH, Waszink AB, Wijngaard J (2000). "An instrument for measuring TQM implementation for Chinese manufacturing companies", Intern. J. Qual. Reliab. Manage., 17(7): 730-755.