

*Full Length Research Paper*

# **Strategic training practices, effective organizational commitment, and turnover intention: The mediating role of psychological contract**

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Accepted 5 October, 2010

**This paper aims at determining the relationships among psychological contracts, affective organizational commitment, and three dimensions of personal needs assessment in strategic training (that is, motivation to learn, perceived support, and training attitudes). The study sample comprised 301 employees from universities of medical sciences in Iran. Multiple and simple linear regression and path analysis were used to test the direct and mediated relationships among the variables. The survey results further demonstrated that psychological contract is a partial mediator between strategic training practices and effective organizational commitment. This study highlights the importance of strategic need assessment in order to foster affective organizational commitment. These findings have important practical and theoretical implications. Firstly, managers will not be able to foster effective commitment through human resource practices unless they recognize and appreciate which needs are valued by employees. Secondly, the results provide evidence in favor of managerial interventions aimed at enhancing affective organizational commitment and, consequently, minimizing the negative effects of an actual turnover in the universities of medical sciences in Iran.**

**Key words:** Motivation to learn, training attitudes, perceived support, effective organizational commitment, psychological contract, turnover intention.

## **INTRODUCTION**

Employee turnover represents a critical problem to an organization in terms of loss of talent, additional employment and training costs (Loi et al., 2006). Effective organizational commitment has been considered as one of the most important predictors of turnover and intention to leave. It was found that employees who were more committed to their organizations had lower intention to leave than those with lower organizational commitment (Griffeth and Hom, 1995; Igharia and Greenhaus, 1992). Almost every employee in the universities receives some type of training during his or her career (Mahmoodi, 2007). High turnover rate of the universities in Iran causes higher costs and lower service quality. Many

empirical researches showed that there is a link between human resource management practices and organizational commitment, and that an individual's commitment to an organization can be significantly influenced by organization's managerial practices (Stup, 2006; Roca-Puig et al., 2007; Fiorito et al., 2007). More specifically, studies have been found focusing on: training and organizational commitment (Tanannenbaum et al., 1991; MacDuffie, 1995; Chew and Chen, 2008), salary levels and organizational commitment (Ritzer and Trice, 1969), performance reward contingencies and organizational commitment (Lee, 1971), promotion and organizational commitment (Kanter, 1977) and profit sharing and organizational commitment (Coyle-Shapiro et al., 2002).

However, researches focusing on the impact of strategic human resource management practices are yet to be found. The concept of strategic human resource management practices is based on the human resource

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management philosophy that emphasizes the strategic nature of human resource (Guest, 1998; Armstrong, 2000; Walton, 1985; Lundy and Cowling, 1996). According to Armstrong (2000) the aim of strategic human resource management practices is to generate strategic capability of organization to ensure that it has skilled, committed, and well motivated employees. This aim shows that the rationale for implementing strategic human resource management is to manage people effectively in the long run. In other words, strategic human resource management practices focuses on the specific plans of what needs to be done and what needs to be changed for the employees which will improve individual effectiveness.

Unfortunately, how strategic human resource management practices and organizational commitment are related is unclear. Understanding how they are related is essential since strategic human resource management practices have been claimed to affect behavior in the organization (Guest, 1998; Meyer and Allen, 1997; Tanannenbaum et al., 1991). Thus, this study will be addressing this issue. Nevertheless, this paper only explores the relationship between strategic training practices and affective commitment. In addition, the expanded role of training places continued pressure on strategic human resource management to develop more effective training strategies and to conduct evaluations that demonstrates a return to the organizations from their training investments (Richard et al., 2009). In the strategic human resource management literature, strategic training acts as an important factor for lowering turnover and improving individual effectiveness (Richard et al., 2009). One way in which this can be achieved is in the provision of strategic training practices and fostering high organizational commitment to enhance the retention of employees in the universities of medical sciences. A better understanding of factors that are associated with affective organizational commitment can be helpful in designing policies and interventions to increase staff commitment and diminish turnover. There is little knowledge on the relationship between individual-centered needs assessment approach in training and measuring of affective organizational commitment. In addition, this research examined if psychological contract mediate the relationship between strategic training practices and affective organizational commitment. Also, this research adds knowledge to the strategic human resource management literature about individual-centered needs assessment approach in Iran and their relationship to affective organizational commitment.

## REVIEW OF THE LITERATURE

### Strategic training

Strategic human resource management researchers define human resource management practices such as training

as the types of activities that affect behavior of individuals in their efforts to formulate and implement the strategic needs of the organization (Huselid et al., 1997; Becker et al., 1996; Deery et al., 1994; Guest, 1987; Iles et al., 1990; Meyer and Allen, 1997). Tanannenbaum et al. (1991) found a strong positive correlation between commitment and employees' motivation for training. Also, employees exposed to more training opportunities are likely to exhibit higher levels of affective commitment (Meyer and Allen, 1991). According to Lang (1992) perhaps training should be specifically designed to achieve increased organizational commitment. In fact, organizational commitment is able to solve basic management problems (Salaman et al., 2005) in order to achieve individual effectiveness, that is, organizational commitment as a factor of work-related attitude and training as an instrument have impact on individual effectiveness (Ahmad and Bakar, 2003). In a relationship between organizational commitment and training a sample of the numerous possible antecedents that have been explored include perception, and benefits such as career, job related, personnel (Mathieu and Martineau, 1997), satisfaction (Tannenbaum et al., 1991), self-efficacy (Saks, 1995), social support (Facteau et al., 1995), facilities, materials and equipments (Gomez-Mejia et al., 1995). Although, a variety of studies have been reported recently examining certain aspects of commitment and training, from a strategic approach it is admittedly limited. The findings do provide some support for the argument that strategic training practices are designed to foster organizational commitment and reduce turnover intention. This strategic approach to training is an implication of a strategic human resource management practice that involves abandoning the mindset and practices of "personnel management" and operational issues and focusing on strategic issues Mello (2002:100). Therefore, from the employee's point of view, training is a character of the employers' commitment to their staff (Storey and Sisson, 1993). In addition, according to Farrell and Rusbult (1981) exchange theory suggests that training can be viewed as an investment in the relationship between an organization and the employees and can contribute to organizational commitment. The more positive the training experience, the greater can the commitment be to the organization. Organizational commitment is positively related to the employee's attitude towards training and training motivation (Carlson et al., 2000). According to Blau (1964), "Social exchange... refers to voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others". Cook and Rice (2003) noted social exchange as the process by which individuals and group give resources to other social individuals, group and organization and receive resources from them. According to Rousseau (1989) the terms and conditions of this reciprocal exchange between organizations and their employees are defined within in the psychological contract. He also describes that

psychological contract is an employee's belief regarding terms and conditions of an exchange relationship with their organization. It constitutes of employment obligations, embedded in the context of social exchange. Strategic human resource management practices affect the psychological contract (King, 2000; Guzzo and Noonan, 1994). A psychological contract is created when organizations and their representatives convey promises of future inducements (training) to the employees in exchange for some contribution from the employees who help them understand terms of their employment (Rousseau and Greller, 1994). It has been argued that human resource management practices including training can send strong messages to individuals regarding what an organization expects of them and what they can expect in return and hence training are seen to play an important role as message senders, shaping terms of the psychological contracts (Rousseau and Wade-Benzoni, 1994). Hence, a major function of training is to foster an appropriate psychological contract (Rousseau and Greller, 1994), and employee interpretations of their employer's training may affect their psychological contract with their employer, and ultimately their perception of contract fulfillment or breach may affect their commitment to their employer. As a result, in the present study, it is theorized or hypothesized that industries' managers can influence work related attitude such as organizational commitment through the maintenance of the strategic training, reduce turnover intention and enhance effectiveness. One of the most important keys to developing successful training programs in organizations is strategizing the training. This involves needs assessment (Mello, 2002). Although, needs assessment involves three levels of analysis such as organization, task, and personal, in this research it was theorized that the more precisely managers can influence organizational commitment through individual level of needs assessment of strategic training. Because this level of needs assessment considers the people to be committed, only analyzing individual needs shows a lack of adequate planning and strategizing on the part of organization (Anthony et al., 1999). In addition, it is thought that highly committed organizations use strategic training practices to make more informed decisions with good consequences. This requires an analysis of levels of knowledge, personal growth, motivation to learn (Hicks, 1984) and personnel attitude that play a role in determining trainability (Noe and Schmitt, 1986). Also, this analysis is based on personal needs assessment of training focuses on the organization-person fit (Daley, 2002) that may lead to affective commitment. It is important to remember that organizational commitment provides a basis for understanding the development of linkages between individuals and organizations (Chew and Chen, 2008). Although, some empirical supports show that person-organization fit is positively linked with organizational commitment and is negatively related to turnover intention

studied by (Becker et al., 1996; Chew and Chen, 2008) there remains a shortage of empirical support for the notion that needs assessment of personal which is essential if training is to be linked to affective organizational commitment. Unfortunately, such link is little investigated. Iranian hospitality industries are organizations that rush to provide training solutions to their problems such as turnover intention, low interest to learn, and lack of support, without adequately assessing personal needs. Training needs assessment is a tool that helps them create a superior workforce. Furthermore, strategic human resource management practices are concerned with longer-term people issues (Armstrong, 2000) and within this framework it is necessary to consider long-term strategies of training. For example, it should provide appropriate support, and it would be necessary to address personal attitude and motivation to learn within the organizations to ensure participation and perceived support. However, organizations can also achieve immediate improvements in performance and result if short-term management approach applies effective training (Thomas, 2000).

### **Motivation to learn**

The motivational level of employees is a foundational component of the effectiveness of organizational training programs. Goldstein (1991, 1992) emphasized the importance of motivation: 'Before trainees can benefit from any form of training . . . they must be motivated' (1991 p. 541). Noe and Wilks argued that 'motivation to learn, and evaluation of previous development experiences have a direct effect on employee's participation in development activities' (1993: 292). They developed and tested a conceptual model of development activity that was based on work conducted by Dubin (1990), Farr and Middlebrooks (1990) found that motivation to learn, perception of benefits and work situation perceptions had considerable, unique effects on employee development activity.

### **Perceived support**

Huczynski and Lewis (1980) concluded that issues important to whether or not trainees use their training included whether they attended the course on their own initiative; how helpful they believed the training would be to them in their jobs; and the motivational climate of the organization, in particular, supervisor support. In addition, employees are often influenced by the level of and the manner in which they interact with their supervisors (Eisenberger et al., 2002). When supervision creates an environment where there is a sense of belonging, and demonstrates effective training, employees will display strong feelings of commitment (Ammeter and Dukerich, 2002). In addition, supervisor support has been shown to

enhance employee job attitudes such as organizational commitment (Thompson and Prottas, 2005) and is negatively related to turnover intentions (Thompson et al., 1999). Supervisor support, a source of social support, is related to work attitude (Hammer et al., 2009) and they are responsible for training. Also, they motivate employees toward acceptable behaviors such as commitment (Caykoylu et al., 2007). Furthermore, training attitudes indicate levels of good or bad feeling about training. Hicks (1984) argued that if employees are given reasonable information about the training program, the employees can see how training fits with their needs. So, if the employees feel that the match is good, they should have a heightened desire to learn (Porter et al., 1974), which is a prerequisite for strategizing training.

### Training attitudes

Training attitudes indicate levels of good or bad feeling about training. Hicks (1984) argued that if employees are given reasonable information about the training program, the employees can see how training fits with their needs. So, if the employees feel that the match is good, they should have a heightened desire to learn (Porter et al., 1974), which is a prerequisite to strategize training. It is clear that training attitudes in strategizing training as a dimension of personal analysis needs was discovered by results (Hicks, 1984) indicated that employees who received the reasonable training and those who had a higher degree of choice were more likely to perceive the seminar to be appropriate for them to take and were better able to profit from training. Also, they were also more committed to their decisions to attend the training. In light of this, if employees in the have learnt new skills and knowledge and successfully implemented this learning to enhance the performance of the organization, they should be compensated accordingly in a way that is significant to them. As a result, according to Garger (1999) the challenge for business today is to provide development opportunities and alignment between these strategies, the most likely to see improvement in both satisfaction of the employees and lower turnover intention. Based on these arguments, the following hypotheses were advanced:

Hypothesis 1: Strategic training practices including motivation to learn, perceived support, and training attitudes will be positively related to affective organizational commitment.

### Organizational commitment

Meyer and Allen (1991) commented on the various definitions of organizational commitment to include "the view that commitment is a psychological state that (a) characterizes the employee's relationship with the

organization, and (b) has implications for the decision to continue membership in the organization" (p. 67). Thus, regardless of the definition, committed employees are more likely to remain in the organization than uncommitted employees. What differs across definitions is the nature of the psychological state being described. According to Meyer and Allen (1991), the three states are as follows: "Affective (commitment) refers to the employee's emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so. Normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization. Finally, continuance commitment refers to an awareness of the costs associated with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so". Meyer and Allen (1991) described these dimensions as components rather than types of commitment, as they postulated that they were not mutually exclusive. The components were felt to reflect a psychological state, and any individual could experience all three components of commitment to varying degrees (Meyer and Allen, 1997). Due to the conceptual differences in the components, they hypothesized that each component would have different antecedents and differences in work-related behavior such as actual turnover. As a result, Meyer, Allen and their colleagues (e.g. Allen and Meyer, 1984, 1990, 1991; Meyer et al., 1989, 1990, 1993) view effective, normative and continuance commitment as components of attitudinal commitment (Iverson and Buttigieg, 1999). However, according to Iverson and Buttigieg (1999), affective commitment is the most consistent factor with the conceptual and operational definition of attitudes, so it has been termed "attitudinal commitment". In other words, affective commitment is a psychological and individual-level (Elias, 2009). Consequently, for this study we want to focus on this aspect of commitment in Meyer and Allen's three-component commitment model.

### Turnover intention

A great deal of research has been conducted that attempts to link employee attitudes (e.g., effective organizational commitment) with behavioral factors (e.g., turnover intention) (Zhao et al., 2007). In fact, effective organizational commitment plays a central role in the turnover literature. Two recent meta-analyses conducted by Griffeth et al. (2000) and Meyer et al. (2002) confirm that effective organizational commitment is well established as an important antecedent of withdrawal behaviors. They also showed that intention to leave is an important antecedent to actual turnover. Committed

employees have been found to be less likely to leave an organization than those who are uncommitted (Angle and Perry, 1981).

As we discussed earlier, effective organizational commitment refers to the employee's emotional attachment, as well as identification with and involvement in the organization, it is likely that committed employees may therefore remain because they wish to maintain their membership in order to facilitate organizational goals (Suliman and Iles, 2000).

Although, a more recent research conducted by Hsu (2009) showed no significant relationship between organizational commitment and turnover intention, most researchers have found a significantly negative relationship between affective organizational commitment and turnover intention (Addae et al., 2006; Zhao et al., 2007; Pare and Tremblay, 2007). It seems to be logical to expect that effective commitment will affect intention to quit, and thus we hypothesize that:

Hypothesis 2: Affective organizational commitment will significantly and negatively influence turnover intention.

### Psychological contract

Argyris (1960), Levinson et al. (1962), and Schein (1965), developed a psychological contract theory as a framework for understanding the employment relationship (Shore et al., 2004; Taylor and Tekleab, 2004) that is mutual obligations (Rousseau and Tijoriwala, 1998; Rousseau, 1989), or legal contract (Zhao et al., 2007). Psychological contracts are defined "as the beliefs individuals hold regarding the terms and conditions of the exchange agreement between themselves and their organizations" (Rousseau, 1995, p. 9) or an "individual's belief in the terms and conditions of a reciprocal exchange agreement between the focal person and another group" (Rousseau, 1989, p. 123). In other words, psychological contracts refer to "employees perceptions of what they owe to their employers and what their employers owe to them" (Robinson, 1996, p.574). Furthermore, psychological contracts are highly subjective (Guzzo and Noonan, 1994; Guest, 1998). Also, Schein (1965) emphasized the importance of the psychological contract concept in understanding and managing behavior in organizations. So, psychological contract theory can also be used to understand commitment. Although, employee perceptions of the psychological contract and commitment to the organization are theoretically linked, and there is some empirical support for this relationship (e.g., Bunderson, 2001; Lester et al., 2002; Sels et al., 2004), research has not kept rapidly with recent developments in the broader contracts and commitment literatures (McInnis et al., 2009). In addition, context-specific differences between organizations, within organizations and among individuals

are more essential for the creation, improvement and evaluation of the psychological contract (Huiskamp and Schalk, 2002). Therefore, it was predicted that psychological contract mediates the relationship between training and organizational commitment.

Hypothesis 3: Psychological contract will be positively related to affective commitment.

Hypothesis 4: Strategic training practices including (motivation to learn, perceive support, and attitudes) will be positively related to psychological contract.

Hypothesis 5: Psychological contract will mediate the relationship between strategic training practices and affective organizational commitment.

### Theoretical framework

Theoretical framework (Figure 1) describes the variables in the conceptual model. The model suggests effective organizational commitment as dependent variable and strategic training practices as independent variable. In addition, it is anticipated that the relationship between strategic training practices and affective organizational commitment will be mediated by psychological contract. These relations are based on review of the literature that tends to support this conceptual model.

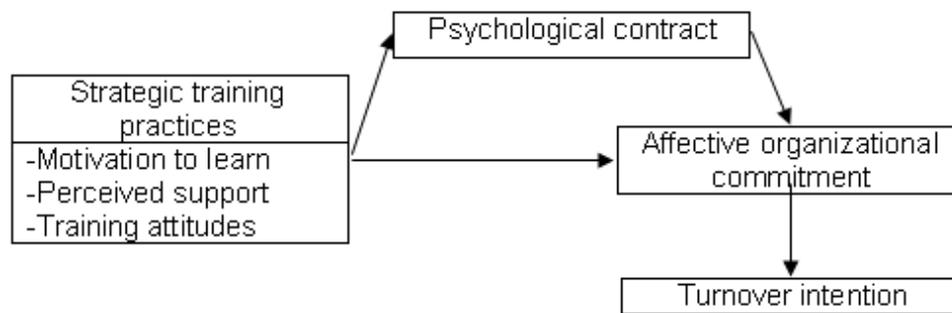
### METHODOLOGY

#### Sample and procedures

Four universities of medical science were places of conducting this study. According to the data released by Health Information Management (2 Dec, 2009), there were nine universities of medical sciences listed in the Webometric Ranking of Top Iranian Medical Universities and out of them, only four universities were top Iranian Medical universities. Sampling frame consisted of non-academic employees in the administrative unit of these universities. The sites for this study were four universities of medical sciences in Iran. The four universities were: (1) Isfahan university, (2) Tehran university, (3) Iran university, and (4) Mashhad university of medical sciences. Sample has two features. First, it is practical. Second, it produces more reliable result (Salkind, 2000). In addition, it comprises selected members to represent the population views of a particular topic. There were approximately 2400 non-academic employees from 500 non-academic employees in the each administrative department of these universities. Then the Krejcie and Morgan (1970) formula is undertaken to determine the sample size of the study. The calculation using the 0.05 confidence demonstrates that the sample size for this study was 334. Of 400 employees selected for the sample, 325 employees returned their questionnaires. After deletions of 24 unusable missing cases, the final data set consisted of 301 respondents for an overall response rate of 75.25%. The university response rate for each of the four universities varied between 68 and 92%.

#### Measurements

All question items in the survey questionnaire were measured on a



**Figure 1.** Conceptual framework.

five-point Likert Scale (1 = strongly disagree; 5 =strongly agree):

(1) Motivation to learn: Motivation to learn scale by Noe and Schmitt (1986) comprises 7 items and the internal consistency reliability for this dimension was 0.88. A study by Bartlett (1999) has revealed that Noe and Schmitt's motivation to learn measure is applicable for health-care workers and administrators. He found that the internal consistency reliability for the motivation to learn with Alpha Cronbach value 0.87. In this study, the motivation to learn is reported to have a high reliability of measurement ( $\alpha = 0.85$ ) which is above the minimum recommended value of 0.7 (De Vellis, 2003).

(2) Perceived support: Perceived support scale by Seyler (1997) comprises 12 items and the Cronbach's Alpha for supervisor support and peer support scales to be 0.86 and 0.83 respectively. In this study, the reliability for this dimension was 0.88, which is higher than the 0.86 and 0.83 reported by Seyler (1997).

(3) Training attitude: Measures for this dimension are drawn from existing research instruments strategic assessment of readiness for training Weinstein et al. (1994). This five-item subscale from this instrument is used to measure attitudes held by individuals toward strategic training. Internal consistency reliability for these dimensions was 0.88 as reported by Weinstein et al. (1994). A study by Seyler (1997) showed the internal consistency reliability for the training attitudes with Alpha Cronbach value 0.82. In this study training attitudes is reported to have a high reliability of measurement ( $\alpha = 0.80$ ) which is above the minimum recommended value of 0.7 (De Vellis, 2003).

(4) Effective organizational commitment: Effective organizational commitment refers to an emotional bonding to the organization. Employees with a large emotional attachment to the organization can not leave their organization (Meyer et al., 1993). In this study, 6-item scale was adopted Meyer and Allen (1997). In this study, affective organizational commitment measurement is adopted from sub dimensions of organizational commitment scale by Meyer and Allen (1997). They reported affective organizational commitment with Cronbach's Alpha value 0.85. In this study, we obtained a Cronbach's Alpha of 0.89.

(5) Psychological contract: Psychological contract fulfillment was included in the present study because of its documented role of influencing with three strategic compensation practices and affective organizational commitment. Psychological contract was measured by using 12 items scale adopted from Coyle-Shapiro and Conway (2005). Whereas they reported an internal consistency reliability with coefficient alpha of 0.89. In this study psychological contract is reported to have a high reliability of measurement ( $\alpha = 0.83$ ).

(6) Turnover intention: Turnover intention scale by Sanders and Roefs (2002) comprised 7 items and the Alpha Cronbach for five

dimensions were 0.76. In this study turnover intention is reported to have a high reliability of measurement ( $\alpha = 0.85$ ).

### Statistical methods

Descriptive statistics, which include frequencies, percentages, means, standard deviations and intercorrelations among the main variables, are used to present the main characteristics of the sample. In addition, following appropriate statistical tools was used for data analysis.

### Pearson product-moment correlation

According to the requirements of the conceptual framework (Figure 1), the test of measuring the relationship of variables is Pearson correlation, because it tests the interdependency of the variables discussed in the conceptual framework.

### Multiple regression analysis

Because there are more than one independent variable in the conceptual framework thus multiple regression analysis is used.

### Path analysis for mediation

The path analysis allows the researcher to examine the direct effect of strategic training practices on effective organizational commitment.

### Simple linear regression

For determining the effect of organizational commitment on the turnover intention a simple linear regression was carried out for this study.

## RESULTS

Prior to the hypotheses testing, we checked the validity of the strategic training scale. This was done by analyzing the content validity, reliability, and construct validity for showing goodness of measurement. For determining

determining the content validity, expert's opinions were sought. For this purpose, a set of questionnaire has been distributed to the academicians in order to establish the grade of match each item with study objectives. Specialists in the field of strategic human resource management have improved the sentences structure in order to validate the content of the research instrument. In this study factor analysis is used as a common test to validate the construct of the measurement. It was decided to use the construct validation strategy-the process of factor analysis recommended by Pallant (2007). The process has three assumptions: determine sufficient correlation that shows value greater than 0.3; demonstrate of significantly in the correlation matrix  $p < 0.05$ ; determine the Kaiser-Meyer-Olkin in the descriptive statistics that show value greater than 0.06. Examination of the component matrix table showed that all items load strongly on the one underlying component. As Tables 1 and 2 show, the different items load into the corresponding factors, exactly as had been established. All studied variables report its cumulative variance greater than 60% (effective organizational commitment: 71.73%; psychological contract 73.14%; turnover intention 60.46%). It denotes that these dimensions are greatly suitable to describe the variables. All the above evidence support sufficient degree of reliability and validity. Thus, the instruments developed to measure strategic training practices, psychological contract, affective organizational commitment, and turnover intention were found to be workable and accepted to utilize for the study. Table 3 gives mean standard deviation, minimum value and maximum value of the variables. Tables 4 and 5 show a matrix of correlations of the variables used in this study. Table 4 shows that strategic training practices including motivation to learn, perceived support, and training attitudes are positively and significantly related with effective organizational commitment (0.565\*\*, 0.511\*\*, 0.568\*\*,  $p < 0.05$ ). In addition, strategic training practices are positively and significantly related with psychological contract (0.578\*\*, 0.549\*\*, 0.576\*\*  $p < 0.05$ ) but more than effective organizational commitment.

### Regression analysis

In order to test the first and second hypothesis, multiple regression analysis was employed. Results of preliminary analyses confirmed that all the assumptions of multiple regressions were met (that is, Normality, Linearity, and Multicollinearity by checking variable inflation factor and condition index). This examination did not reveal any violation in conducting the multiple regressions. Table 6 shows that the model tested is significant ( $p < 0.05$ ). The regression analysis accounted for 32% change is caused by strategic training practices to affective organizational commitment which is dependent variable. Value of beta also shows the positive rates of change by dependent

variable (0.302) with both independent variables are significant (0.000). Table 7 also shows that the model tested is significant ( $p < 0.05$ ). The regression analysis accounted for 22% change is caused by strategic training variables to psychological contract which is dependent variable. Value of beta also shows the positive rates of change by psychological contract (0.167) with strategic training variables are significant. Thus,  $H_1$  and  $H_4$  are supported.

$H_3$  stated that psychological contract will be positively associated with emotional attachment to the organization ( $r = 0.662$ ,  $p < 0.01$ ). This finding supports the hypothesis. Strategic training practices are said to influence affective organizational commitment in two ways: (a) by exerting a direct effect on affective organizational commitment and (b) by exerting an indirect effect on affective organizational commitment by affecting psychological contract. In this approach two causal steps recommended by Baron and Kenny (1986): (a) independent variable must affect the dependent variable and mediator (b) mediator must effect to the dependent variable. The equation for basic mediation model is given as follows:

$$\text{Equation 1: } Y = i_1 + c X + \varepsilon_1$$

$$\text{Equation 2: } M = i_2 + a X + \varepsilon_2$$

$$\text{Equation 3: } Y = i_3 + c' X + b M + \varepsilon_3$$

Where:

Y=The dependent variable (affective organizational commitment), X= The independent variable, (strategic training practices), M= The mediator variable (psychological contract),  $i_1, i_2, i_3$ = Constant Value for the Y variable, a,b,c,c'= coefficient for independent variable, dependent variable and mediator,  $\varepsilon_1, \varepsilon_2, \varepsilon_3$ = regression residual.

The result of three equations is presented in Table 8. As can be seen from the table, strategic training practices affects the affective organizational commitment ( $\beta = 0.565$ ,  $p < 0.05$ ,  $CI_{95} = 0.561, 0.784$ ) in the first equation. Strategic training practices is found to be significantly related to the psychological contract ( $\beta = 0.471$ ,  $p < 0.05$ ,  $CI_{95} = 0.420, 0.647$ ). The mediator (psychological contract) is found to significantly influence to affective organizational commitment ( $\beta = 0.509$ ,  $p < 0.05$ ,  $CI_{95} = 0.441, 0.629$ ). However, strategic training practices remains highly significant in the equation 3 ( $\beta = 0.325$ ,  $t = 7.159$ ) and indicates no perfect mediation is found. Therefore the tested null hypothesis is supported. But the Beta value of strategic training practices in the third equation has been diminished by 0.240 (0.565 - 0.325). It implies that the inclusion of psychological contract in the Equation 3 has reduced the effect of strategic training practices to effective organizational commitment. Hence, psychological contract is partially mediating the relationship of strategic training practices on affective organizational commitment. On top of that, bivariate and partial correlation tests are adopted to examine the mediating

**Table 1.** Exploratory factor analysis on strategic training practices.

Item	Factor			KMO	Communalities value	Cumulative variance (%)
	1	2	3			
Strategic training practices				0.856	29 items>0.637	83.434
Motivation to learn					7 items>0.645	30.234
Q7	0.884			0.678	0.678	67.234
Q8	0.834				0.765	86.822
Q9	0.795				0.834	93.862
Q10	0.765				0.899	98.989
Q11	0.730				0.645	99.462
Q12	0.687				0.798	99.774
Q13	0.634				0.654	100.000
Perceived support				0.712	11 items>0.638	32.124
Q14		0.923			0.887	84.346
Q15		0.885			0.831	88.447
Q16		0.897			0.819	91.549
Q17		0.767			0.638	93.852
Q18		0.746			0.690	95.809
Q19		0.712			0.765	97.573
Q20		0.710			0.698	98.882
Q21		0.696			0.736	99.414
Q22		0.645			0.765	99.720
Q23		0.634			0.694	99.930
Q24		0.629			0.653	100.000
Training attitudes				0.843	5 items>0.637	21.076
Q25			0.894		0.836	91.867
Q26			0.859		0.698	97.068
Q27			0.761		0.752	98.465
Q28			0.734		0.637	99.666
Q29			0.702		0.748	100.00

**Table 2.** Exploratory factor analysis on affective organizational commitment, psychological contract, and turnover intention.

Item	KMO	Communalities value	Cumulative variance (%)
Affective commitment	0.696	6 items>0.601	71.733
Q60		0.764	48.916
Q61		0.637	71.733
Q62		0.798	84.808
Q63		0.903	92.643
Q64		0.699	97.922
Q65		0.601	100.00
Psychological contract	0.828	12 items>0.658	73.135
Q66		0.832	44.391
Q67		0.857	59.620
Q68		0.777	73.135
Q69		0.829	80.722
Q70		0.807	86.886
Q71		0.658	90.103
Q72		0.674	93.176
Q7		0.817	95.504
Q74		0.839	97.272
Q75		0.864	98.622
Q76		0.894	99.572
Q77		0.876	100.000
Turnover intention	0.678	7 items>0.593	60.462
Q78		0.598	24.345
Q79		0.771	43.815
Q80		0.593	60.462
Q81		0.670	74.103
Q82		0.743	84.778
Q83		0.716	93.550
Q84		0.658	100.000

**Table 3.** Descriptive statistics of strategic training practices, psychological contract, affective organizational commitment, turnover intention.

Variable	Mean	Standard deviation	Minimum value	Maximum value
Strategic training	2.9578	0.47948	1.00	4.13
Psychological contract	3.7400	0.54335	1.25	4.58
Affective organizational commitment	3.9131	0.57050	2.17	4.50
Turnover intention	2.0570	0.59236	1.29	4.14

**Table 4.** Correlations between strategic training practices and effective organizational commitment.

No.	Variables	1	2	3	4
1	Motivation to learn	1.00			
2	Perceived support	0.534**	1.00		
3	Training attitudes	0.635**	0.487**	1.00	
4	Affective organizational commitment	0.565**	0.0511**	0.568**	1.00

\*\*Correlation is significant at the 0.01 level (2- tailed).

**Table 5.** Correlations between strategic training practices and psychological contract.

No	Variables	1	2	3	4
1	Motivation to learn	1.00			
2	Perceived support	0.479**	1.00		
3	Training attitudes	0.630**	0.532**	1.00	
4	Psychological contract	0.578**	0.549**	0.576**	1.00

\*\*Correlation is significant at the 0.01 level (2- tailed).

**Table 6.** Regression analysis.

R	R <sup>2</sup>	Adjusted R	Std. error of the estimate	F	Sig.
0.569	0.323	0.317	0.47162	47.331	0.000

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	1.933	.170		11.349	.000
	Motivation to learn	.025	.007	.196	3.834	.000
	Perceived support	.034	.005	.400	7.484	.000
	Training attitudes	.022	.009	.134	2.536	.012

a. Predictors: (Constant), Motivation to learn, perceived support, training attitudes. b. Dependent Variable: Affective commitment

mediating nature of psychological contract (Tables 9 and 10). The result of bivariate correlation shows that the correlation ( $r = 0.565$ ) between strategic training practices and affective organizational commitment is significant ( $p = 0.00$ ). However when psychological contract is controlled, the

magnitude of the correlation coefficient reduces from 0.565 to 0.383. Therefore, this finding supports the result of the three-step process pertaining to the partial mediation role of psychological contract. The simple mediation model is illustrated in Figure 2. The indirect effect of

strategic training practices on effective organizational commitment is 0.240 ( $0.471 \times 0.509$ ) and its direct effect is 0.325. The total effect coefficient is 0.565 ( $0.240 + 0.325$ ). The model also indicates 42.5% ( $0.24 / 0.565$ ) of the effect of strategic training practices on affective organizational

**Table 7.** Regression analysis.

<b>R</b>	<b>R<sup>2</sup></b>	<b>Adjusted R</b>	<b>Std. error of the estimate</b>		<b>F</b>	<b>Sig.</b>
0.488	0.238	0.230	0.4767		30.878	0.000
<b>Model</b>	<b>Unstandardized coefficients</b>		<b>Standardized coefficients</b>		<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. error</b>	<b>Beta</b>			
1 (Constant)	2.182	.172			12.671	.000
Motivation to learn	.010	.007	.082		1.517	.130
Perceived support	.032	.005	.393		6.926	.000
Training attitudes	.018	.009	.118		2.111	.036

a. Predictors: (Constant), Motivation to learn, perceived support, training attitudes. b. Dependent Variable: Psychological contract.

**Table 8.** The mediation effect on the relationship of strategic training practices on affective organizational commitment.

<b>Estimator</b>	<b>Equation 1</b>		<b>Equation 2</b>		<b>Equation 3</b>	
	<b>(Dependent= Affective commitment)</b>		<b>(Dependent= Psychological contract)</b>		<b>(Dependent = Affective commitment)</b>	
	<b>B</b>	<b>t</b>	<b>β</b>	<b>t</b>	<b>β</b>	<b>t</b>
Independent	0.565**					
Strategic training		11.844	0.471**	9.230	0.325**	7.159
Mediator: Psychological contract					0.509**	11.206

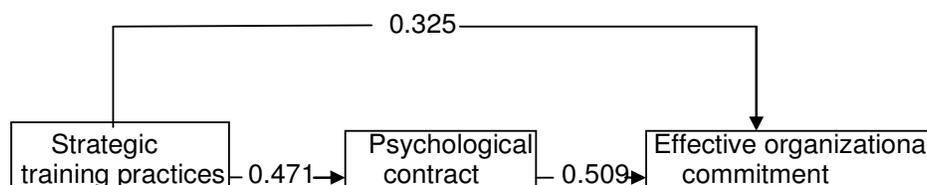
**Table 9.** Bivariate correlation of strategic training practices, psychological contract, and affective commitment.

<b>Variables</b>	<b>Strategic training Practices</b>	<b>Psychological Contract</b>	<b>Affective commitment</b>
Strategic training practices	1	.471**	.565**
Psychological contract	.471**	1	.662**
Affective commitment	.565**	.662**	1

**Table 10.** Partial correlation of strategic compensation practices on affective organizational commitment.

<b>Variable</b>	<b>Affective organizational commitment (Dependent)</b>
Strategic training and controlled by psychological contract	0.383**

Predictors: (Constant) Affective organizational commitment. Dependent variable: Turnover intention.



**Figure 2.** Simple mediation model for strategic training practices on affective organizational commitment.

**Table 11.** Regression analysis.

R	R <sup>2</sup>	Adjusted R	Std. error of the estimate	F	Sig.
0.865	0.748	0.747	0.2979	886.93	0.000

Predictors: (Constant) Affective organizational commitment. Dependent variable: Turnover intention

commitment is mediated through psychological contract. And 57.5% (0.325 / 0.565) is the direct effect of strategic training practices on effective organizational commitment when psychological contract is controlled. To determine the significance of indirect effect, Mackinnon et al. (1998) distribution of product is used. The result indicates the indirect effect value is 103.43 which are above than the critical value of 2.18. In another words, there is a significant indirect effect of strategic training practices on effective organizational commitment through psychological contract at the alpha value of 0.05.

The result of simple linear regression coefficient is presented in Table 11. The results show that the simple linear regression coefficient of the independent variables that are entered into the regression model and R (0.865) was the correlation of the affective organizational commitment and turnover intention, and R<sup>2</sup> was 0.748. The result suggest that 75% of the variance (R<sup>2</sup>) in turnover intention has been significantly explained by the affective organizational commitment, as shown by the F value of 886.930 ( $p < 0.000$ ) substantiating the fourth hypothesis. The result clearly illustrated that employees who were more committed to their universities had lower turnover intention than those with lower affective organizational commitment. Nonetheless, the negative relationship between turnover intention and effective organizational commitment suggests that the higher the level of affective organizational commitment the lower would be the intention to leave.

## DISCUSSION

The purpose of this study was to measure the relationship between strategic training practices and affective organizational commitment of non academic staff in Iran. After interpretation of results, our H<sub>1</sub> is sustained as there is a significant relationship is found between strategic

training practices and effective organizational commitment. However, limited studies have been conducted so far, particularly on the relationships of strategic training practices on effective organizational commitment. It should be noted that universities employees put great emphasis on psychological contract, which in turn significantly affects their emotional bond toward their employing university. Therefore, it would be beneficial for universities provide employees with what was obligated by employees (e.g., motivation to learn, support, and training attitudes), latter reciprocate by forming positive attitude in terms of affective organizational commitment. This study demonstrates that psychological contract has positive impact on affective organizational commitment. Addae et al. (2006) found a nonlinear relation between psychological contract and affective organizational commitment. Despite divergent finding in their work, this exploratory investigates how fulfillment of the psychological contract may have been expected encourage more emotional bonding (that is, effective organizational commitment) to the organizations. In the regression model on strategic training practices including psychological contract, strategic training practices showed a direct and positive effect on effective organizational commitment. This direct effect indicates that psychological contract does not completely mediate the relationship between strategic training practices and affective organizational commitment. In other words, the most important purpose of strategic training practices is to foster an appropriate employees conception of employment relationship (psychological contract) that if the employment relationship is to be seen fair by employees, they feel emotional bonding to the organization. However, this result has not been previously described in other studies. One plausible explanation is that, when employees are presented the useful and beneficial actions by the organization they may recognize high-quality exchange relationships and a feel of strong bonding to their

bonding to their organizations. Sometimes when these strategic practices are viewed by employees helpful and they acknowledge the accomplishment of these practices, thus they feel emotional attachment to the organization. This result is consistent with Addae's (2006: 228) explanation that "if organizations can meet the expectations inherent to the psychological contract, they are more likely to encourage employees' effective commitment to the organization". Because of the previous research has been conceptual (Aggarwal and Bhargava, 2009) it is difficult to compare the findings of this research with the findings of other research within the strategic human resource management field. Analysis of data relating to H<sub>2</sub> found that affective organizational commitment and turnover intention are significantly and negatively correlated. Regressing the variable on turnover intention yielded that it is a significant explanatory variable of turnover intention. These findings confirm theorization that the degree employee's emotional attachment increases if the degree of likely to leave an organization decrease and vice versa. When employees have emotional attachment to the organization they will contribute with and involvement in the organization to achieve individual effectiveness as argued by Armstrong (2000). The higher affective organizational commitment, the lower turnover intention is likely to be. This reasoning is confirmed by the findings. The findings are consistent with the results of Addae et al. (2006). They found that employees who are thinking about living are likely uncommitted than those involvement to the organization. It seems possible that these results are due to they wish to sustain their attachment in order to achieve individual effectiveness. Also, the findings are consistent with the explanation of Zhao et al. (2007) and Pare and Tremblay (2007). It can therefore be assumed that if organizations could give their employees with effective involvement, then the researcher can expect employees will not intention to conduct a job search.

## LIMITATIONS, FUTURE RESEARCH, AND CONCLUSIONS

The main hypothesis of this study was to investigate the mediating effect of psychological contract on the relationship between strategic training practices and effective organizational commitment of non academic staffs in the universities of medical sciences in Iran. The relationships between strategic training practices, psychological contract, and effective organizational commitment have not been investigated in one integrated model in Iran. Thus, the study contributes to filling this gap. Although, the findings raise important considerations about the strategic training practices that may affect organizational commitment, there are number of limitations that should be noted. The generalizability of the results may be limited because the research was conducted in organizations in the universities of medical sciences in Iran. While it is

arguable that they should be relevant to other similar occupations, this may have biased our results. We hope that this study will encourage new research avenues. For instance, we found relationship between strategic training practices and psychological contract. Perhaps future studies can explore this in integrating model of strategic training, compensation, and performance appraisal practices. By doing so, we can understand more about how integrating of strategic human resource management practices including compensation, training, and performance appraisal affect work attitudes (that is, effective organizational commitment) and work behavior (that is, turnover intention). Consequently, this study provided evidence that psychological contract is important in the emotional bond (that is, effective organizational commitment) to the organization as a link between strategic training practices and effective organizational commitment. The findings imply that managers can develop a positive emotional bond to the organization among their competent staff by using relational psychological contracts that often support employees' effective commitment to the organization. The results of this study generally supported the literature on this complex construct.

## REFERENCES

- Addae HM, Parboteeah KP (2006). Organizational information, organizational commitment, and intention to quit a study of Trinidad and Tobago. *Int. J. Cross Cultural Manage.*, 6(3):343-359.
- Addae HM, Parboteeah KP, Davis EE (2006). An examination of the moderating effects of psychological contract breach in Trinidad and Tobago. *Int. J. Organ. Anal.*, 14(3): 225-238.
- Ahmad KZ Bakar RA (2003). The association between training and organizational commitment among white-collar workers in Malaysia. *Int. J. Train. Dev.*, 7: 166-185.
- Allen NJ, Meyer JP (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *J. Occup. Psychol.*, 63: 1-18.
- Ammeter AP, Dukerich JM (2002). Leadership, team building, and team member characteristics in high performance project teams. *Eng. Manage. J.*, 14(4): 3-10.
- Angle HL, Perry JL (1981). "An empirical assessment of organizational commitment and organizational effectiveness". *Adm. Sci. Q.*, 26: 1-14.
- Anthony WP, Perrewe PL, Kacmar RM (1999). *Human resource management: a strategic approach*, The Dryden Press, Fort Worth, TX.
- Argyris C (1960). *Understanding organizational behavior*. Homewood, IL: Dorsey Press.
- Armstrong M (2000). *Strategic human resource management: a guide to action*. London: Kogan Page.
- Becker TS, Billings RS, Eveleth DM, Gilbert NL (1996). 'Foci and bases of employee commitment: implications for job performance'. *Acad. Manage. J.*, 39: 464-482.
- Blau P (1964). *Exchange and power in social life*. New York: Wiley.
- Bunderson JS (2001). How work ideologies shape the psychological contracts of professional employees: doctors' responses to perceived breach. *J. Organ. Behav.*, 22: 717-742.
- Carlson DS, Bozeman DP, Kacmar MK (2000). Training motivation in organizations: an analysis of individual-level antecedents. *J. Managerial*, 12 (3): 271-288.
- Caykoylu S, Egri CP, Havlovic S (2007). Organizational commitment across different employee groups. *Bus. Rev.*, 8(1): 191-197.
- Chew J, Chan CCA (2008). Human resource practices, organizational commitment and intention to stay. *Int. J. Manpow.*, 29 (6):503-522.

- Cook KS, Rice E (2003). Social exchange theory. handbook of social psychology, edited by John Delamater. Kluwer Academic/Plenum Publishers, New York.
- Coyle-Shapiro J, Morrow PC, Richardson R, Dunn SR (2002). Using profit-sharing to enhance employee attitudes: a longitudinal examination of the effects on trust and commitment. *Hum. Resour. Manage.*, 41(4): 423-438.
- Coyle-Shapiro J, Conway N (2005). Exchange relationships: examining psychological contracts and perceived organizational support. *J. Appl. Psychol.*, 90: 774-781.
- Daley DM (2002). Strategic human resource management: people and performance management in the public sector, Pearson Education. Prentice Hall.
- Deery SJ, Iverson RD, Erwin PJ (1994). Predicting organizational and union commitment: the effect of industrial relations climate. *Brit. J. Ind. Relat.*, 32(4): 581-597.
- Dubin SS (1990). Maintaining competence through updating. In S. L. Willis and S. S. Dubin (Ed). *Maintaining Professional Competence* (pp. 9-43). San Francisco: Jossey-Bass.
- Eisenberger R, Stinglhamber F, Vandenberghe C, Sucharski IL, Rhoades L (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *J. Appl. Psychol.*, 87(3), 565-573.
- Elias SM (2009). Employee commitment in times of change: assessing the importance of attitudes toward organizational change. *J. Manage.*, 35 (1): 37-55.
- Facteau JD, Dobbins GH, Russell JEA, Ladd RT, Kudisch JD (1995). The influence of general perceptions of the training environment on pretraining motivation and perceived training transfer. *J. Manage.*, 21(1): 1-25.
- Farr JL, Middlebrooks CL (1990). Enhancing motivation to participate in professional development. In S. L. Willis and S. S. Dubin (Ed). *Maintaining professional competence* (Pp. 195-213). San Francisco: Jossey-Bass.
- Farrell D, Ruslout CE (1981). Exchange variables as predictors of job satisfaction, job commitment and turnover. *Organ. Behav. Hum. Perf.*, 28(1), 78-95.
- Fiorito J, Bozeman DP, Young A, Meurs JA (2007). Organizational commitment, human resource practices, and organizational characteristics. *J. Manage. Issues*, 19(2):186-207.
- Garger EM (1999). Holding on to high performers: a strategic approach to retention. *Compens. Benefits Manage.*, 15(4): 10-17.
- Goldstein IL (1991). Training In Work Organizations. In M. D. Dunnette and L. M. Hough (Ed). *Handbook of industrial and organizational psychology* (pp. 507-619). Palo Alto, CA: Consulting Psychologists Press.
- Goldstein IL (1992). Training in organizations. (3rd Ed.) Pacific Grove, CA: Brooks/Cole.
- Goldstein IL (1993). Training in organization: needs assessment, development and evaluation (3rd ed.). California: Brooks/Cole Publishing Company.
- Gomez-Mejia LR, Balkin DB, Cardy RL (1995). Managing human resources. Englewood Cliffs, N. J.: Prentice-Hall.
- Griffeth RW, Hom PW, Gaertner S (2000). "A meta-analysis of antecedents and correlates of employee turnover: Update, Moderator Tests, and Research Implications for the Next Millennium". *J. Manage.*, 26: 463-88.
- Griffeth RW, Hom PW (1995). The employee turnover process. *Res. Pers. Hum. Resour. Manage.*, 13: 245-293.
- Guest DE (1998). Is the psychological contract worth taking seriously? *J. Organ. Behav.*, 19: 649-664.
- Guest D (1987). Human resource management and industrial relations. *J. Manage. Stud.*, 24: 503-521.
- Guzzo RA, Noonan KA, Elron E (1994). Expatriate managers and the psychological contract. *J. Appl. Psychol.*, 79: 617-626.
- Hammer LB, Kossek EF, Yragui NL, Bonder TE, Hanson GC (2009). Development and validation of a multidimensional measure of family supportive supervisor behaviors (FSSB). *J. Manage.*, 35(4): 837-856.
- Hicks WD (1984). The process of entering training programs and its effects on training outcomes. Dissertation abstracts. 44, 35648 (University Microfilms No. DA8403528).
- Huczynski AA, Lewis JW (1980). An empirical study into the learning transfer process in management training. *J. Manage. Stud.* 17: 227-240.
- Huselid MA, Jackson SE, Schuler RS (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Acad. Manage. J.*, 40(1): 171-188. [Online]
- Igharia M, Greenhaus JH (1992). Determinants of MIS employees' turnover intentions: a structural equation model. *Association for computing machinery. Communication ACM*, 35(2): 34-49.
- Iles P, Mabey C, Robertson I (1990). HRM practices and employee commitment: possibilities, pitfalls and paradoxes. *Brit. J. Manage.*, 1(3): 147-157.
- Iverson RD, Buttigieg DM (1999). Affective, Normative and Continuance Commitment: Can The 'Right Kind' of Commitment Be Manage. *J. Manage. Stud.*, 36(3): 307-333.
- Kanter RM (1977). Men and women of the corporation. New York: Basic Books
- King J (2000). White collar reactions to job insecurity and the role of the psychological contract: implications for human resource management. *Hum. Resour. Manage.*, 39(1), 79-92.
- Lang DL (1992). Organizational culture and commitment. *Hum. Resour. Dev. Q.*, 3(2): 191-196.
- Lee SM (1971). An empirical analysis of organizational identification. *Acad. Manage. J.*, 14(2):213-226.
- Levinson H, Price C, Munden K, Mandl H, Solley C. (1962). Men, management, and mental health. Cambridge, MA: Harvard University Press.
- Schein EH. (1965). Organizational psychology. Englewood Cliff, NJ: Prentice Hall.
- Loi R, Hang-Yue N, Foley S (2006). Linking employees' justice perceptions to organizational commitment and intention to leave: the mediating role of perceived organizational support. *J. Occup. Organ. Psychol.*, 79, 101-120.
- Lundy O, Cowling A (1996). Strategic human resource management. London and New York: Routledge.
- Macduffie JP (1995). Human resource bundles and manufacturing performance: organizational logic and flexible production systems in the world auto industry journal article. *Ind. Labor Relat. Rev.*, 48: 197-221.
- Mackinnon DP, Lockwood C, Hoffman J (1998). A new method to test for mediation. Presented at the society for prevention research annual meeting in Park City, Utah On June 5, 1998.
- Mahmoodi S (2007). Human resource practices for employees. *Strateg. Plann.*, 2(3): 56-68.
- Mathieu JE, Martineau, JW (1997). Individual and Situational influences in training motivation. In: J.K. Ford et al., Editors, *Improving training effectiveness in work organizations*. (pp. 193-222). Mahwah, N. J.: Lawrence Erlbaum Associates.
- Mcinnis KJ, Meyer JP, Feldman S (2009). Psychological contracts and their implications for commitment: a feature-based approach. *J. Vocat. Behav.*, 74: 165-180.
- Mello JA (2002). Strategic human resource management. Ohio: South-Western.
- Meyer JP, Allen NJ, Gellatly IR (1990). 'Affective and continuance commitment to the organization: evaluation of measures and analysis of concurrent and time-lagged relations'. *J. Appl. Psychol.*, 75: 710-720.
- Meyer JP, Allen NJ, Smith CA (1993). 'Commitment to organizations and occupations: extension and test of a three-component conceptualization'. *J. Appl. Psychol.*, 78(4): 538-551.
- Meyer JP, Allen NJ (1984). Testing the "side-bet theory" of organizational commitment: some methodological considerations. *J. Appl. Psychol.*, 69: 372-378.
- Meyer JP, Allen NJ (1991). A Three component conceptualization of organizational commitment. *Hum. Resour. Manage.*, 1: 61-89.
- Meyer JP, Allen NJ (1997). Commitment in the workplace: a theory, research, and application. Thousand Oaks, CA: Sage.
- Meyer JP, Paunonen SV, Gellatly IR, Goffin RD, Jackson DN (1989). 'Organizational commitment and job performance: it's the nature of the commitment that counts'. *J. Appl. Psychol.*, 74: 152-156.
- Meyer JP, Stanley DJ, Herscovitch L, Topolnitsky L (2002). Affective, continuance, and normative commitment to the organization: A Meta-Analysis of antecedents, correlates, and consequences. *J. Vocat.*

- Behav. 61: 20-52.
- Noe RA, Schmitt N (1986). The influence of trainee attitudes on training effectiveness. Test of a model. *Pers. Psychol.*, 39, 497-523.
- Pare G, Tremblay M (2007). The influence of high-involvement human resource practices, procedural justice, organizational commitment, and citizenship behavior on information technology professionals' turnover intention. *Hec Montréal Group Org. Manage.*, 32(3): 326-357.
- Porter LW, Lawler EE, Hackman JR (1975). *Behavior in organizations*. New York: McGraw- Hill Book Company.
- Porter LW, Steers RM, Boulian P (1974). Organizational commitment, job satisfaction and turnover among psychiatric technicians. *J. Appl. Psychol.*, 59: 603-609.
- Richard PJ, Devinney TM, Yip GS, Johnson G (2009). Measuring organizational performance: Towards methodological best practice. *J. Manage.*, 35 (3): 718-804.
- Ritzer G, Trice HM (1969). An empirical study of Howard Becker's Side-Bet theory. *Soc. Forces*. 47:475-479.
- Robinson SL (1996). Trust and breach of the psychological contract. *Admin. Sci. Q.*, 41: 574-599.
- Roca-Puig V, Beltra'N-Marti'N I, Scrig-Tena AB, Bou-Llusar JC (2007). Organizational commitment to employees and organizational performance a simultaneous test of configurative and universalistic propositions. *Pers. Rev.*, 36(6): 867-886.
- Rousseau DM (1989). "Psychological and implied contracts in Organizations". *Empl. Responsive Rights J.* 2: 121-39.
- Rousseau DM, Tijoriwala SA (1998). Assessing psychological contracts: Issues, alternatives and measures. *J. Organ. Behav.*, 19, 679-695.
- Rousseau DM (1989). Psychological and implied contracts in organizations. *Employee Responsibilities Rights J.* 2: 121-139.
- Rousseau DM (1995). Psychological contracts in organizations: understanding written and unwritten agreements. Thousand Oaks, CA: Sage.
- Rousseau DM, Greller MM (1994). Human resource practices: administrative contract makers. *Hum. Resour. Manage.* 33(3): 385-401.
- Rousseau DM, Wade-Benzoni KA (1994). Linking strategy and human resource practices: how employee and customer contracts are created. *Hum. Resour. Manage.* 33(3): 463-489.
- Saks AM (1995). Longitudinal field investigation of the moderating and mediating effects of self-efficacy on the relationship between training and newcomer adjustment. *J. Appl. Psychol.* 80(2): 211-225.
- Salaman G, Storey J, Billsberry J (2005). *Strategic human resource management: a Reader*, 2nd Edition. London: Sage.
- Schein EH (1965). *Organizational psychology*. New Jersey: Englewood Cliffs, Sels, L., Janssens, M., And Van Den Brande, I. (2004). Assessing the nature of psychological contracts: a validation of six dimensions. *J. Organ. Behav.* 25 (4), 461-488.
- Shore LM, Tetrick LE, Taylor S, Shapiro J.A-MC, Liden RC, Parks JM Et Al L (2004). Them employee organization relationship: a timely concept in a period of transition. In Martocchio JJ (Ed.), *research In personnel and human resource management*, (pp. 291-370). Elsevier.
- Suliman AM, Iles PA (2000). "The multi-dimensional nature of organizational commitment in a non-Western context". *J. Manage. Dev.*, 19: 71-82.
- Storey J, Sisson K (1993). *Managing human resources and industrial relations*. Buckingham: Open University Press.
- Stup RE (2006). *Human resource management, organizational commitment, and perceived organizational support in dairy farm businesses*. Ph.D. Thesis. The Pennsylvania State University.
- Tannenbaum SI, Mathieu JE, Salas E, Cannon-Bowers JA (1991). Meeting trainees' expectations: the influence of training fulfillment on the development of commitment, self efficacy, and motivation. *J. Appl. Psychol.* 76: 759-769.
- Taylor SM, Tekleab AG (2004). Taking stock of psychological contract research: assessing progress, addressing troublesome issues, and setting research priorities. In Coyle- Shapiro JA—M, Shore LM, Taylor SM, Tetrick LE (Eds.), *the employment relationship: examining psychological and contextual perspectives*. New York: Oxford University Press.
- Thomas KW (2000). *Intrinsic motivation at work: building energy and commitment*. San Francisco: Berrett – Koehler Publisher, Inc.
- Thompson CA, Prottas D (2005). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *J. Occup. Health Psychol.*, 11(1): 100-118.
- Thompson CA, Beauvais LL, Lyness KS (1999). When work-family benefits are not enough: the influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *J. Vocat. Behav.*, 54: 392-415.
- Walton RE (1985). From control to commitment in the workplace. *Harv. Bus. Rev.* 63(2): 76-84.
- Weinstein CE, Palmer DR, Hanson GR, Dierking DR, Mccann E, Soper M, Nath I (1994). Design and development of an assessment of readiness for training: the start. Annual conference of the academy of human resource development. March, San Antonio, TX.
- Zhao H, Wayne SJ, Glibkowski BC, Jesus Bravo J (2007). The impact of psychological contract breach on work-related outcomes: a meta-analysis. *Pers. Psychol.*, 60, 647-680.