

The effect of autonomy, training opportunities, age and salaries on job satisfaction in the South East Asian retail petroleum industry

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Abstract

South East Asian petroleum retailers are under considerable pressure to improve service quality by reducing turnover. An empirical methodology from this industry determined the extent that jobs characteristics, training opportunities, age and salary influenced the level of job satisfaction, an indicator of turnover. Responses are reported on a random sample of 165 site employees (a 68 per cent response rate) of a Singaporean retail petroleum firm. A restricted multivariate regression model of autonomy and training opportunities explained the majority (35.4 per cent) of the variability of job satisfaction. Age did not moderate these relationships, except for employees >21 years of age, who reported enhanced job satisfaction with additional salary. Human Capital theory Life Cycle theory and Job Enrichment theory are invoked and explored in the context of these findings in the South East Asian retail petroleum industry. In the South East Asian retail petroleum industry, jobs providing employees with the opportunity to undertake a variety of tasks that enhanced the experienced meaningfulness of work are likely to promote job satisfaction, reduce turnover and increase the quality of service.

Keyword: Job satisfaction, job characteristics, training opportunities, age, salary, retailing.

Introduction

This study revisits a classic topic in the field of occupational psychology, labor turnover in the services industry. Retaining valued employees has become a pervasive goal of retail firms, as retail employee turnover remains amongst the highest of all job families, ranging from a disturbing 20 per cent (Huselid and Day, 1991) to a staggering 263 per cent (Good, Page and Young, 1996). Examining the various factors that lead to turnover in the retail industry, including the corrective measures to take, therefore assumes high significance as it has important implications for competitiveness in this industry (Hamer, 2007; Hendrie, 2004).

Over time a number of factors have consistently been linked to job turnover. These include organizational commitment, comparison of alternatives and intention to quit. Job satisfaction has also constantly emerged as a factor responsible for increasing or decreasing employee turnover (Hom and Griffeth, 1995; Griffeth, Hom and Gaertner, 2000; Macky and Boxall, 2007). Empirical reexaminations of job satisfaction identify various human resource (HR) practices that can lead to job satisfaction. This is not only because these relationships are poorly understood, but also because these have implications for organizational outcomes such as turnover and productivity. Specifically, it is well worth examining how job satisfaction impacts turnover, and also identifying which of the HR practices are likely to have maximum impact on job satisfaction (Rayton, 2006).

This study to re-examines the validity of a classic model of job enrichment, the Job Characteristics Model (JCM) proposed by Hackman and Oldham (1975, 1980) that predicts jobs characterized by skill variety, task identity, task significance, autonomy and feedback will lead to job satisfaction. This is achieved through enabling critical psychological states, including, experienced meaningfulness of work, experienced responsibility for outcomes of work, and the knowledge of the actual results of work activities (Hackman and Oldham, 1975, 1980).

An *Integrated Model of the Relationships Between Job Characteristics, Training Opportunities, Age and Job Satisfaction* is proposed and tested using a full and restricted multivariate regression model to explain the variability in job satisfaction, with specific reference to the retail petroleum industry in Singapore.

Scholarly impetus for this study was borne out of seminal work by Walton (1985) and Lawler (1986). This thinking impacted on the popular management writings and study of high-performance work systems by Becker and Huselid (1998). Later, Wood and Wall (2007) noted that this earlier work on high-involvement management practices, with its emphasis on employee involvement, job enrichment and intrinsic motivation, had laid the foundation for empirical work on HR management–performance studies. Variables tested in these studies have been de-emphasized in recent empirical literature in favour of extrinsic motivators such as pay, recruitment and selection, and compensation.

This decreased emphasis on employee involvement is even more pronounced in resource based conceptualizations of work (Barney, 1991; Barney et al. 2001) which advocates the importance of acquiring skills and knowledge, with employee involvement playing a relatively less important role. Therefore, a pressing need exists to reexamine the impact of intrinsic job satisfaction motivators, such as job enrichment and their impact on performance, simultaneously with other HR practices. Besides identifying interaction effects and synergies between varied practices comparative impacts may be discerned (Wood and Wall, 2007).

Although the JCM is among the most cited in HR literature, and the significance of job design and job enrichment is well recognized, there is a need to re-examine the key relationships predicted by the JCM in contemporary organizations. These are yet to be tested in combination

with varied contextual factors, particularly in the service sector to identify whether the relationships predicted by the model still holds true (DeVaro et al, 2007; Parker et al. 2001). For example, recent literature suggests that there is a need to take a holistic perspective by examining multiple variables in addition to those specified by JCM. In particular, including both individual and contextual factors is an improvement over earlier studies which have typically examined organizational outcomes such as job satisfaction from a compartmentalized perspective (Hon and Rensvold, 2006; Macky and Boxall, 2007; Wright and Geroy, 2001; Dodd and Ganster, 1996). As noted by Parker et al. (2001, p. 417):

There has been insufficient attention (in job design theory) to the mechanisms or processes that underpin the link between work characteristics and outcomes, as well as limited consideration of the contingencies likely to moderate those links. Quite simply, existing (job-design) theory is under-specified and relatively context-insensitive.

Thus, developing extended frameworks of JCM requires careful consideration of contextual factors in contemporary settings, specifically in emerging economies such as Singapore.

Various contextual factors merit attention when examining job satisfaction and turnover in contemporary organizations. For example, drawing from the tenets of social exchange theory a considerable amount of research has focused on the significance of investing in employee learning and development (Blau, 1964a; Emerson, 1976). Recent empirical work by Aragon-Sanchez et al. (2003) has provided evidence of productivity increases as a direct outcome of training investments and expenditures made by organizations. Specifically, it was found that imparting job specific skills through on-the-job training led to increased employee involvement, quality and productivity. However, there is very limited empirical literature to support the significant impact of training and development on job satisfaction, turnover and other economic outcomes for organizations (Georgellis and Lange, 2007; Lee and Bruvold, 2003; Aragon-Sanchez et al. 2003), particularly among retail employees (Choo and Bowley, 2007). This indicates a fresh look into the benefits of training and developing employees in the retail petroleum industry is warranted.

From a theoretical perspective this study explores the relevance of Human Capital theory in a different context (Sullivan and Sheffrin 2003), the retail petroleum industry. Human capital, developed through training and experience related to jobs, is necessary to improve the quality of service in the retail petroleum industry. There is, for example, evidence to indicate that organizations excellence can only be achieved if training interventions are introduced in conjunction with social factors such as trust, communication, feedback, type of supervision, appropriate performance management and reward systems.

There is considerable merit in examining training impact holistically and in combination with other individual and job-related variables. Besides physical factors, such as infrastructural support, technical training; strategically aligned organizational structures are needed for this effect to be evident (Wright and Geroy, 2001). But further validation is required from other industries, particularly with regard to impact of training on performance and job attitudes (Lee and Bruvold, 2003; Sturdy, 2000).

No research has included the role of age and salary as mediators of job satisfaction in this context, although there is some recent evidence to indicate that age and salary may have important implications on how people respond to HR interventions. These potentially include training and development and the subsequently impacts organizational outcomes, such as job satisfaction and performance (Georgellis and Lange, 2007; Rayton, 2006). Specifically, HR interventions such as training and development impact job performance only when they are able

to raise the self-esteem of employees (Arnolds and Boshoff, 2002). There is evidence to indicate that younger and older employees differ substantially with regard to their need for self-actualization and therefore opportunities for skill development like that provided through training opportunities have differing implications for self-esteem (Arnolds and Boshoff, 2002). Life Cycle theory can be invoked here to explain the proclivity of employees to seek ‘greener pastures’ if skills and knowledge are not commensurate with their job enrichment (Levinson 1978; Levinson and Levinson, 1996).

National culture is another key contextual factor that merits attention as theories and findings in job design are predominantly from the West. Cultural differences in employee responses to job enrichment remains an under searched area (Parker et al. 2001). A related and pertinent debate currently ensuing in HR literature is whether it would be logical to merge the available conceptualizations of HR practices in the Asia-Pacific region, notably China, Hong Kong, Japan, Singapore, Indonesia and Malaysia to form an Asia-Pacific HR model.

There is some recent evidence to indicate that there could be some level of divergence among HR practices even within the Asia-Pacific region (Warner, 2000) and thus the need for further empirical evidence to support a model of HR in the Asia-Pacific. While several studies into South East Asia workforce practices have demonstrated the capacity of job satisfaction to have a negative impact on turnover intentions (Hendrie, 2004; Honda-Howard and Michiko Homma, 2002; Kyuhwan, 2006), the determinants of job satisfaction, in a modern South East Asian retail petroleum service context, have yet to be investigated contemporaneously in a multivariate study. Therefore, specific data on HR practices and implications of JCM in the Singaporean context examined through the current study will add significant insights to this ongoing debate.

Last, as indicated at the beginning of this section, there is also a strong economic imperative for this study, particularly in the retail sector context. Turnover impacts organizational productivity negatively by increasing costs of recruiting, and training new employees to become productive (Glebbeck and Bax, 2004; Shaw, Delery, Jenkins and Gupta, 1998). Findings from this study are therefore particularly relevant to the retail petroleum industry within a South East Asia context where consumers are not accustomed to self-service. Estimated costs of labour turnover for some licensed retailers’ runs into millions of dollars (Lashley and Rowson, 2000).

The next section critiques the literature on labor turnover in the global retail industry. This is followed by a brief discourse on the Singaporean retail petroleum industry. A review of literature is then provided with specific reference to related contextual factors, as discussed above, that impact job satisfaction. These variables include job characteristics, training opportunities, age, and salary and their implications for turnover. The methodology section outlines the data collection process, the sample and instruments used. Findings and implications for HR policies and practices are discussed in the final section.

Retail industry and labor turnover

Labor turnover in the global retail industry is a matter of concern for academic researchers and industry practitioners. Retail turnover remains amongst the highest for all job families (Huselid and Day, 1991, Good, Page & Young, 1996). From a review of labor turnover in major retail firms, Booth and Hammer (2007) and Hendrie (2004) concluded that labor turnover decreases in the presence of a supportive work environment and work groups, while it increased in proportion to a negative work environment characterized by lack of career development opportunities, training and poor employee recognition. Inadequate training and development opportunities has

also been shown to contribute to turnover in the retail industry (Khatri et al. 2001; Honda-Howard and Michiko Homma, 2002; Kyuhwan, 2006; Rahman et al. 2008).

Retail petroleum industry in Singapore

Singapore is an island city-state experiencing commercial challenges in retailing. This entropy has emerged as a strong player in the South East Asia retail sector, not only because of the growing affluence of Singaporeans but also because of targeted governmental policies and initiatives in the 1970s and 1980s to open up their markets to foreign investment. However, deregulation of the Singaporean economy has resulted in petroleum retailers facing considerable pressure to improve the quality of service. Sociopolitical changes in Singapore have provided opportunities for the expansion of multinational retailers from around the world.

This trend is posing a threat to the existing retailers who have been forced to cut costs to achieve sustainability, especially during periods of recession (Keri, 1993). A report by Cedar Consultants (2009) on the franchises of retail petroleum industry found that the four leading players—Exxon Mobil, Shell, Caltex and British Petroleum—account for over 95 per cent of the retail fuel sales in Singapore. Because of limited physical space in Singapore, there are limited opportunities to expand for existing retailers who are seeking to provide more value added-service in order to attract and retain customers (Cedar Consulting, 2009). In this context, service employees' at these retail petroleum franchises has become a foci as they are uniquely positioned to provide a range of exceptional to awful service to customers.

The retail industry in Singapore is composed of very different markets. The petroleum industry is a very different segment of the retail sector opposed to clothing, fashion accessories or computers. Traditionally age, education, perceived alternative employment opportunities, job hopping and (dis)satisfaction with pay are cited as drivers of turnover. Lack of organizational commitment resulting from a coercive management style has been also been indicated as one of the most important factors for employee turnover in Singaporean retail industry (Khatri et al. 1999). In this context, labor turnover caused by dissatisfaction with poor management is an important issue.

As a labor intensive industry, high turnover rates have a direct impact on the costs and profitability of Singaporean retail petroleum businesses. Turnover rates in Singapore are amongst the highest in Asia, largely because of job hopping attitudes coupled with perceptions of inequity in the workplace in the absence of well established and understood procedures for rewarding employees (Khatri et al., 2001). Turnover is highly undesirable in view of the market pressures to reduce operating costs. The situation has prompted the Singaporean Government to initiate a Workforce Skills Qualifications system to provide opportunities to improve overall service standards by upgrading the skills and qualifications of its employees. In response to the growing challenges to the retail sector and to the overall economy, the Singaporean government has also introduced the Workforce Skills Qualification system to develop job based skill competencies in order to facilitate entry and subsequent integration into the local workforce.

Further, the Singaporean retail petroleum industry continues to grow, albeit more slowly, as an industry despite the Global Financial Crisis of 2008/9. Growing affluence amongst Singaporeans has resulted in more people owning cars; 550,455 in 2008 up from 375,217 in 1998 (Land Transport Authority, 2006). As Singapore continues to develop new housing estates, the demand for petrol stations continues to increase. With new petrol stations comes the concomitant demand for more retail employees to operate these businesses. The Singaporean government is a long-term advocate of human capital development solutions to labor market

demand. They acknowledge that the retail industry's productivity is only 40 per cent of the national norm and lags behind South East Asia direct competitors, such as Hong Kong. A need to increase productivity and increase the skills and wages of retail employees is recognized (Singapore Government, 2011).

The retention of valued employees has become a pervasive goal of Singaporean petroleum retailers. Therefore, it follows that attempts to discern the root cause of turnover in the Singaporean retail industry has the potential to offer useful insights for human capital development in emerging South East Asian economies. Specifically, the extent to which job characteristics, training opportunities, age and salary of employees contribute to job satisfaction, (a strong indicator of turnover) among retail employees needs to be determined, as these impact on the quality of service provided.

In the ensuing review of the literature, several studies were examined to ascertain the capacity of job satisfaction and job characteristics to negatively impact turnover intentions.

Job satisfaction

Organizational behavior theorists have extensively researched the motivational aspects of work attitudes such as job satisfaction, a multidimensional construct that is strongly influenced by disposition and mood. Hoppock (1935) initially conceived of job satisfaction as the aggregate of dispositional and situational influences. Several decades of research since Hoppock's work informed the conceptualization of job satisfaction as a person's cognitive appraisal of the working environment (Organ and Near, 1985).

Consistent with this view is Locke's (1776: 1299) classical definition of job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience". Ten years later, Motowidlo et al., (1986: 176), defined self-reported job satisfaction as "judgments about the favorability of the work environment." Others have suggested that job satisfaction represents the positive emotional and cognitive reactions a person has towards a job (Oshagbemi, 1991).

Job satisfaction may be divided into two elements: intrinsic and extrinsic. Intrinsic job satisfaction refers to the internal state associated with characteristics inherent in a job, such as utilization of skills, amount of job complexity and opportunities for control, amount of responsibility, and challenges (Brayfield and Rothe, 1951; Clark et al. 1996; Clegg et al. 1987; Koestner et al. 1987). Extrinsic job satisfaction refers to an external state contingent upon aspects of a job, such as pay, working conditions, industrial relations, conditions of employment, hours of work and job security (Brayfield and Crockett, 1955; Brayfield and Rothe, 1951).

Intrinsic and extrinsic job satisfaction is positively intercorrelated but do not indicate a conceptual duality (Herzberg et al. 1959). Satisfaction with the content of a job has been found to be the main factor that explained overall job satisfaction (Groot and Maasen, 1999).

Job characteristics

An ever growing body of literature has investigated the impact of possible workplace variables on the determinants of job satisfaction; the most cited being the JCM (Hackman and Oldham, 1976, 1980), an outgrowth of Herzberg's two factor theory (Herzberg, et al. 1959). The JCM predicts that enriched jobs; characterized by skill variety, task identity, task significance and particularly autonomy and feedback led to increased job satisfaction and especially for those individuals who have a higher desire for growth and achievement. As suggested by Herzberg et al. (1959), empowered employees were more prone to give suggestions for improving workplace

productivity, as opposed to requiring money and recognition. Intrinsic factors such as a desire to overcome frustration at work and improve the success of the organization and personal satisfaction obtained from seeing their idea implemented, motivated employees to contribute ideas.

The significance of job design is well established in the HR literature with several researchers having proposed that job characteristics and job design have varying impacts on the levels of job satisfaction of employees (Crede, et al. 2007; De Varo et al. 2007; Parker et al. 2001; Rabinowitz and Hall; 1977; Sims, Sziagyi and Keller, 1976). According to the JCM, skill variety, task identity, task feedback and autonomy, have a linear function with job satisfaction. There is evidence that jobs which provide the opportunity to undertake a variety of tasks and engage in meaningful work promoted job satisfaction and motivation (Lambert,1991). Later research provides evidence that jobs characterized by skill variety, where employees have autonomy in choosing procedures, where task feedback was received, and when employees were involved in a complete module of work or service is positively related to job satisfaction (Taber and Alliger, 1995).

Lee-Ross (2002) tested all the specified relationships in the JCM (Hackman and Oldham, 1976, 1980). As predicted, the core job dimensions strongly correlated with affective outcomes and critical psychological states, with the strongest correlation reported between feedback and growth satisfaction and the weakest between task significance and growth satisfaction. The job characteristics–job satisfaction relationship was later confirmed by Thomas et al. (2004) who reported that skill variety, autonomy, task identity and task feedback were the most significant predictors of job satisfaction. These factors were important irrespective of differences in age, gender, occupation, organization or job type.

Despite all the research into the JCM, one specific criticism of the model itself, and the research that followed, is the lack of attention paid to the individual or contextual factors that may moderate the predicted relationships (Parker et al. 2001). Dodd and Ganster (1996) provided evidence that contextual factors such as type of supervision, type of co-workers, and satisfaction with pay, also played a moderating role on job satisfaction. However, the holistic impact of specific job characteristics on actual work behavior such as turnover, absenteeism and work effectiveness has not been fully supported in the extensive research that followed the JCM. For example, De Varo et al's (2007) re-examination of the job characteristics model in contemporary organizational contexts in the UK, failed to demonstrate any significant impact of contextual variables on-the-job satisfaction of employees.

Specifically, task variety predicted performance related outcomes more strongly than worker satisfaction (De Varo et al. 2007). These mixed results indicate that more research is justified to test the applicability of the job characteristics in combination with a careful consideration of contextual factors, particularly in contemporary organizations. There is also some merit in proposing an extended framework, with a careful consideration of moderating factors, and applicability of the extended framework in different contexts to establish the validity of the model with regard to work-related outcomes. For example, a study by Huang and Van De Vliert (2003) indicated that intrinsic job characteristics and job satisfaction are moderated by national characteristics. Specifically, job satisfaction was stronger in countries that were richer, more individualistic and wherein power was distributed more equally (Huang and Van De Vliert, 2003).

Based on the preceding findings the following hypotheses are tested in the next section.

Hypotheses

H1: Jobs characterized by high level of skill variety, task identity, task feedback and autonomy, will increase levels of job satisfaction.

Skill Variety

From H1, it was also postulated that jobs characterized by each of the task attributes will have a positive linear influence on job satisfaction. A challenging job characterized by skill variety and opportunities for using a variety of skills and abilities is expected to contribute to job satisfaction (Schwab and Cummings, 1976; Taber and Alliger, 1995). Recent evidence has indicated that less routine jobs and those characterized by a high challenge component, and autonomy, lead to high job satisfaction (Rayton, 2006), providing hypothesis H1a, H1b, H1c, and H1d:

H1a: Jobs with a high level of skill variety will increase levels of job satisfaction.

Task Identity

Tasks with an identifiable beginning and an identifiable end, and the opportunity to be involved with complete modules of work, are also expected to correlate positively with job satisfaction (Hackman and Oldham, 1975, 1980; Taber and Alliger, 1995), leading to the following hypothesis:

H1b Jobs with a high level of task identity will increase levels of job satisfaction.

Task Feedback

Udo et al. (1997) provided evidence that task characteristics, such as decision making authority, interesting and challenging work, feedback and task variety were found to increase job satisfaction and reduce turnover intentions. This finding was supported by Thomas, et al. (2004), Lee-Ross (2002), and Good and Fairhurst (1999) who found feedback to be among the strongest predictors of job satisfaction as it reduced the ambiguity surrounding tasks. Later, Srivastava and Rangarajan (2008) examined the linkage between feedback and satisfaction; those who received positive feedback from their supervisor perceived their jobs as challenging and exhibited higher levels of involvement with their job which led to heightened feelings of job satisfaction. Thus, jobs characterized by task feedback are likely to increase the level of job satisfaction, such that:

H1c: Jobs with a high level of task feedback will increase levels of job satisfaction.

Autonomy

When a job is not closely supervised, it is likely to give a worker a sense of autonomy and personal accomplishment in undertaking tasks. Therefore, a job characterized by a high level of autonomy will be expected to be positively correlated with job satisfaction (Turner and Lawrence, 1965; Taber and Alliger, 1995). Further, Udo et al. (1997) suggested that encouraging freedom to experiment with new methods and tools in organizations could not only enhance job satisfaction, but also reduce voluntary turnover. De Varo et al. (2007) empirically distinguished autonomy as perceived by employees and employers to provide evidence that although both have

an impact on job satisfaction, workers' perceived autonomy had a stronger impact. Evidence by Origo and Pagani (2008) and Thomas et al. (2004) also supported the finding that employees autonomy and the freedom to control their behavior increases intrinsic job satisfaction, so that:

H1d: Jobs with a high level of autonomy will increase levels of job satisfaction.

As indicated in the previous sections, there is a need to examine job satisfaction from a holistic perspective and also to examine the moderating impact played by individual and contextual factors in combination with the key components of the JCM. For example, there is not much literature to indicate how age differences affect job satisfaction (Schmidt and Hunter, 1998). Some influential studies do show that older employees tend to be more satisfied than younger employees. Kalleburg and Loscocco (1983) introduced the concept of developmental aging that examines job satisfaction through the aging process, whereby satisfaction tends to increase through the 30s, level off in the 40s, and increase again during the late 50s. Thus, age is an important variable to be considered which is further substantiated by recent evidence that employee motivation differs significantly as a function of age even when controlling for other socio-demographic factors such as gender, education, and professional tenure, with older employees consistently deriving more satisfaction from intrinsic factors as compared to extrinsic motivators (Inceoglu et al. 2012).

Another example by Sarker et al. (2003) of Thai hotel employees examined whether age and tenure are individual determinants of satisfaction or whether there is an interaction between them. Job satisfaction was found to be constant over the first decade of tenure. After the first decade, job satisfaction was found to rise with tenure, a finding supported by Oshagbemi (2000), although tenure was found to be a better predictor of extrinsic job satisfaction. This could be probably attributed to employees dissatisfied with the intrinsic aspects of the job leaving for better financial and career opportunities.

From the preceding discussion, results indicate that evidence to support the relationship between age and job satisfaction is mixed. Additional empirical evidence is needed to substantiate the relationship between age and job satisfaction in the South East Asia retail context. Further a consideration of the same in combination with the key components of the job characteristics model is an unexplored research area and likely to generate important insights related to moderating factors that may impact the outcomes of job design. A strong and significant U shaped relationship has been found between intrinsic and extrinsic job satisfaction and age with job satisfaction typically rising from the early thirties and reaching its peak at 36 years of age. Older employees derived less satisfaction from their job, possibly because of their life stage and less due to the job itself (Clark, et al. 1996; Georgellis and Lange, 2007).

A longitudinal study of young retail executive trainees by Good and Fairhurst (1999) reported that expectations about all job characteristic variables were unrealistically high when the employees start a job. Both extrinsic and intrinsic job satisfaction a year later was predicted by autonomy, skill variety and feedback. In addition, Origo and Pagani (2008) reported that the positive effects of functional flexibility (operationalized in terms of pay, hours of work, amount of work, job security, promotion prospect and training received) on intrinsic job satisfaction tends to decrease with employee's age with the effect being greatest for younger employees. This argument is consistent with Herzberg, et al's (1959) work which suggested that to yield satisfaction, work must not only be challenging but also be meaningful and personally interesting. Based on these findings, it is hypothesized that young employees (as opposed to

older employees) enjoy jobs that are characterized as more complex and provide achievable challenges, resulting in the next hypothesis:

H2a Young employees will derive greater satisfaction with jobs characterized by higher level of skill variety, task identity, task feedback and autonomy, than older employees.

Training is an integral part of employer–employee relationship. However, few studies have deciphered the complex relationship between job characteristics, training opportunities and job satisfaction, when moderated by age. For example, a study by Groot and Maasen (1999) examined job satisfaction among employees aged 43 and older did not find a significant impact from on-the-job training with job satisfaction. Georgelless and Lange (2007) reported that higher the age, greater the participation in on-the-job training because younger employees who may have had recent training opportunities are unlikely to participate in further training.

Perhaps skill development increases with experience as employees attempt to up skill themselves. Thus, it would be of theoretical and practical interest to establish whether the availability of training opportunities will skew the overall job satisfaction of different age groups of employees. There is evidence to indicate that young employees are likely to remain longer in organizations if they benefit from the training by acquiring key skills (Breen, 1992). Also, Origo and Pagani (2008) reported that the positive impact of training was evident for younger skilled employees, providing the final hypothesis:

H2b With the availability of training opportunities, younger employees are expected to derive higher levels of job satisfaction than older employees.

Researchers have noted that while the impact of training on job satisfaction is well recognized in literature, there is very little attention played to how they interact to impact on productivity. Besides methodological criticisms there is a need to re-examine the significance of training on job satisfaction due to previous research having been conducted with small sample sizes, thus casting doubt on the validity of this research (Georgelless and Lange, 2007).

Some studies have reported that employees who have participated in training are less likely to leave an organization compared to those with no training opportunities (Krueger and Rouse, 1998, Royalty, 1996; Bartel, 1995. Strong correlations were reported by Rowold (2008) on developmental interventions including technical and non technical training, and formal one-on-one coaching sessions, on subsequent job performance, job involvement and job satisfaction. Choo and Bowley (2007) reported that the quality of the training experience, especially the extent to which the content was job specific and the degree to which the training modules were achievable and applicable contributed to job satisfaction. Rowden and Conine (2005) emphasized the significance of informal in addition to formal HR development interventions, such as more on-the-job training, and opportunities for critical reflection, mentoring, coaching and collaborative experiences for enhancing job satisfaction.

Despite this evidence, studies examining the impact of training in other cultures are still warranted (Nikandrou et al. 2008; Ying and Noel, 2004). Theorists have noted the lack of empirical studies on impact of training investments in emerging economies, especially transitional economies, such as Singapore, China, and Malaysia wherein western models of training and development and its related implications may not apply (Ying and Noel, 2004). These authors provide evidence that transitional economies, such as China, that have experienced

substantial economic growth through advances in the industrial sector experience severe skill shortages particularly in state-owned enterprises (SOEs). SOEs are typically disadvantaged in terms of not only the skill levels of the workforce but also technological and training investments which are limited compared to non SOEs.

Differences have also been found in the training orientation of SOEs versus non SOEs with evidence that the focus is clearly skewed towards more individual skill development (as an offshoot of Western models) in response to increasing competition. Likewise, there is some evidence from European countries that the relationship between training investments and performance may not be direct and there is a need to study the impact of training and development investments in alignment with other HR interventions. Both the national factors, such as investments in education and organizational contextual factors, such as performance orientation have been found to play a moderating role on firm performance (Nikandrou et al. 2008). Results revealed that in line with the Western models, training investments in performance oriented organizational cultures yielded higher performance as opposed to that with a more humane orientation.

Further, in countries wherein a higher percentage of GDP is spent on education, the need for organizational investment in skill based training is lower as employees are relatively more skilled when they enter organizations. Results reveal that in such countries investing in the skill development of manpower reveal that strategically aligned and formalized and informed training interventions are more likely to lead to higher job performance (Nikandrou et al. 2008).

Therefore, it is evident that the relationship between training investments and turnover is not straightforward or settled in the literature. While the significance of training investments on job satisfaction is recognized by researchers, there is a need for further empirical research due to a limited understanding of how this investment impacts employee perceptions and attitudes. For example, Lee and Bruvold, draw from social exchange theory to provide empirical evidence from the health care industry that greater the investment in employee development, more the employees perceive that organizations value their contributions besides increasing their employability. This perceived investment in employee development increases employee' commitment to organizations and thus job satisfaction might play a mediating role on the intention to stay in an organization (Lee & Bruvold, 2003), leading to the final hypotheses:

H3 When employees are exposed to training opportunities, they derive higher levels of job satisfaction.

Methodology

In this section the empirical methodology used is described and frequency data provided. A series of empirical hypotheses derived for the extant literature were tested and the results interpreted. *An Integrated Model of the Relationships between Job Characteristic, Training Opportunities, Age and Job Satisfaction* was developed from the literature to re-examine the associations in a contemporary South East Asia workplace, as depicted in Figure 1.

INSERT FIGURE 1

Three main perspectives were examined by the model; the first explores how the four job characteristics–Skill Variety, Task Identity, Task Feedback and Autonomy–influence job

satisfaction; the second examined the relationships between training opportunities and job satisfaction, and the third examined how age moderates the linkages. Salary was not specified in the model tested as this has not been incorporated into previous confirmatory models of the relationships between job characteristic, training opportunities and age although there is some recent evidence to indicate that pay impacts both job satisfaction and organizational commitment positively more than what was thought earlier and hence a needs to be examined the same in a contemporary service contexts (Rayton, 2006). Further, pay has found to impact performance positively for all levels of employees irrespective of whether they are in front line, supervisory or managerial positions although it does so only when other higher order needs such as need for relatedness and capability to develop skills are met (Arnolds & Boshoff, 2002).

Site and sample

All Singaporean retail petroleum station franchisees of a particular reputed petroleum brand supported this study. The researcher worked closely with the various Station Managers to brief them on the objectives of the questionnaire and gain buy-in to encourage employees to participate. Station Managers identified employees with enough English literacy to understand the questionnaire. Participants were informed of the objectives of the study and the procedure for completing the questionnaire by both the researcher and the Station Managers.

Out of the 650 retail employees in 65 retail petroleum stations, 165 from 242 (a response rate of 68 per cent) were randomly selected to participate in this study by completing the questionnaire. This represented 35 per cent of employees at each petrol station. To ensure confidentiality a sealable envelope was provided to insert the completed questionnaire, which was returned directly to the researcher.

Measures

Measures used in this study were consistent with the established theory base in this stream of research and were closely aligned to the constructs being investigated; namely job characteristics (Sims, Sziagyi and Keller, 1976; Pierce and Dunham, 1978), 'Training Opportunities' (Frazis, et al., 2000; Stafford and Duncan, 1980); and 'Job Satisfaction' (Huang and Van De Vliert, 2003). The following identifies the source of these questions (see Appendix 1 for the actual questions).

Job Satisfaction was the dependent variable comprising general satisfaction, and satisfaction with compensation. Seven questions were used to measure Job Satisfaction derived from work by Huang and Van De Vliert (2003) with items such as 'How satisfied are you in being treated with fairness and respect?' A seven point Likert scale was anchored to the descriptors 'Very Dissatisfied' to 'Very Satisfied.'

Job Characteristics included four dimensions—'Skill Variety,' 'Task Identity,' 'Task Feedback' and 'Autonomy'—measured by 17 items in the *Job Characteristics Inventory* developed by Sims et al. (1976). This inventory (Pierce and Dunham, 1978) was chosen over the five dimensions *Job Diagnostic Survey* (Hackman and Oldham, 1975/80) because its internal consistency was judged on the whole to be stronger than *Job Diagnostic Survey*. All 17 items were measured based on a seven point Likert scale ranging either from 'Very Little' to 'Maximum Amount.'

Training Opportunities relate to how often new learning takes place to help individuals do a job better that could lead to improved performance. Two questions were adapted from the study used for measuring training incidences (Frazis, Gittleman and Joyce, 2000); "You are taught a

skill or provided with new information to help you in doing your job better.” (Stafford and Duncan, 1980). A seven point scale ranging from ‘Very Little’ to ‘Very Much’ was used.

Analysis

Age was measured in five age categories (<21, 21–30, 30–40, 40–50 and >50 years of age). Demographics data on age, education level, job level and salary were obtained from the questionnaire. Cronbach’s alpha coefficient (Cronbach, 1984; Price and Mueller, 1986) was calculated for each scale and subscale in the questionnaire to ascertain internal scale reliability (see Table 1) to check for congruence with the underlying dimensions. An internal reliability $\geq .7$ is acceptable but $< .5$ is usually considered unacceptable for most psychological scales which may be reduced to .6 in factor analysis (Hair, Anderson Tatham and Black, 1995; Cronbach, 1984). All composite items loaded .7 or higher, except Skill Variety which was just below (.688) the generally acceptable threshold.

Graphical analysis, using side-by-side box plots, and one way analysis of variance were undertaken to check how the mean of the variables investigated were affected by each of the five age categories. The strength of relationship between age groups and the change in the variables was assessed by both ANOVA significance F test and η^2 accounting for the proportion of variance of the dependent variables that is related to the age factor. As reported in Table 1, except for Skill Variety, the results revealed no evidence of significant difference, even at the highest level of significance, in the variables’ means among age groups at five per cent significance level. Further, because the overall F test was significant for Skill Variety ($F(4,160)=3.064, p=0.018$) post hoc range tests and pair multiple comparisons were conducted to control for type I error.

INSERT TABLE 1 ABOUT HERE

The Levene p values for equal variance homogeneity test are reported in the last column of Table 1. Since the equal variance assumption holds across all age groups, the Tukey procedure was performed to determine which age groups were significantly different from each other. The results revealed that difference in the skill means differs significantly only between ages 21-30 and ages 31-40 ($p=0.31$). Hence, both hypothesis H2 and H4 were rejected at five per cent level as the differences in job characteristic variables and Job Satisfaction among age groups were not deemed significant or due to chance.

The correlation coefficients for all variables are displayed in Table 2 revealing that Job Satisfaction was significantly correlated with Training Opportunities, Autonomy, Skill Variety and Task Identity at $\alpha=0.01$. Task Feedback was correlated at a confidence level of $\alpha=0.05$. Hence, hypotheses H1a, H1b H1d, and H3 cannot be rejected at $\alpha=0.01$ and H1c cannot be rejected only at $\alpha=0.05$.

INSERT TABLE 2 ABOUT HERE

Multiple linear regressions was performed to test Job Satisfaction as an outcome variable for job characteristics, Training Opportunities and four dummy variables accounting for the five age groups. The full model was significant, $F(9,155)=11.37, p=0.000$, and explained 39.8 per cent of the variance in Job Satisfaction. However, results from the regression revealed that age did not impact on the independent variable, or act as a mediating variable on Job Satisfaction as it

ANOVA analyses revealed significant difference in the means of salaries as a function of age group. The corresponding F value (4.820) well exceeded $F_{critical, \alpha=0.05} (df_{num}=4, df_{denom}=160) = 2.43$ with a p-value equal to 0.00107. The third group (30–40) had the highest average salary of (2.8) while the first group (<21) had the lowest salary with (1.5). Conversely, the comparison of Job Satisfaction means by age group, as a factor, showed no evidence of significance. The ANOVA F value (0.44) is well beneath the $F_{critical}$ with a p value equal to 0.779.

Salary had no mediating effect between the investigated variables (Training Opportunities and job characteristic variables) and Job Satisfaction since salary did not affect Job Satisfaction. Next, salary was investigated to ascertain if it acted as a moderator between each of the variables tested and Job Satisfaction. In order to obtain a meaningful interpretation (due to multicollinearity between the variables and their interaction terms) the variables were centred around the mean and normalized to unit variance. Interaction terms between salary and each of the variables were used to detect moderation effects but no significance was found except for the variable Autonomy (p=0.029) and slightly significant with Training Opportunities (p=0.050) as shown:

$$\begin{aligned} \overline{Job\ Satisfaction} = & 0.420\ Training\ Opportunities + 0.266\ Autonomy - .025\ Salary \\ & (.000) \qquad \qquad \qquad (0.001) \qquad \qquad (.692) \\ & 0.150\ Training\ Opportunities * Salary - .176\ Autonomy * Salary \\ & (.050) \qquad \qquad \qquad (.029) \end{aligned}$$

$$N=165, R^2=0.378, dw=1.61, F(5,159)= 19.329, p=0.000.$$

Further, Job Satisfaction was examined to normalize salaries as a function of age categories. For this purpose, a new variable named, Job Satisfaction Per Unit Salary, was introduced by dividing Job Satisfaction by salary. The analysis revealed a significant difference in the means of this new variable as a function of the age group with a corresponding ANOVA F-value (7.20) which well exceeded the critical F-value with a p value equals 0.00002. Hence, it was concluded that there was unique variance between the variables salaries, age and Job Satisfaction.

This finding warranted using more specific analysis extending beyond ANOVA to determine the precise nature of the Job Satisfaction Per Unit Salary variable for each age category. A pairwise multiple comparison supported the test between each pair of means, Job Satisfaction Per Unit Salary variable for the first age category (age <21), which was significantly greater than the other age categories. For employees under 21 years of age there was a pronounced positive linear relationship for salary and a commensurate inverse relationship for Job Satisfaction.

This linear relationship continued for salary for employees until 30-40 years of age then begins to diminish. Means for Job Satisfaction and salary are furthest apart for employees under 21 years of age. From ages 30-40 years there was a close correlation between the means of Job Satisfaction and salary. Significant differences in the means of salaries by age categories were found when Job Satisfaction was normalized to salaries. In particular, the age category (age <21) for Job Satisfaction Per Unit Salary was significant compared to those of the other age categories (21–30, 30–40, 40–50 and >50 years of age).

Results

An Integrated Model of the Relationships Between Job Characteristic, Training Opportunities, Age and Job Satisfaction retested the predicted associations between individual difference for growth need strength and task attributes in a South East Asia work context. A full multivariate regression model consisting of job characteristics, Training Opportunities, and age groups was used to explain the 39.8 per cent of the variability in the dependent variable Job Satisfaction. A restricted model, consisting of Autonomy and Training Opportunities, explained the bulk (35.4 per cent) in the variability of Job Satisfaction. Age did not moderate these relationships except for employees >21 years of age who reported increased Job Satisfaction with incremental salary earned.

The next section considers the implications of these findings.

Discussion

An empirical re-examination was undertaken of the applicability of an extended JCM in the Singaporean retail sector with careful consideration of important contextual factors. Specifically the study determined the extent that jobs characteristics specified in the JCM, training opportunities, age and salary influenced the level of job satisfaction, an indicator of turnover. Of all the job characteristics studied, skill variety, task identity and task feedback combined accounted for 15 per cent of the variability in job satisfaction, a finding supported by earlier studies by Lee-Ross (2002), and Udo, Guinaraes and Igarria (1997). However, in this study, these variables only contributed 2.7 per cent to the overall model. Autonomy was found to be the most significant predictor accounting for 21.7 per cent of the variability in job satisfaction.

This finding was supported by Thomas et al. (2004), Origo and Pagani (2008), and Udo e. al. (1997), who found that the opportunities and freedom to take decisions and experiment in jobs (which equates to more autonomy) provided intrinsic satisfaction to employees. This outcome was also consistent with the studies in the Western context that autonomy was a vital enhancer of job satisfaction (Butler and Parsons, 1989; Molleman and Van Knippenberg, 1995; Williams, 1990). Employee empowerment reflected in organizational practices such as autonomy in decision making, opportunities to be involved in goal setting and involvement in teams and committees that influence decisions have been found to be a stronger predictor of job employee satisfaction than other variables such as salary (Voisard, 2008).

Findings in this study reiterate the importance of providing training opportunities to employees. Training opportunities emerged as the single most important predictor of job satisfaction across all age groups accounting for 32 per cent of the variability in job satisfaction when taken alone and explaining 35.4 per cent of the variability in job satisfaction when combined with autonomy. These findings are supported by Origo and Pagani (2008) and Rowold (2008) who found formal and informal opportunities for training to have a significant impact on both extrinsic and intrinsic satisfaction and job involvement of employees. These results are particularly important as they extend the limited literature currently available on the significance of training and development in job satisfaction among retail employees (Choo and Bowley, 2007).

These findings also lend support to Arnold and Boshoff (2002) who provided evidence that contrary to expectations, satisfaction of growth needs, such as through opportunities for developing new capabilities and opportunities for participation in decision-making, enhances the self-esteem of front-line employees, particularly when approved by their peers, which then has

positive implications for performance. Drawing from these findings Arnold and Boshoff (2002) it may be concluded, on the basis of our results, that training and development interventions have maximum impact on job satisfaction when combined with autonomy through its positive impact on satisfaction of higher order needs such as their self-esteem.

Results of this study further validate the findings from earlier research (Batt, 1999; Parker et al. 2011) within the service sector, which indicates that within highly competitive and uncertain environments such in the Singaporean retail sector, employees who have the autonomy and the requisite skills may be in a better position to serve their customers better, thus contributing to job satisfaction and service excellence.

Lack of training and development opportunities, and recognition of employees has been found to contribute significantly to turnover in the retail industry (Hendrie, 2004; Honda-Howard and Michiko Homma, 2002; Kyuhwan, 2006), a finding also supported by this study. Since training opportunities have been found to be a significant predictor of job satisfaction across all age groups in this study, a case emerges for retail organizations to invest in training and development opportunities across all employee age groups. Findings from this study confirm Parker et al.'s (2001) position that contextual enablers such as training and development interventions must be considered in alignment with features of job design for positive individual and organizational outcomes.

The significance of job enrichment has clear implications for job satisfaction and length of service. The finding that age accounted for less than 1.5 per cent of the variance in the overall model was consistent with earlier findings by Sarker et al. (2003) who found age to have an impact on job satisfaction only when combined with tenure. This implies that people who are satisfied with their job tend to stay longer with the organization, a position supported by Udo et al. (1997) and Oshagbemi (2000). Also, this study supported work by Groot and Maasen (1999) that fulfillment with job content was more important than age and tenure on job satisfaction.

As noted earlier, age did not moderate these relationships between jobs characteristics, training opportunities, age and salary on the level of job satisfaction. Employees <21 years of age reported increased job satisfaction with incremental salary earned. This finding is consistent with recent evidence that salary contributes to overall job satisfaction, particularly among men (Georgellis and Lange, 2007) and the authors contend that the gender difference could probably be attributed to differences in needs, with women being motivated more by alternative mechanisms, such as flexible conditions. Thus from our findings it may be predicted that additional salary available to employees <21 is likely to be highly coveted.

Elasticity of reward for employees >21 years of age was high and remained so until peaking at 30-40 years. For this group there was a close correlation between the means of job satisfaction and salary. Employees over 50 years of age placed less importance on salary. However, this should not be taken to mean that employees 30–50 years of age have less need for salary. Up until the age of 30, employees are attempting to find what kind of work suits them. Hence, labour turnover is much higher among those <30 compared to other age groups (Burgess and Rees, 1998; Boxall et al, 2003).

Findings in this study confirm findings from recent research (Rayton, 2006; Garrido et al. 2005) that satisfaction with pay does impact job satisfaction positively. However the impact may not be as straightforward as earlier thought. There is evidence to indicate that salary can have positive implications for performance only to the extent that self-esteem needs of employees are met (Arnolds and Boshoff, 2002) such as through relatedness in the case of front-line employees. Chen et al. (2003) provide support and an explanation for these findings. These authors used

career stages as a substitute for age to provide evidence that employees at different career stages have distinct career needs which impact the way these employees may respond to career development opportunities.

Further, greater the gap between career needs and career development opportunities, lower the job satisfaction. In case of a gap, lack of job satisfaction and thus turnover intentions was found to be maximal for employees in their early career stages, when they are still establishing their careers, as compared to those in the maintenance stages who are less demanding with regard to career development opportunities as they have reached a stage in their career where they are content to retain what has been achieved thus far. Those in the retirement stage were least affected by the gap as this is a stage when they are already beginning to disengage from their work (Chen et al. 2003). Our findings lend further support to this study conducted with employees working in Research and Development confirms that even for less knowledge intensive sector such as the retail industry, the same argument may apply.

Along similar lines, Life Cycle theory helps explain how employment relationships can endure beyond the short-term. Part of this relationship involves making a good match between person capabilities and the requirement of the job, the 'person-job' fit (Caress, 2005). Some managers in the retail petroleum business consider their employees to be fungible resources that are homogeneous and easily interchangeable. Hence, there is no rational economic reason to invest, for example, in training and developing such employees since they can be readily replaced. From the Life Cycle theory perspective, as a person's knowledge and skill increase, new job challenges are sought. At various transitional points throughout their life some people externalize their internal angst and seek major developmental challenges or change jobs. Failure to provide satisfactory job challenges for people with this mindset will result in dissatisfaction and eventual turnover.

In contrast, advocates of Human Capital theory and practice (Sullivan and Sheffrin, 2003) see a person's store of capabilities as adding economic value to the firm. From this perspective employees are seen as valuable resources deserving of nurturing. Employee attributes are believed to improve employee capabilities through development and job experience. Clearly, retail petroleum employers need to decide what HR strategic choices to make when trying to deal with issues on job satisfaction and turnover.

As noted earlier, older employees reported being more satisfied with their work compared to younger employees. This study showed some support for 'developmental aging' perspective of job satisfaction proposed by Kalleburg and Loscocco (1983). As predicted, job satisfaction tended to increase through the 30s, leveled off somewhat in the 40s, and increased again during the late 50s. Job satisfaction typically rose from the early thirties and peaked around 36 years of age (Clark, et al. 1996). However, specific empirical evidence is still needed to substantiate the relationship between age and job satisfaction in a South East Asia context. Since categorical variables for age were used it was difficult to make definite conclusions confirming these findings. Thus, employees dissatisfied with the intrinsic aspects of the job may leave for better financial and career opportunities. Further, it may be argued that younger (Generation Next) employees are now socialized to expect more from a job, whereas older (Baby Boomers) employees may be more accustomed tolerating unchallenging work. Frustration occurs when there are not enough challenging tasks for younger employees to fulfill expectations.

Relevance of public policy in Singapore

Singapore is a unique island state, a tiny country with a small population and a high cost of living. Singaporeans enjoy world's fourth highest life expectancy of 81.98 years, fractionally below Japan's 82.12 years. A rapidly aging working population and the concomitant low fertility rate means Singaporeans are struggling to afford to retire due to the high cost of living. Many are being forced to work longer just to survive. Singaporeans are increasingly being forced to work longer, and save more in order to enjoy a more comfortable retirement.

In the spirit of Confucian values, the Singapore government has developed public policies to accommodate the specific needs of an ageing population. For example, the Singaporean Inter-Ministerial Committee on Aging Report (1999), Chan (2030, p.1) reported that the nation-state has one of the fastest ageing populations in Asia, with seven per cent over the age of sixty five currently, and expected to increase to nineteen per cent. Policy makers may therefore need to consider ways in which dependency can be reduced by improving the financial security of older employees either by extending the working years or through retirement funds, especially, since Singapore is not a welfare state, as in most South East Asian countries (Chan, 2001).

The Singapore government is very active in promoting human capital development solutions to issues such as increasing productivity and workforce participation. There are important government policy issues and private sector concerns about encouraging older employees to continue to participate in the Singapore retail sector. Results from this study confirm that providing access to training for employees across all age groups is an important policy objective for these retailers. These findings will also be of interest to organizations facing commercial uncertainties faced in general retailing. A recently announced Continuing Education and Training (CET) may contribute to improving the training opportunities for retail employees (Singapore Government, 2011).

When enacted in 2012, the Singapore National Re-Employment Legislation will require employers to offer re-employment to employees beyond the existing retirement age of 62, and eventually to the maximum 67 years of age. An increased Workforce Income Supplement will be paid to older, lower paid employees. Singapore's Workforce Development Agency is urging employers to adopt Re-Employment policies as standard HR practices.

Many older Singaporeans from lower income backgrounds have no choice but to do menial jobs. Unskilled labor in the service sector accounts for the largest number of mature employees. Working in fast food chains, serving tables and clearers at food courts, taxi and truck drivers, office cleaners, and public restroom cleaners are increasingly the fate of post retirees. From wider vista, however, this a trend may spread more widely to countries with aging working populations by cajoling older, unskilled employees back into the service workforce (Wood, 2001).

Future research

As stated by Parker et al. (2001: 433) "reducing work-design theory to a handful of universalistic prescriptions in respect of work characteristics and outcomes might be convenient but it is not realistic." Our study extends Job Enrichment theory by providing important evidence that in addition to the positive impact of key components of the JCM such as autonomy on job satisfaction, employee satisfaction is enhanced when these factors are considered in combination with contextual enablers such as training and development opportunities and adequate salary.

Future research may productively identify the relative contribution of specific formal and informal training opportunities to performance based incentive schemes and other motivational

strategies to increase employee job satisfaction in the retail sector. Such research could be done in conjunction with identifying the relative role of specific training interventions in enhancing job satisfaction when combined with certain job characteristics, particularly autonomy. These investigations may also productively explore whether individual need for growth mediates the relationship between job characteristics, training and job satisfaction in the retail industry.

One important implication from this study is related to the design of jobs and the opportunities for growth that is provided to the organizational members. As such, there is also a strong case for studying the impact of age in combination with tenure and other relevant contextual variables to get a better understanding of its impact on job satisfaction.

Further exploration would be worthwhile into the links between salaries and age on job satisfaction for retail employees across a lifespan. Perhaps younger employees equate making money (as they don't get paid very much!) more with job satisfaction; whereas older employees may be more concerned with intrinsically satisfying aspects of a job as they may be more financially secure. This is, of course, speculation.

Future research would also do well to assess the interactive effects of age and tenure to examine its significance as a predictor of job satisfaction. Longitudinal studies in different cultural milieu are needed to establish if these links are replicable. As suggested by others and the authors, it is worth confirming if links between intrinsic job characteristics and job satisfaction are moderated by national characteristics, as suggested by Huang and Van De Vliert, 2003; Friday and Friday (2005).

Due to the limited sample and the inability to identify different petrol stations, analysis of this dataset was undertaken at the individual level. Future analyses of a larger dataset could use a nested structure of employees belonging to different retail petroleum stations. Some percentage of the variance of the dependent variable job satisfaction may feature at the petrol station level. Hierarchical linear modeling could also be used to estimate the relationships between the variables. Categorical variables were used for both age and salary variables limiting the inferences that can be made from the data. Future studies in this area could use ordinal scales to make the results about age more amenable to statistical manipulation and interpretation.

Conclusion

While the results obtained here are congruent with previous studies in the area there are several unique features to this study. A model was tested on the impact of job characteristics and training opportunities on job satisfaction, using age and salary as a mediator of these variables. Support was found for the established relationships in the JCM, particularly autonomy. Jobs characterized by high levels of skill variety, task identity, task feedback and autonomy, training opportunities influenced the level of job satisfaction of employees. Autonomy and training opportunities clearly predicted the majority of variance of job satisfaction. However, age itself did not moderate the relationships between these linkages.

Providing training and developmental opportunities will increase intrinsic satisfaction and that has the potential to enhance retention rates in the Singaporean retail industry. No difference between age groups was found with respect to the need for autonomy, indicating that employers may need to stop micro managing employees and instead provide opportunities for making independent decisions in areas related to their work sphere. Opportunities and freedom to take decisions and experiment in jobs are likely to provide intrinsic satisfaction to employees.

Currently, the literature on retail employees has not tested the role of age and salary categories and salary as mediators. Employees >21 years of age were found to have more job

satisfaction for each incremental unit of salary earned. The point of inflection for elasticity of reward for employees >21 years of age is high and remains so, though less severely, until peaking at 30-40 years. As such, increases in salary for employees under 21 are likely to result in concomitant increases in job satisfaction. Increased salary may also result in greater effort being expended in the job. In all, increases in salary for employees <21 are likely to result in attendant increases in job satisfaction resulting in less likelihood of employees leaving the retail organizations.

Findings from this study are especially valuable in the retail industry wherein turnover rates continue to remain stubbornly high. How well jobs are designed and the provision of opportunities for growth in the workplace were found to be valued by employees. Providing timely and relevant training and developmental opportunities was also valued by employees. Such initiatives indicate the need to commence with individual entry level positions and progressively updating employee competencies throughout a career can have increased impact on job performance.

The labor intensive operating model in this retail petroleum industry does not yet fully recognize that frequent turnover can add considerable cost to organizational effectiveness and hence business costs. Enhanced job satisfaction reduces turnover in retail organizations. This has important implications for motivation of employees in the South East Asia retail petroleum industry.

Investing in training for all employees across all age groups should also therefore be an important policy objective for retailers. Findings from this study suggest that retail organizations need to continue to provide training and developmental opportunities for their workforce to increase job satisfaction and reduce turnover by attracting individuals who desire such developmental opportunities. Updating individual's skill base needs to be done on a continuous basis thereby enhancing job satisfaction and thus reducing the incidence of turnover.

In the context of nations with ageing populations such as Singapore there are important policy issues and concerns about encouraging older employees to continue to participate in the workforce. Attracting and retaining older managers and employees is likely to depend more on intrinsic motivators, such as opportunities for developing skills, amount of job complexity and opportunities for control, amount of responsibility, and challenges, rather than purely extrinsic motivators, such as wages and hours of work. Providing access to training for employees across all age groups is recommended as an important policy objective for retailers. Further, the results clearly indicate that there is a continued need to attract and retain an ageing workforce, who value intrinsic satisfaction motivators over extrinsic motivators, in an attempt to reduce turnover and improve the quality of service in the retail petroleum industry.

FIGURES AND TABLES

Figure 1. Integrated Model of the Relationships between Job Characteristic, Training Opportunities, Age and Job Satisfaction

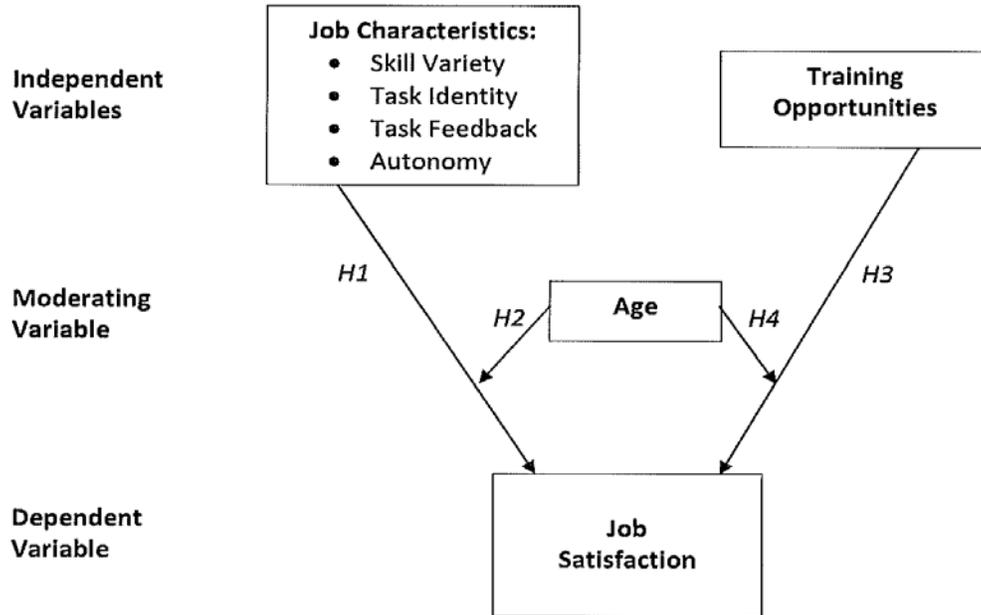


Table 1. ANOVA comparison of means by age categories

	F-value	p-value	η^2	p-value^a
Job Satisfaction	.440	.779	.011	.593
Skill Variety ^b	3.065	.018*	.071	.824
Task Identity	.412	.800	.010	.563
Autonomy	1.016	.401	.025	.783
Task Feedback	.828	.509	.020	.223
Training Opportunities	1.479	.211	.036	.873

$F_{\text{critical}, \alpha=0.05} (4, 160) = 2.43$

*significant at $\alpha=0.05$

a. Levene p-value statistic for the test of the Homogeneity of Variances

b. Post hoc test conducted for controlling type 1 error.

Table 2. Correlation and Cronbach Alpha Coefficients

Variable	1	2	3	4	5	6
1. Job Satisfaction	.688					
2. Skill Variety		.840				
3. Task Identity	.388**		.748			
4. Autonomy	.234**	.434**	.526**	.908		
5. Task Feedback	.466**	.497**	.490**		.759	
6. Training Opportunities	.153*	.306**	.516**	.457**		.726
	.566**	.529**		.551**	.290**	

Cronbach alpha are given along the diagonal

** significance at $\alpha=0.01$, * significance at $\alpha=0.05$, N=165

Table 3. Hierarchical Regression Results Predicting Job Satisfaction

Model and Variables	Regression coef.	Standard error	Sig	Partial Correl.	Part Correl.
1. Training Opportunities	.450	.051	.000	.566	.566
2. Training Opportunities	.354	.060	.000	.419	.371
Autonomy	.235	.081	.004	.223	.184
3. Training Opportunities	.371	.066	.000	.407	.351
Autonomy	.292	.090	.001	.249	.202
Skill Variety	.107	.089	.234	.094	.075
Task Identity	-.165	.083	.049	-.156	-.124
Task Feedback	-.057	.077	.462	-.058	-.046
4. Training Opportunities	.374	.067	.000	.411	.349
Autonomy	.287	.091	.002	.246	.197
Skill Variety	.152	.092	.101	.131	.103
Task Identity	-.186	.085	.029	-.174	-.137
Task Feedback	-.040	.078	.611	-.041	-.032
age <21	-.237	.318	.456	-.060	-.047
Age21-30	-.037	.224	.869	-.013	-.010
Age31-40	-.330	.236	.163	-.112	-.087
Age41-50	.068	.243	.781	.022	.017

Table 4. Models' Specifications Summary Predicting Job Satisfaction

Model	R²	ΔR²	ΔF	Sig ΔF
1 ^a	.320	.320	76.813	.000
2 ^b	.354	.034	8.507	.004
3 ^c	.381	.026	2.265	.083
4 ^d	.398	.017	1.102	.358

a. Predictors:(Constant), training opportunities

b. Predictors: (Constant), training opportunities, autonomy

c. Predictors: (Constant), training opportunities, autonomy, task feedback, skill variety, task identity

d. Full model, predictors: (Constant), training opportunities, autonomy, task feedback, skill variety, task identity, 4 dummy variables corresponding to age categories.

Appendix 1. Questionnaire

Section 1: BACKGROUND INFORMATION

1) Name of Participating Petrol Station: _____

2) Educational Qualifications (Please tick):

Primary and Below Secondary 'A' Levels/Diploma & Above

3) age (Years of age) (Please tick):

<21 21 – 30
 31 – 40 41 – 50
 >50

4) Job Level (Please tick):

Sales Assistant Customer Service Assistant
 Shift Manager

5) Salary (Please tick):

<\$800 \$800 - \$1000
 \$1001 - \$1400 \$1401 - \$1800
 >\$1800

Section 2. Job Characteristics Inventory

This survey will take a maximum of 30 minutes to complete. Kindly circle the number that represents how you feel for each question. Here is a reference guide to some of meanings of the words.

Variety – Means different types of tasks in your job

Repetition – Means doing the same things several times

SKILL VARIETY (Items 1-5)

- 1) How much variety is there in your job?
- 2) How repetitious are your duties?
- 3) How similar are the tasks you perform in a typical workday?
- 4) The opportunity to do a number of different things.
- 5) The amount of variety in my job.

AUTONOMY (Items 6-10)

- 6) How much are you left on your own to do your own work?
- 7) To what extent are you able to do your job independently of others?
- 8) To what extent do you receive information from your superior on your job performance?
- 9) The opportunity for independent thought and action.
- 10) The freedom to do pretty much what I want on my job.

FEEDBACK (Items 11-13)

- 11) To what extent do you find out how well you are doing on-the-job as you are working?
- 12) The opportunity to find out how well I am doing on my job.
- 13) The feeling that I know whether I am performing my job well or poorly.

TASK IDENTITY (Items 14-17)

- 14) To what extent do you do a 'whole' piece of work as opposed to doing part of a job, which is finished by some other employees?
- 15) How often do you see projects or jobs through to completion?
- 16) The opportunity to do a job from the beginning to end (the chance to do a whole job)
- 17) The opportunity to complete work I start on.

Section 2: TRAINING OPPORTUNITIES

- 18) You are taught a skill or provided with new information to help you in doing your job better.
- 19) Have learning opportunity that may lead to a better job or promotion.

Section 3: JOB SATISFACTION

- 20) How satisfied are you in being treated with fairness and respect?
- 21) How satisfied are you with your pay?
- 22) How satisfied are you in recognition for performance?
- 23) How satisfied are you in terms of your benefits?
- 24) How satisfied are you with the career opportunities?
- 25) How satisfied are you with the job security?
- 26) How satisfied are you in the training you have receive

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