The Impact of Employee Perceptions of Training on Organisational Commitment and

Turnover Intentions: A Study of Multinationals in the Chinese Service Sector

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Abstract

This study examines the impact of employee perceptions of training on organizational

commitment, and the latter's relationship with turnover intentions. Structured equation

modelling is conducted on survey data from 437 Chinese employees of five multinational

enterprises operating in the Chinese service sector. The results of the survey are consistent

with social exchange theory. They highlight the importance of training as a tool to enhance

the affective organisational commitment of employees, and reduce turnover. The findings

differ from previous studies in non-Chinese settings. No evidence was found of any impact of

motivation to learn and perceived benefits of training on organizational commitment. This

may be explained by three factors; the involuntary nature of employee training, the limited

career development opportunities on offer to local employees of multinational enterprises and

the difficulty employees face in applying learnt skills given cultural differences. The

implications for research and practice are discussed.

Keywords

China, multinational enterprises, organisational commitment, training, turnover intentions.

Introduction

Current international human resource management research has a strong focus on how organisations can improve the organisational commitment of employees (Malhotra et al., 2007). Meyer et al. (1993) see this as having three elements; affective, continuance and normative commitment. Normative commitment has its antecedents in an employee's values as determined by their cultural, social and familial background and prior experiences. These are all exogenous to this study which focuses instead on the impact of HRM interventions after employees join an enterprise, particularly training, on their affective and continuance commitment. The benefit to organisations from high levels of organisational commitment has been widely researched (Gamble and Huang, 2008). This research supports the notion that it is related positively to a variety of desirable outcomes including job satisfaction and performance, and to a decline in an employee's intention to leave. This it seems is true in both Western and Asian contexts (Meyer et al., 2002; Cheng et al., 2003).

The implementation of effective HR practices has been shown to play an important role in building and maintaining the commitment of employees towards the organisation (Allen et al., 2003). According to social exchange theory individuals enter into a relationship with an organisation so as to maximise the benefits they obtain (Blau, 1964). Social exchange is based on an implicit agreement between employee and the employer, referred to as a psychological contract (Rousseau, 1995). Psychological contracts are governed by the norm of reciprocity and have been shown to play an important role in determining organisational behaviour (Garrow, 2004). The literature suggests that employees enhance their commitment towards the organisation when the organisation meets their expectations as regards fulfilment of their individual needs (Malhotra et al., 2007).

Recent literature has begun to examine the relationship between training and commitment (Owens, 2006; Al-Emadi and Marquardt, 2007). A number of studies demonstrate that training provision leads to improvements in organisational commitment (Bartlett, 2001; Ahmad and Bakar, 2003; Al Emadi and Marquardt, 2007). As part of their unwritten psychological contract with the organisation employees expect to be provided with training

and development opportunities in exchange for displayed organisational commitment (Bartlett, 2001). Despite Western research investigating this (Klein, 2001; Owens, 2006), research on this in China is limited.

Motivations for research

Despite a vast literature on the impact of HRM on the described psychological contract there is little consensus on the antecedents of organisational commitment (Malhotra et al., 2007). Most knowledge on organisational commitment is derived from Western studies (Gamble and Huang, 2008). Little is known on the relationships between antecedents and commitment outside the West. The literature suggests that cultural differences between countries exert a considerable influence on commitment (Chen and Francesco, 2000; Glazer et al., 2004). The key cultural values multinationals are reported to consider when implementing their HRM practices in China include respect for seniority, group loyalty and the importance of personal relationships between individuals (Bond, 1996; Hui and Tan, 1996; Lockett, 1998). Gamble and Huang (2006) argue that such differences impact on how HRM practices are implemented in Chinese subsidiaries. This research takes such cultural differences and a given level of normative commitment into account when exploring the relationship between training and affective and continuance commitment.

This study makes its contribution to theory and practice in a number of ways. Firstly, it extends to China the work on the relationship between employee perceptions of training and organisational commitment. The results enable researchers to understand whether training provision can be used by multinational enterprises to enhance the affective and continuance commitment of Chinese employees given their pre-existing contextually and culturally determined level of normative commitment. This should help multinationals better tailor their training provision to enhance employee commitment. To demonstrate how training by multinational enterprises enhances organisational commitment in China we explore the relationship between affective and continuance commitment and training variables used previously. The research asks a number of questions:

- 1. To what extent can multinationals enhance employee commitment in China by promoting awareness of training opportunities among employees?
- 2. To what extent are multinationals in China able to enhance the commitment of employees by motivating them to participate in training activities?
- 3. To what extent can multinationals in China enhance employee commitment by improving social support for training from supervisors and co-workers?
- 4. To what extent are multinationals in China able to enhance employee commitment by promoting awareness of the benefits of training participation?

This study also examines the impact of organisational commitment on the turnover intentions of employees in China. Multinational enterprises see high turnover as a major challenge in China because of a shortage of good quality middle-managers and intense international and local competition for their skills (Wong et al., 2001; Hulme, 2006). Over the last five years staff turnover rates in multinationals in China have been high compared to developed economies, at between ten to fifteen per cent of the workforce (Leininger, 2007). Job turnover has the high associated costs of selection, recruitment and training. In addition, new employees only reach the productivity of the person they replace after some time. To save these costs one has to reduce employee turnover. Our investigations throw further light on how employers can reduce the turnover intentions of employees by investing in training to enhance organisational commitment, and explore the differences between the results obtained in China from those observed elsewhere.

In the following section we review the literature on organisational commitment and training before proposing hypotheses and testing them. After discussing our findings, we draw out their implications for management and theory.

Literature review and hypotheses

Organisational commitment

Organisational commitment has been defined as the relative strength of an employee's identification and involvement with a particular organisation (Steers, 1977). The most widely

used model is the three-component model developed by Meyer and other researchers (Meyer et al., 1993). In this study, for reasons already explained, we examine only two of these components; affective and continuance commitment. Affective commitment refers to the employees' identification and emotional attachment to their employing organisation (Allen and Meyer, 1990). Employees with high levels of affective commitment stay because of strong emotional attachment to an organisation. Continuance commitment is the perceived costs to the employee of leaving the organisation, and may include the loss of benefits or seniority status within the organisation (Allen and Meyer, 1990). Employees with strong continuance commitment stay with the organisation out of self-interest. The third component, normative commitment, depends on the prior attitudes and values of employees before joining the organisation and thus should not be significantly impacted by HR practices.

Over the last decade many studies have been conducted on the organisational commitment of Chinese employees (Chen and Francesco, 2000, 2003; Wong et al., 2001; Chen et al., 2002; Chiu, 2002; Cheng et al, 2003; Cheng and Stockdale, 2003; Wang, 2004; Chan et al., 2006; Yao and Wang, 2006; Gamble and Huang, 2008; Wang, 2008). Studied determinants include organisational type (Chiu, 2002; Wang, 2004), employee demography (Chen and Francesco, 2000) and loyalty to supervisor (Chen et al., 2002). However, no Chinese research has been conducted to investigate the effects of organisational commitment on the relationship between employee perceptions of training and turnover intentions.

Training situation in China

Despite the increasing number of multinational enterprises operating in China, research on their training practices is sparse (Ng and Siu, 2004). With a shortage of skilled workers, investment by multinationals in training is viewed as critical to success in China (Wang and Wang, 2006). A small but growing literature has examined the transfer of HRM practices to the Chinese subsidiaries of multinationals (Ahlstrom et al., 2001; Lu and Bjorkman, 1997; Lu and Bjorkman, 1998; Gamble, 2003, 2006). The training practices provided by multinationals are considered by some as potentially inappropriate in China because of cultural differences

from elsewhere (Ahlstrom et al., 2001; Gamble, 2003; Gamble, 2006). The literature suggests multinationals must take Chinese cultural values into account, such as the importance of group loyalty and personal relationships, when implementing HRM practices in their Chinese subsidiaries (Lockett, 1988). Previous empirical work supports this. A comparative study of UK and Chinese firms demonstrates that cultural factors strongly influence the adoption of professional HRM practices in the Chinese context (Easterby-Smith et al., 1995). Another study (Wong et al., 2001) indicates that investment in training provision, instead of benefitting multinationals, may in fact lead to greater employee turnover as skilled workers are head hunted by competitors. This has led to reluctance among some firms to invest heavily in training, and impacted on the localisation plans of many multinationals, exacerbating the shortage of skilled managers in China (Wong and Law, 1999).

Training and organisational commitment

Training has been identified as contributing greatly to organisational competitiveness (Schuler and MacMillan, 1984). Research suggests that investment in training can be justified by the contribution it makes to improved individual and organisational performance (Bartel, 2000). However, previous studies have indicated difficulty in identifying causality between training and organisational performance (Tan and Batra, 1994; Blundell et al., 1999). Bartlett (2001) suggests that one problem exacerbated this difficulty is developing an effective measure for organisational performance. Blundell et al. (1999: 18) support this, arguing that a 'lack of suitable data and methodological difficulties have...prevented adequate assessment of the impact of human capital appreciation on firm performance' and that 'estimates of the impact of training on productivity are subject to wide margins of uncertainty'.

There is a growing consensus that HRM practices influence employee attitudes and work-related behaviour (Allen et al., 2003; Gould-Williams, 2007). In order to judge better the effectiveness of training it has been suggested that its relationship to organisational commitment be examined directly. This has been demonstrated as positively related to organisational effectiveness (Bartlett, 2001). The literature suggests that positive work-related

behaviour and attitudes largely depend on employee perceptions as to the extent to which their employer values their contribution and cares about their well-being (Allen et al., 2003). This view is consistent with social exchange theory (Blau 1964) which proposes that the psychological contract between employer and the employee is an important determinant of organisational behaviour. This is the theoretical basis for our study. Social exchange is initiated by organizations when they signal their willingness to care for employee interests (Gould-Williams, 2007). Employees reciprocate with positive attitudinal and behavioural responses helpful to their organisation (Settoon et al., 1996; Aryee et al., 2002). Training, like other HRM practices, can be utilised to elicit desired responses which may include improved organisational commitment (Bartlett, 2001). Existing research suggests that training and development provision is taken as a sign by employees that their organisation desires to enter into a social exchange with them. This creates a strong psychological bond between them and their employer (Garrow, 2004).

However, the impact of training on organisational commitment has not been so widely researched. A limited number of studies have been conducted in America (Bartlett, 2001), Malaysia (Ahmad and Bakar, 2003) and the Middle-East (Al-Emadi and Marquardt, 2007). These studies all find a strong positive relationship between training perceptions and affective organisational commitment and a weaker relationship with continuance commitment. Bartlett's (2001) study in the US health care context, finds a strong relationship between four training variables and affective commitment. However, his research suggests a limited impact of them on continuance commitment. Ahmad and Bakar's (2003) study, conducted in Malaysia, finds a significant relationship between five training variables and affective commitment. For continuance commitment their research only demonstrated a significant correlation with two, the training environment and perceived training benefits. Al-Emadi and Marquardt (2007) examine the perceptions of senior staff in the Qatari petrochemical industry on the perceived benefits of training participation and its impact on organisational commitment. They found a positive relationship between perceived training benefits and both affective and continuance commitment.

Previous research in China, on training in multinationals, produces evidence of a positive link between investment in training and performance (Ng and Siu, 2004). However, no empirical work has been conducted in China on the relationship between perceptions of training and organisational outcomes. This work fills this void by investigating the nature of the link between perceptions of training and organisational commitment, and the latter's relationship with turnover intentions. This study examines the extent to which training can be used as a tool by multinational enterprises to enhance the organisational commitment and reduce the turnover intentions of Chinese employees. A number of hypotheses are developed from the existing literature and then tested.

Perceived availability of training

The perceived availability of training is taken to be the extent to which employees feel they are able to access training opportunities. Prior research suggests employees with positive perceptions of this will be more committed to the organisation (Bartlett, 2001). As previously indicated by studies in the US and Malaysia the perceived availability of training has a strong relationship with affective but not continuance commitment (Bartlett, 2001; Ahmad and Bakar, 2003). These findings suggest that organisations may enhance affective commitment by promoting awareness of training opportunities. This study tests this in the Chinese context. Contrary to previous findings it is hypothesised that the perceived availability of training will be positively related to continuance commitment as well as affective commitment. Previous work has confirmed that Chinese employees stay with their employer as they are concerned not to lose the training opportunities on offer to them (Anonymous, 2006). This leads to the following hypotheses:

H1a: There is a positive relationship between the perceived availability of training and affective commitment

H1b: There is a positive relationship between the perceived availability of training and continuance commitment

Motivation to learn

Well-motivated employees are more likely to have a positive perception of the training environment in their organisations. This has been shown to lead to greater participation in training activities (Mathieu et al., 1992). Empirical research also indicates that those motivated to learn tend to apply learnt skills more effectively in their work (Cannon-Bowers et al., 1993; Facteau et al., 1995). The benefits resulting should generate positive feelings towards the organisation, and so enhance affective commitment.

Empirical studies by Bartlett (2001) and Ahmad and Bakar (2003) confirm a strongly significant relationship between an individual's motivation to learn and their affective commitment but no relationship with continuance commitment. These findings suggest that organisations may benefit from greater affective commitment through motivating their employees to participate in training activities. Previous research in Hong Kong also confirms a positive relationship between motivation to learn and affective commitment (Cheng, 2001). This study tests whether multinationals in China may engender greater commitment by improving employee motivation to learn. This leads to the following hypothesis:

H2: There is a positive relationship between motivation to learn and affective commitment

Perceived supervisor support for training

A growing body of research has demonstrated that support in the workplace has vital implications for the proper functioning of the organisation. Studies have shown that social support increases job satisfaction and commitment, and decreases turnover and absenteeism (Larocco, et al., 1980; Allen and Meyer, 1990; Hutchison and Garstka, 1996; Eisenberger et al., 2002; Maertz et al., 2007). The combined evidence suggests that social support is an essential determinant of organisational effectiveness. For a number of decades, researchers have consistently demonstrated that social support is an important resource in that it facilitates the psychological, physical and overall well-being of individuals (La Rocco and Jones, 1978; La Rocco et al., 1980). Social support comes from three sources: family and friends, work colleagues (Ganster et al., 1986) and the immediate supervisor (Eisenberger et al., 2002).

Perceived support for training from senior colleagues has been shown to influence training participation (Noe and Wilk, 1993). Bartlett (2001) demonstrates a significant relationship between supervisor support for training and both affective and continuance commitment. These findings illustrate the potential benefits that may be brought from the creation of an environment in which participation in training and development activities is encouraged by supervisors.

It has been suggested that the relationship between supervisor and subordinate is extremely important in Chinese organisations given the hierarchical nature of Chinese Confucian society (Farh and Cheng, 2000). In China, it is known that employees are loyal to others more than to a system (Redding, 1990). In such a society, employee loyalty is more likely to be based on personal gratitude to their particular supervisor, not to the organisation (Chen et al., 2002). Empirical research in China has demonstrated the vital role played by supervisors in cultivating subordinate commitment (Cheng et al., 2003). Such personal attachment to a supervisor results from a prescribed social norm dictating a requirement to be loyal to those with seniority (Wang, 2008). In this study we examine the extent to which multinationals are able to enhance employee commitment by encouraging supervisory level employees to provide more support to their subordinates, in particular to participate in training activities and apply learnt skills in their work. This leads to the following hypotheses:

H3a: There is a positive relationship between perceived supervisor support for training and affective commitment

H3b: There is a positive relationship between perceived supervisor support for training and continuance commitment

Perceived co-worker support for training

The impact of the relationships between co-workers on organisational performance has received less attention than the relationships between supervisors and their subordinates (Wang, 2008). However, co-worker support may have important performance-related outcomes (Shah and Jehn, 1993). Perceived co-worker support for training has been shown to

have a positive impact on participation rates and affective commitment (Noe and Wilk, 1993; Tharenou, 1997; Bartlett, 2001). These findings illustrate the potential benefits brought to organisations creating a culture in which co-workers support each other's participation in training.

As we have seen the collective, personalised nature of Chinese society should lead to closer relationships between co-workers than is the case in the West (Wang, 2008). We would thus expect co-worker support for training to be more closely related in China to affective commitment there leading to:

H4: There is a positive relationship between perceived co-worker support for training and affective commitment

Perceived benefits of training

Ahmad and Bakar (2003) suggest that employees who recognise the benefits from training will tend to be more committed and so be more willing to participate in an organisation's training activities. Empirical work confirms such a relationship (Bartlett, 2001; Ahmad and Bakar, 2003; Al-Emadi and Marquardt, 2007). Ahmad and Bakar (2003) find evidence of a significantly positive relationship between the perceived benefits of training and affective and continuance commitment. Bartlett (2001) distinguishes between the career-related, personal and job-related benefits of training. He finds strong evidence of a relationship between the perceived career-related and personal benefits of training and both affective and continuance commitment. These findings illustrate the potential benefits of enhancing the organisational commitment of employees by promoting the personal and career-related benefits of participating in training. This study tests this relationship in China, leading to the following hypotheses:

H5a: There is a positive relationship between the perceived benefits of training and affective commitment

H5b: There is a positive relationship between the perceived benefits of training and continuance commitment

Turnover intentions

The relationship between organisational commitment and turnover intentions has been widely studied (Gamble and Huang, 2008). Previous research in China finds strong evidence that turnover intentions are negatively related to both affective and continuance commitment (Chen and Francesco, 2000; Cheng and Stockdale, 2003), leading to the following hypotheses: H6a: There is a negative relationship between affective commitment and turnover intentions H6b: There is a negative relationship between continuance commitment and turnover intentions

Figure 1 shows the proposed research model.

Insert Figure 1 about here

Methodology

Sample and procedure

Self-completion survey questionnaires were employed in this research. The original questionnaire was written in English. The questionnaire was translated into Chinese using the back translation procedure recommended by Brislin (1993). A pilot test of this translation was conducted and some minor adjustments were made to the final Chinese version. The fieldwork was conducted over a two month period from May to July 2008 in five multinational enterprises. Table 1 provides information on each of the organisations participating in the research and the fieldwork locations.

Insert Table 1 about here

Employees were randomly selected from human resource department records in each organisation and invited to participate. All employees were full-time and worked at a

managerial or administrative level in the organisation. In each organisation formal training existed for such employees.

In three organisations online questionnaires were utilised, and in two paper questionnaires. In the case of online questionnaires the HR department sent out a personalised questionnaire link to each participant allowing them to send their responses to the research team directly. This validated their responses. Stamped-addressed envelopes were provided with paper questionnaires to allow participants to return to the research team directly. 437 valid responses were obtained from 1000 prospective participants, a response rate of around 43.7 per cent. The respondents were 64.5 per cent female and 35.5 per cent male. The average age was 30 with tenure of around 4 years. This was in line with the demographic profile of the organisations.

Measures

Turnover intentions were measured using Farh's (1998) four-item scale. The alpha coefficient for this scale was 0.909. The three component organisational commitment scale of Meyer et al. (1993) was adopted. Two six-item scales were used to measure affective and continuance commitment. After deleting items that did not load onto the two requisite factors two four-item measures of affective and continuance commitment were constructed for the final analysis. The alpha coefficients of these were 0.879 and 0.843.

Five training-related variables were utilised. A five-item scale was developed to measure perceived availability of training. Items included: "My organization provides a good environment for new recruits to learn job-specific skills and knowledge" and "My organisation provides assistance for its employees to take management training and development courses". The suitability of this scale was tested through exploratory factor analysis on a separate dataset. The alpha coefficient for this scale was 0.928. Motivation to learn was measured using three items taken from Noe and Schmitt's (1986) study. The alpha coefficient for this scale was 0.870. Perceived co-worker support for training and perceived supervisor support for training were measured by seventeen items taken from Noe and Wilk

(1993). After conducting factor analysis we deleted two items that did not load. This left us with a two-item scale to measure perceived co-worker support for training and a thirteen-item scale to measure perceived supervisor support for training. The alpha coefficients for the two scales were 0.833 and 0.951. Perceived benefits of training were measured by seven items taken from Noe and Wilk (1993). The alpha coefficient for this scale was 0.936. All responses were measured on a five-point likert scale.

Data analysis

Confirmatory factor analysis (CFA) was conducted to evaluate the reliability of the scales. As suggested by Churchill (1979) items that did not load well onto their corresponding constructs were dropped from further consideration. The final question items used in the analysis and their cross loadings and reliability estimates are shown in Table 2. As can be seen, the composite reliability estimates range from 0.833 to 0.951, all of which are greater than 0.7, the threshold commonly used for reliability (Fornell and Larcker, 1981). Table 3 shows the latent variable correlations with the diagonal elements being the square root of the Average Variance Extracted (AVE). As shown, the AVE of each construct exceeds 0.5, the benchmark for convergent validity (Fornell and Larcker, 1981). The square root of the AVE of each variable is greater than the correlations between the variable and other variables in the model, suggesting adequate discriminant validity (Fornell and Larcker, 1981). Discriminant validity is further established by verifying that all items load more highly on their corresponding factors than other factors (Gefen et al, 2000), see Table 2. Overall, the measurements show satisfactory reliability and validity.

Insert Table 2 about here

Insert Table 3 about here

Structured equation modelling using LISREL 8.80 was adopted as the tool for analysis. It allows the simultaneous estimation of multiple interrelated dependence relationships and so is suitable for developing empirical models. The results are shown in Figure 2.

Insert Figure 2 about here

Overall, our model shows satisfactory explanatory power for affective commitment and turnover intentions. These account for 57% and 62% of the variance, respectively. However, the model explains only 10% of the variance in continuance commitment. Apart from hypotheses H2, H3b, H5a and H5b all hypothesized relationships are supported.

As there is no consensus on the appropriate method of determining overall goodness-of-fit a number of measures were calculated to assess this. Five measures were utilised to determine the absolute fit of the model; the goodness of fit index (GFI), the adjusted goodness-of-fit index (AGFI), the root mean squared error of approximation (RMSEA) the chi-square goodness-of-fit test (χ^2) and the ratio of χ^2 to degrees of freedom (χ^2 /df). Three measures were utilised to determine the incremental fit of the model; the comparative fit index (CFI), the non-normed fit index (NNFI) and the incremental fit index (IFI).

We provide the model fit statistics in Table 4. The Goodness-of-Fit Index (GFI) and the Adjusted GFI (AGFI) are both close to 0.8, the commonly suggested benchmark, indicating a marginal fit to our model. The other model fit statistics, however, look more promising. The RMSEA is less than 0.08, indicating an adequate model fit (Browne and Cudeck, 1993). The CFI, NNFI and IFI are all greater than 0.90, a common cut-off for goodness of fit. Collectively, these fit index values suggest our model fits the data more weakly than we would like.

Insert Table 4 about here

To improve the model fit, we removed all insignificant relationships from the model. The test results for the new model are shown in Figure 3. The model fit statistics are shown in Table 5.

Insert Figure 3 about here

Insert Table 5 about here

As shown in Table 5, the removal of the insignificant paths improved the GFI and AGFI statistics, without hurting the other model fit statistics significantly. Furthermore, the Akaike's Information Criterion (AIC) for the final model is 1490.41, which is smaller in the AIC for the initial model, which is 2504.21. Therefore, this model is preferred as it explains the data with fewer parameters (Burnham and Anderson 1998). Table 6 provides a summary of our results. A number of competing models were also tested but none provided a better fit than the model shown in figure 3.

Insert Table 6 about here

Results and discussion

To a certain extent, our results support the contentions of social exchange theory (Rousseau, 1995). They confirm existing findings by demonstrating a strong relationship of three variables to affective commitment; the perceived availability of training, supervisor support for training and co-worker support for training. This is in line with the results of previous empirical work in a non-Western context (Bartlett, 2001, Ahmad and Bakar, 2003). Our results suggest that both the supervisor and co-workers are extremely important in supporting employee training participation in China and the subsequent application of skills learnt.

Previous literature indicates this may result from the nature of Chinese culture which places high importance on the values in hierarchies and personal relationships rather than on the system itself (Redding, 1990; Wang, 2008). In such a society, employee loyalty is more likely to be based on gratitude for individualized support from a supervisor above any perceived personal role obligations they may have (Chen et al., 2002).

In line with existing work we found a much weaker relationship between perceptions of training and continuance commitment (Bartlett, 2001, Ahmad and Bakar, 2003). A significant relationship was found between a single variable, perceived availability of training, and continuance commitment. This suggests that employees who have positive views of the training availability in their organisation will be more inclined to stay with the organisation for fear of losing the training opportunities that leaving the organisation may incur.

Contrary to expectations we found no relationship between motivation to learn and the perceived benefits of training, and both types of commitment. This contradicts findings from other countries (Bartlett, 2001; Ahmad and Bakar, 2003; Al-Emadi and Marquardt, 2007). The lack of a relationship between motivation to learn and organisational commitment could result from a number of factors. Firstly, an employee's motivation to learn might not actually lead to greater participation in training activities. This has been shown to lead to greater affective commitment (Bartlett, 2001). In most multinationals operating in China training is not voluntary. It is the organisation or supervisor who decides on who will participate. In addition, there are limited options to engage in external training due to the limited provision of management education in China (Gamble, 2003; Gamble and Huang, 2006). Secondly, although employees might be motivated to learn, their inability to apply learnt skills might explain the lack of an observable relationship with organisational commitment (Benson et al., 2000). This may result from the inadequate nature of the training offered that might not have been adapted to the Chinese context. Previous research highlights the difficulties faced by multinationals in designing HRM programmes for China given cultural differences (Gamble, 2003; Gamble and Huang, 2006). Thirdly, the limited career development opportunities in China and the existence of a 'glass ceiling' for local employees, may also explain our findings. Previous work has suggested that perceptions of training might only be related to commitment when training is tied to career development (Meyer and Smith, 2000).

Similar to motivation to learn we find no evidence of a relationship between the perceived benefits of training and organisational commitment. Firstly, employee perceptions of the benefits of training might not lead to greater training participation. As for motivation to learn, this may be a result of the compulsory nature of many training programmes in China. Secondly, although employees who perceive benefits from participating in training may be more motivated to participate, this may not increase their commitment if they are unable to gain promotion or apply learnt skills.

Our findings are consistent with the results of previous studies in China (Chen and Francesco, 2000; Cheng and Stockdale, 2003), confirming that organisational commitment is negatively related to turnover intentions, with affective commitment having a stronger impact as opposed to continuance commitment.

Our findings have important managerial implications. They provide indicative guidance to multinational companies wishing to enhance the organisational commitment of Chinese employees. Firstly, the weak relationship between employee perceptions of training and continuance commitment indicates that in China provision of training should not be used to enhance continuance commitment. To achieve this multinationals should consider improving salary and fringe benefits packages. Previous research demonstrates that these extrinsic factors might play a greater role in promoting continuance commitment than training provision (Malhotra et al., 2007).

Secondly, our research confirms a strong relationship between the perceived availability of training and organisational commitment. This is consistent with social exchange theory (Settoon et al., 1996). Our findings underline the importance for organisations in China to improve employee perceptions of training and associated development opportunities and so meet their employees' expectations in these two areas of organisational development (Bartlett, 2001; Ahmad and Bakar, 2003). The organisation might do this by publicising training

opportunities more widely and providing assistance to managers to explain the availability of training opportunities to their subordinates.

Thirdly, our research indicates that both perceived supervisor support and co-worker support are important to the development and maintenance of affective commitment. This has useful implications for multinationals designing training and development programmes for Chinese employees. The importance to commitment of creating an environment in which participation in training activities is strongly encouraged by supervisors and co-workers needs to be recognised.

Fourthly, our findings suggest limited benefits accrue from attempting to improve the motivation to learn of employees or promoting awareness of the benefits obtained from training participation. No link is evident between these variables and both types of commitment. Multinationals may be better advised to focus on improving the transferability of skills learnt in training to the Chinese workplace and encouraging social support for training in the workplace. Employers could also place more emphasis on developing greater ties between training and career development. Our results suggest there is a weak link between these in China. Multinationals might also make participation in training voluntary. This might actually lead to greater affective commitment than is the case with compulsory training.

Fifthly, our findings reveal that both types of commitment are negatively related to turnover intentions, and that affective commitment has a stronger impact than continuance commitment. From a practical point of view, employers might encourage employees to consider the organisation as a family/in-group (Chen and Francesco, 2000) for which they might be more willing to exert effort. This might then be manifested in a greater intention to stay. Multinationals should therefore consider how to get their employees to strongly identify with their organisational goals, missions and values.

Limitations of Existing Research

The findings of this research should be interpreted recognising its limitations. Firstly, the results are only generalisable to similar populations in China, i.e. employees of multinationals operating in the service sector. Existing research has shown that the organisational commitment of Chinese employees differs considerably between different ownership types and industrial sectors (Wang, 2004). Further research is needed across different geographical settings and across different industries before these results can be generalised (Schuler et al., 1993). Additionally, future research would also be useful on the impact of organisational commitment on other key outcome variables both in China, and other Asian countries.

Secondly, our research suggests a strong moderating influence from cultural variables on the relationship between perceptions of training and commitment. Recent commitment research has begun to examine this with factors such as traditionality, collectivism and power distance (Francesco and Chen, 2004; Chen and Aryee, 2007). Future research may address the moderating effects of such variables on the training/commitment relationship.

Thirdly, the fact that our findings are drawn from cross-sectional data obtained by self-completed survey questionnaires, means we cannot draw hard conclusions about the direction of causality. Although our findings are consistent with hypotheses based on the existing literature, we cannot rule out the possibility that causality operates in a direction opposite to what we suppose- i.e. more committed employees will evaluate the training provided by the organisation more positively. In order to resolve such issues future longitudinal research seems in order.

Fourthly, one should remember that as all variables were assessed using self-report measures in a single questionnaire the possibility of common method bias is increased. We believe that this effect had a minor influence. Although it is difficult to establish the extent to which this problem existed in the present study there was considerable variation between the perceptions of training variables and their correlation with organisational outcomes. This increases our confidence that the respondents were answering discriminately and accurately. To eliminate such common method bias objective measures such as data on actual turnover behaviour might be included in future research.

Conclusion

In this study of multinationals in the Chinese service sector we sought to understand the relationship between perceptions of training and organisational commitment, and the latter's relationship with turnover intentions.

A strong positive relationship was established between three variables: perceived availability of training, supervisor support for training and co-worker support for training, and affective organisational commitment. Only perceived availability of training was found to be significantly related to continuance commitment. Our findings also confirm a strong inverse relationship between both components of organisational commitment and employee turnover intentions.

It must be concluded that when applying HRM theories developed in the West to China differences in culture need to be taken into account. The findings of our research differ from studies conducted in other cultural contexts. They have significant managerial implications for multinationals operating in China. The need to account for culture in training design and implementation is evident.

References

- Ahlstrom, D., Bruton, G. and Chan, S.C. (2001) 'HRM of Foreign Firms in China: The Challenge of Managing Host Country Personnel', *Business Horizons*, May-June: 59–68.
- Ahmad, K.Z. and Bakar, R.A. (2003) 'The Association between Training and Organizational Commitment among White Collar Workers in Malaysia', *International Journal of Training and Development*, 7(3): 166-185.
- Al Emadi, M.A. and Marquardt, M.J. (2007) 'Relationship between Employees' Beliefs

 Regarding Training Benefits and Organizational Commitment in a Petroleum Company in
 the State of Qatar', *International Journal of Training and Development*, 11(1): 49-70.
- Allen, N.J. and Meyer, J.P. (1990) 'The Measurement and Antecedents of Affective,

 Continuance and Normative Commitment to the Organization', *Journal of Occupational Psychology*, 63(1): 1-18.
- Allen, N.J. and Meyer, J.P. (1996) 'Affective, Continuance and Normative Commitment to the Organization: An Examination of Construct Validity', *Journal of Vocational Behavior*, 49: 252–276.
- Allen, D.G., Shore, L.M. and Griffeth, R.W. (2003) 'The Role of Perceived Organizational Support and Supportive Human Resource Practices in the Turnover Process', *Journal of Management*, 29(1): 99–118.
- Al-Emadi, M.A.S. and Marquardt, M.J. (2007) 'Relationship between Employees' Beliefs

 Regarding Training Benefits and Employees' Organizational Commitment in a Petroleum

 Company in the State of Qatar', *International Journal of Training and Development*,

 11(1): 49-70.
- Anonymous (2006) 'China's Tight Talent Market', *China Business Review*, March/April 2006: 26-28.
- Aryee, S., Budhwar, P.S. and Chen, Z.X. (2002) 'Trust as a Mediator of the Relationship Between Organizational Justice and Work Outcomes: Test of a Social Exchange Model', *Journal of Organizational Behavior*, 23(3): 267–85.

- Bartel, A.P. (2000) 'Measuring the Employer's Return on Investment in Training: Evidence from the Literature', *Industrial Relations*, 39(3): 502-24.
- Bartlett, K.R. (2001) 'The Relationship between Training and Organizational Commitment: A Study in the Health Care Field', *Human Resource Development Quarterly*, 12(4): 335-352.
- Benson, J., Debroux, P., Yuasa, M. and Zhu, Y. (2000) 'Flexibility and Labour Management:

 Chinese Manufacturing Enterprises in the 1990's', *International Journal of Human*Resource Management 11(20): 183-196.
- Blau, P.M. (1964) Exchange and Power in Social Life, New York: Wiley.
- Blundell, R., Dearden, L., Meghir, C. and Sianesi, B. (1999) 'Human Capital Investment: The Returns from Education and Training to the Individual, the Firm and the Economy', *Fiscal Studies*, 20(1): 1-23.
- Bond, M.H. (1996) 'Chinese Values'. In Bond, M.H. (ed) *The Handbook of Chinese Psychology*. Hong Kong: Oxford University Press, pp. 208–226.
- Brislin, R. (1993) *Understanding Culture's Influence on Behavior*, Fort Worth: Harcourt Brace College Publishers
- Burnham, K. P., D. R. Anderson (1998) *Model Selection and Inference: A Practical Information-Theoretic Approach*. Berlin: Springer-Verlag.
- Browne, M.W. and Cudeck R. (1993) 'Alternative Ways of Assessing Model Fit'. In: Bollen K.A. (ed) *Testing Structural Equation Models*. Newbury Park: Sage Publications.
- Cannon-Bowers, J.A.. Salas, E. Tannenbaum, S.I. and Mathieu, J.E. (1993) 'Toward

 Theoretically Based Principles of Training Effectiveness: A Model and Initial Empirical

 Investigation', *Military Psychology*, 7: 141-164.
- Chan, A.W., Feng, T.Q., Redman, T. and Snape, E. (2006) 'Evaluating the Multi-Dimensional View of Employee Commitment: A Comparative UK–Chinese Study, *International Journal of Human Resource Management*, 17(11): 1873-1187.

- Chen, Z.X. and Aryee, S. (2007) 'Delegation and Employee Work Outcomes: An Examination of the Cultural Context of Mediating Processes in China', *Academy of Management Journal*, 50(1): 226–238.
- Chen, Z.X. and Francesco, A.M. (2000) 'Employee Demography, Organizational Commitment, and Turnover Intentions in China: Do Cultural Differences Matter?', *Human Relations*, 53(6): 869-887.
- Chen, Z.X. and Francesco, A.M. (2003) 'The Relationship between the Three Components of Commitment and Employee Performance in China', *Journal of Vocational Behavior*, 62(3): 490-510.
- Chen, Z.X., Tsui, A.S. and Farh, J.L. (2002) 'Loyalty to Supervisor vs. Organizational Commitment: Relationships to Employee Performance in China', *Journal of Occupational and Organizational Psychology*, 75: 339–56.
- Cheng, E.W.L. and Ho, D.C.K (2001) 'The Influence of Job and Career Attitudes on Learning Motivation and Transfer', *Career Development International*, 6(1): 20–8.
- Cheng, B.S., Jiang, D.Y. and Riley, J.H. (2003) 'Organizational Commitment, Supervisory Commitment, and Employee Outcomes in the Chinese Context: Proximal Hypothesis or Global Hypothesis?', *Journal of Organizational Behavior*, 24(3): 313–34.
- Cheng, Y. and Stockdale, M.S. (2003) 'The Validity of the Three-component Model of Organizational Commitment in a Chinese Context', *Journal of Vocational Behavior*, 62(3): 465–89.
- Chiu, W.C.K. (2002) 'Do Types of Economic Ownership Matter in Getting Employees to Commit? An Exploratory Study in the People's Republic of China', *International Journal of Human Resource Management*, 13(6): 865–82.
- Churchill, G.A. (1979) 'A Paradigm for Developing Better Measures of Marketing Constructs', *Journal of Marketing Research*, 16(1): 64-73.
- Easterby-Smith, M., Malina, D. and Yuan, L. (1995) 'How Culture Sensitive is HRM? A Comparative Analysis of Practice in Chinese and UK Companies', *International Journal of Human Resource Management*, 6(1): 31–59.

- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I.L. and Rhoades, L. (2002) 'Perceived Supervisor Support: Contributions to Perceived Organizational Support and Employee Retention', *Journal of Applied Psychology*, 87:565–573.
- Facteau, J.D., Dobbins, G.H., Russell, J.E.A., Ladd, R.T. and Kudisch, J.D. (1995) 'The Influence of General Perceptions of the Training Environment on Pretraining Motivation and Perceived Training Transfer', *Journal of Management*, 21(1): 1-25.
- Farh, J.L. and Cheng, B.S. (2000) 'A Cultural Analysis of Paternalistic Leadership in Chinese Organizations', in *Management and Organizations in the Chinese Context*, eds. Li, J.T. Tsui A.S. and Welson, E., London: MacMillan.
- Farh, J.L., Tsui, A.S., Xin, K.R. and Cheung, B.S. (1998) 'The Influence of Relational Demography and Guanxi: The Chinese Case', *Organization Science*, 9(2): 1-18.
- Fornell, C., and Larcker, D. F. (1981) 'Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics', *Journal of Marketing Research*, 18(3): 382-388.
- Francesco, A.M. and Chen, Z.X. (2004) 'Collectivism in Action: Its Moderating Effects on the Relationship between Organizational Commitment and Employee Performance in China', *Group and Organization Management*, 29(4): 425-441.
- Gamble, J. (2003) 'Transferring business practices from the United Kingdom to China: The limits and potential for convergence', *International Journal of Human Resource Management*, 14(3): 369–387.
- Gamble, J. and Huang, Q. (2006) 'Introducing Western-Style HRM Practices to China: Shopfloor Perceptions in a British Multinational', *Journal of World Business*, 41: 328–343.
- Gamble, J. and Huang, Q. (2008) 'Organizational Commitment of Chinese Employees in Foreign-Invested Firms', *International Journal of Human Resource Management*, 19(5): 896-915.
- Ganster, D.C., Fusilier, M.R. and Mayes, B.T. (1986) 'Role of Social Support in the Experience of Stress at Work', *Journal of Applied Psychology*, 71(1): 102-110.

- Garrow, V. (2004) 'Training and Development and the Psychological Contract', *Training Journal*, April: 8-10.
- Gefen, D., Straub, D.W. and Boudreau, M.C. (2000) 'Structural Equation Modelling and Regression: Guidelines for Research Practice', Communications of the Association for Information Systems, 4(7)
- Glazer, S., Daniel, S.C. and Short, K.M. (2004) 'A Study of the Relationship between Organizational Commitment and Human Values in Four Countries', *Human Relations*, 57(3): 323–345.
- Gould-Williams, J. (2007) 'HR Practices, Organizational Climate and Employee Outcomes: Evaluating Social Exchange Relationships in Local Government', *International Journal of Human Resource Management*, 18(9): 1627-1647.
- Hui, C.H. and Tan, C.K. (1996) 'Employee Motivation and Attitudes in the ChineseWorkforce'. In Bond, M.H. (ed.) *The Handbook of Chinese Psychology*. Hong Kong:Oxford University Press, pp. 364–378.
- Hulme, V.A. (2006) 'Short Staffed', China Business Review, Mar/Apr: 18-23.
- Hutchison, S. and Garstka, M. (1996) 'Sources of Perceived Organizational Support: Goal Setting and Feedback', *Journal of Applied Social Psychology*, 26(15): 1351-1366.
- Klein, H.J. (2001) 'Invited Reaction: The Relationship between Training and Organisational Commitment- A Study in the Health Care Field', *Human Resource Development Quarterly*, 12(4): 353-361.
- La Rocco, J.M., House, J.S. and French Jr., J.R.P. (1980) 'Social Support, Occupational Stress and Health', *Journal of Health and Social Behavior*, 21(3): 202-218.
- La Rocco, J.M. and Jones, A.P. (1978) 'Co-Worker and Leader Support as Moderators of Stress-Strain Relationships in Work Situations', *Journal of Applied Psychology*, 63(5): 629-634.
- Leininger, J. (2007) 'Recent Compensation and Benefit Trends in China', *China Business Review*, July-August: 28-30.

- Lockett, M. (1988) 'Culture and the Problems of Chinese Management', *Organization Studies*, 9(4): 475–496.
- Lu, Y. and Bjorkman, I. (1998) 'Human Resource Management in International Joint Ventures in China', *Journal of General Management*, 23(4): 63-79.
- Lu, Y. and Bjorkman, I. (1997) 'HRM Practices in China-Western Joint Ventures: MNC Standardization versus Localization', *International Journal of Human Resource Management*, 8(5): 614-28.
- Maertz, C.P., Griffeth, R.W., Campbell, N.S. and Allen, D.G. (2007) 'The Effects of Perceived Organizational Support and Perceived Supervisor Support on Employee Turnover', *Journal of Organizational Behavior*, 28: 1059-1075.
- Malhotra, N., Budhwar, P. and Prowse, P. (2007) 'Linking Rewards to Commitment: An Empirical Investigation of Four UK Call Centres', *International Journal of Human Resource Management*, 18(12): 2095-2128.
- Mathieu, J.E. Tannenbaum, S.I. and Salas, E. (1992) 'Influences of Individual and Situational Characteristics on Measures of Training Effectiveness', *Academy of Management Journal*, 35: 828-847.
- Meyer, J.P., Allen, N.J., and Smith, C. A. (1993) 'Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conception', *Journal of Applied Psychology*, 78: 538–551.
- Meyer, J.P. and Smith, C.A. (2000) 'HRM Practices and Organizational Commitment: Test of a Mediation Model', *Canadian Journal of Administrative Sciences*, 17(4): 319-331
- Meyer, J.P., Stanley, D.J., Herscovitch, L. and Topolnytsky, L. (2002) 'Affective,
 Continuance, and Normative Commitment to the Organization: A Meta-analysis of
 Antecedents, Correlates, and Consequences,' *Journal of Vocational Behavior*, 61(1): 20–52.
- Ng, Y.C. and Siu, N.Y.M. (2004) 'Training and Enterprise Performance in Transition:

 Evidence from China', *International Journal of Human Resource Management*, 15(4):

 878-894.

- Noe, R.A. and Schmitt, N. (1986) 'The Influence of Trainee Attitudes on Training Effectiveness: A Test of a Model', *Personnel Psychology*, 39: 497-523.
- Noe, R.A. and Wilk, S.L. (1993) 'Investigation of the Factors that Influence Employees'

 Participation in Development Activities', *Journal of Applied Psychology*, 78(2): 291-302.
- Owens, P.L. (2006) 'One More Reason Not to Cut your Training Budget: The Relationship between Training and Organizational Outcomes', *Public Personnel Management*, 35(2): 163-172.
- Redding, S.G. (1990) The Spirit of Chinese Capitalism. Berlin: Walter de Gruyter.
- Rousseau, D.M. (1995) Psychological Contracts in Organizations. Thousand Oaks, CA: Sage
- Schuler, R.S. and MacMillan, I.C. (1984) 'Gaining Competitive Advantage Through Human Resource Management Practices', *Human Resource Management*, 23(3): 241-255.
- Schuler, R.S., Dowling, P.J. and De Cieri, H. (1993) 'An Integrative Framework of Strategic Human Resource Management', *International Journal of Human Resource Management*, 4: 717 -764.
- Settoon, R.P., Bennett, N. and Liden, R.C. (1996) 'Social Exchange in Organizations:

 Perceived Organizational Support, Leader-Member Exchange, and Employee

 Reciprocity', *Journal of Applied Psychology*, 81: 219–27.
- Shah, P.P. and Jehn, K.A. (1993) 'Do Friends Perform Better than Acquaintances? The Interaction of Friendship, Conflict and Task,' *Group Decision and Negotiation*, 2: 149–165.
- Steers, R. (1977) 'Antecedents and Outcomes of Organizational Commitment', Administrative Science Quarterly, 22: 46-56.
- Tan, H.W. and Batra, G. (1995) 'Enterprise Training in Developing Countries: Incidence, Productivity Effects and Policy Implication', Unpublished Paper, Washington: The World Bank
- Tharenou, P. (1997) 'Organizational, Job and Personal Predictors of Employee Participation in Training and Development', *Applied Psychology: An International Review*, 46(2): 111-134.

- Tharenou, P. (2001) 'The Relationship of Training Motivation to Participation in Training and Development, *Journal of Occupational and Organisational Psychology*, 74: 599-621.
- Wang, Y. (2004) 'Observations on the Organizational Commitment of Chinese Employees:
 Comparative Studies of State-Owned Enterprises and Foreign-Invested Enterprises',
 International Journal of Human Resource Management, 15(4): 649-669.
- Wang, Y. (2008) 'Emotional Bonds with Supervisors and Co-Workers: Relationship to Organizational Commitment in China's Foreign-Invested Companies, *International Journal of Human Resource Management*, 19(5): 916-931.
- Wong, C.S., Hui, C. Wong, Y.T. and Law, K.S. (2001) 'The Significant Role of Chinese Employees' Organizational Commitment: Implications for Managing Employees in Chinese Societies', *Journal of World Business*, 36(3): 326-340.
- Wong, C. S. and Law, K. S. (1999) 'Managing Localization of Human Resources in the PRC: A Practical Model', *Journal of World Business*, 34(1): 26–40.
- Yao, X and Wang, L. (2006) 'The Predictability of Normative Organizational Commitment for Turnover in Chinese Companies: A Cultural Perspective', *International Journal of Human Resource Management*, 17(6): 1058-1075.

Figure 1: The Research Model

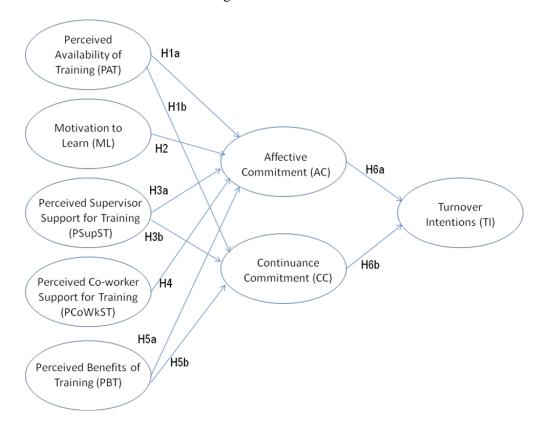


Table 1: Company Information

Company	Industry	Head Office	Fieldwork Locations	Total Distributed	Total Complete Responses
A	Retail	Shanghai	Nationwide	500	215
В	Retail	Shanghai	Nationwide	200	95
С	Banking	Beijing	Zhejiang Province	100	59
D	Education	Zhejiang Province	Zhejiang Province	100	37
Е	Airline	Shanghai	Zhejiang Province	100	31

Table 2: Cross Loadings and Composite Reliability

	Turnover Intentions	Affective Commitment	Continuance Commitment	Perceived Availability of Training		Perceived Supervisor Support for Training	Kanatite	Motivation to Learn	Composite Reliability
I often think of quitting my present job	0.866	-0.556	-0.186	-0.395	-0.272	-0.475	-0.213	-0.279	
I may leave this company and work for another company in the next year	0.872	-0.550	-0.260	-0.456	-0.243	-0.518	-0.211	-0.316	
I plan to stay in this company to develop my career for a long time	0.804	-0.539	-0.184	-0.356	-0.240	-0.478	-0.254	-0.305	0.909
I may not have a good future if I stay with this organisation	0.840	-0.601	-0.145	-0.474	-0.314	-0.555	-0.302	-0.342	
I really feel that this organisation's problems are my own.	-0.410	0.592	0.087	0.329	0.149	0.455	0.295	0.408	
I do not feel like "part of the family" at this organisation.	-0.595	0.864	0.175	0.438	0.394	0.492	0.266	0.326 0.879	
I do not feel "emotionally attached" to this organisation.	-0.548	0.882	0.162	0.387	0.362	0.445	0.284	0.335	0.879
I do not feel a strong sense of belonging to my organisation.	-0.569	0.849	0.168	0.416	0.305	0.465	0.266	0.313	
Too much in my life would be disrupted if I decided I wanted to leave my organization now	-0.194	0.157	0.673	0.198	-0.004	0.144	0.036	0.093	
I feel that I have too few options to consider leaving this organization	-0.216	0.199	0.783	0.219	-0.011	0.112	0.102	0.094	
One of the few serious consequences of leaving this organization would be the scarcity of available alternatives	-0.158	0.104	0.812	0.196	-0.154	0.046	-0.073	-0.014	0.843
If I had not already put so much of myself into this organization, I might consider working elsewhere	-0.128	0.113	0.757	0.211	-0.154	0.087	-0.097	0.032	
My organisation provides its employees with good opportunities to undertake in-house job-specific training	-0.405	0.394	0.222	0.870	0.179	0.469	0.185	0.412	0.928

My organization provides a good environment for new recruits to learn job-specific skills and knowledge	-0.483	0.473	0.233	0.884	0.237	0.515	0.174	0.416	
My organisation provides it employees with good opportunities to learn general skills and knowledge inside the organisation which may be of use to me in my future career	-0.445	0.450	0.208	0.861	0.236	0.508	0.207	0.453	
My organisation provides its employees with good opportunities to undertake general training programmes and seminars outside of the organisation	-0.406	0.395	0.262	0.834	0.106	0.438	0.109	0.371	
My organisation provides assistance for its employees to take management training and development courses externally at educational institutions	-0.366	0.359	0.232	0.795	0.055	0.406	0.102	0.369	
My co-workers resist my efforts to apply new knowledge or skills on the job	-0.225	0.271	-0.066	0.148	0.795	0.222	0.289	0.228	0.833
My co-workers are reluctant to give advice	-0.306	0.375	-0.115	0.183	0.903	0.290	0.230	0.230	
I am comfortable discussing my skill weaknesses with my manager	-0.443	0.459	0.048	0.377	0.253	0.750	0.428	0.416	
My manager shares information (problems, trends) influencing career plans	-0.413	0.430	0.115	0.403	0.174	0.780	0.302	0.378	
My manager supports my participation in training and development programmes	-0.473	0.443	0.133	0.414	0.284	0.797	0.342	0.379	
My manager gives me coaching and guidance to help achieve my work objectives	-0.494	0.498	0.077	0.438	0.234	0.862	0.341	0.411	0.951
My manager believes advising and training as one of his/her major job responsibilities	-0.452	0.437	0.079	0.424	0.211	0.794	0.279	0.373	0.931
I do not hesitate to tell my manager of a training need	-0.414	0.350	0.039	0.383	0.219	0.610	0.253	0.395	
My manager makes sure I get the training and development needed for job effectiveness	-0.545	0.482	0.166	0.544	0.195	0.772	0.260	0.371	
My manager provides me with specific feedback on my job performance	-0.485	0.473	0.137	0.433	0.226	0.840	0.325	0.343	

My co-workers help me to develop the skills I have learned in training and development	-0.399	0.387	0.038	0.384	0.266	0.663	0.280	0.363	
My manager helps me to develop the skills I have learned in training and development	-0.520	0.477	0.141	0.489	0.264	0.840	0.326	0.395	
My manager is supportive of my efforts to acquire new skills and knowledge	-0.438	0.423	0.089	0.377	0.280	0.784	0.437	0.377	
My manager willing to discuss problems I have in using new skills and knowledge	-0.454	0.420	0.039	0.418	0.252	0.825	0.372	0.396	
My manager assigns projects using skills and knowledge from training and development	-0.487	0.475	0.126	0.452	0.230	0.715	0.454	0.502	
Participating in training programmes will help my personal development	-0.179	0.192	-0.039	0.055	0.288	0.323	0.816	0.356	
Participating in training programmes will help me network with other employees	-0.146	0.203	-0.034	0.114	0.244	0.277	0.763	0.347	
Participating in training programmes will help me perform my job better	-0.248	0.293	-0.002	0.136	0.282	0.366	0.892	0.422	
Participating in training programmes will help me stay up to date on new processes and products or procedures related to my job	-0.208	0.281	-0.027	0.079	0.277	0.332	0.854	0.396	0.936
Participating in training programmes will help me reach my career objective	-0.320	0.355	-0.036	0.228	0.257	0.419	0.869	0.450	
Participating in training programmes will give me a better idea of the career path I want to pursue	-0.293	0.349	0.025	0.187	0.237	0.411	0.861	0.430	
Participating in training programmes will result in more opportunities to purse different career paths	-0.191	0.204	0.024	0.203	0.124	0.335	0.683	0.293	
I try to learn as much as I can from training programmes	-0.208	0.218	-0.043	0.254	0.271	0.350	0.409	0.718	
I believe I tend to learn more from training programmes than others	-0.256	0.313	0.045	0.361	0.146	0.399	0.359	0.848	0.870
I am usually motivated to learn skills emphasized in training programmes	-0.404	0.461	0.113	0.513	0.257	0.493	0.434	0.923	

Table 3: AVE and Correlations of Latent Constructs

	Affective Commitment	Continuance Commitment	Co- Worker Support for	Benefits of Training			Perceived Availability of Training	Turnover Intentions
AC	0.000		Training					
AC	0.806	0.750						
CC	0.188	0.758						
PCWST	0.387	-0.110	0.850					
PBT	0.342	-0.013	0.296	0.823				
ML	0.422	0.065	0.267	0.477	0.834			
PSST	0.575	0.126	0.305	0.438	0.506	0.775		
PAT	0.490	0.272	0.196	0.185	0.477	0.552	0.849	
TI	-0.665	-0.228	-0.317	-0.291	-0.368	-0.600	-0.499	0.846

Figure 2: LISREL Results

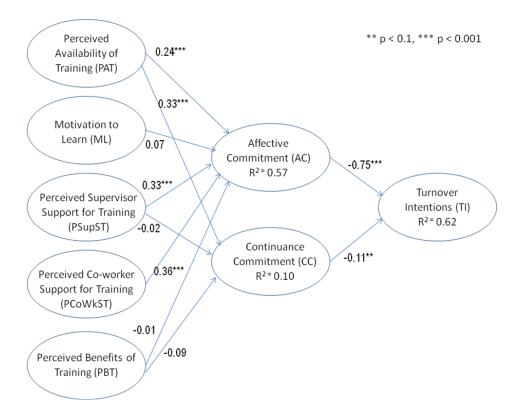


Table 4: Model Fit Statistics

Goodness of Fit Index (GFI)	0.80
Adjusted Goodness of Fit Index (AGFI)	0.77
Root Mean Square Error of Approximation (RMSEA)	0.066
χ^2	2139.30
χ^2/df	2.68
Comparative Fit Index (CFI)	0.97
Non-Normed Fit Index (NNFI)	0.97
Incremental Fit Index (IFI)	0.97
Akaike's Information Criterion (AIC)	2504.21

Figure 3: LISREL Results for the Final Model

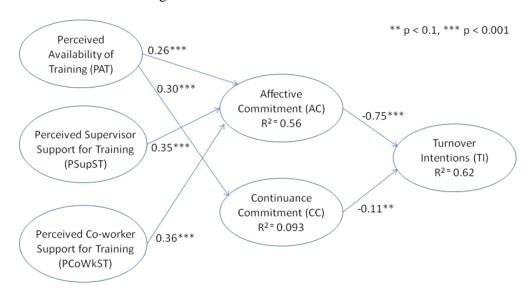


Table 5: Model Fit Statistics for the Final Model

0.84
0.81
0.067
1318.81
2.90
0.97
0.97
0.97
1490.41

Table 6: Summary of the Results

H1a: There is a positive relationship between the perceived availability of training and affective commitment	Supported
H1b: There is a positive relationship between the perceived availability of	Supported
training and continuance commitment	
H2: There is a positive relationship between motivation to learn and	Not Supported
affective commitment	
H3a: There is a positive relationship between perceived supervisor support	Supported
for training and affective commitment	
H3b: There is a positive relationship between perceived supervisor support	Not Supported
for training and continuance commitment	
H4: There is a positive relationship between perceived co-worker support	Supported
for training and affective commitment	
H5a: There is a positive relationship between the perceived benefits of	Not Supported
training and affective commitment	
H5b: There is a positive relationship between the perceived benefits of	Not Supported
training and continuance commitment	
H6a: There is a negative relationship between affective commitment and	Supported
turnover intentions	
H6b: There is a negative relationship between continuance commitment and	Supported
turnover intentions	