

# A Study of Influential Factors on Employees' Motivation for Participating in the In-Service Training Courses Based on Modified Expectancy Theory

Farhad Ebrahim Abadi<sup>1</sup>  
Mohammad Reza Jalilvand<sup>2</sup>  
Mostafa Sharif<sup>3</sup>  
Ghorban Ali Salimi<sup>4</sup>  
Somayeh Aziz Khanzadeh<sup>5</sup>

**Abstract:** By training we can foster human resources in harmonizing with inside and outside organizational changes. Participation of active and motivated employee in training courses can facilitate acquisition of courses goals and prevent cost-wasting in this section of human resources. The purpose of current study is to identify influential factors on motivation based on revisited expectancy theory. Statistical population was formal and temporary employees of National Iranian Oil Products Distribution Company in Isfahan and Kurdistan. Finding reveals that situation, expectancy, intrinsic instrumentally, and intrinsic valence have affected employees' motivation to participate in the in-service training courses, and utilization level of influential factors could not satisfy employees' expectations.

**Key words:** In-service training; Modified expectancy theory; Motivation; Situation; Employee

## 1. INTRODUCTION

Work motivation is one of the most intensively studied topics in the social sciences. Motivation is what moves us from boredom to interest. Motivation represents those psychological processes that cause the arousal, direction, and persistence of voluntary activities that are goal oriented (Mitchell, 1982). Bartol and Martin (1998) define motivation as a force that energizes behavior, gives direction to behavior, and underlies the tendency to persist. This definition recognizes that in order to achieve goals, individuals must

---

<sup>1</sup> Corresponding author. Department of Educational Sciences, University of Isfahan, Azadi square, Isfahan, Iran.  
E-Mail: farhadebrahimi2010@yahoo.com

<sup>2</sup> Corresponding author . Department of Management, University of Isfahan, Azadi square, Isfahan, Iran.  
E-Mail: mrjd\_reza2006@yahoo.com

<sup>3</sup> Assistant professor. Department of Educational Sciences, University of Isfahan, Azadi square, Isfahan, Iran.

<sup>4</sup> Associate professor. Department of Educational Sciences, University of Isfahan, University of Isfahan, Azadi square, Isfahan, Iran.

<sup>5</sup> Iran's Oil Company, Department of Human Resource Management, Iran.

\*Received 5 December 2010; accepted 10 January 2011

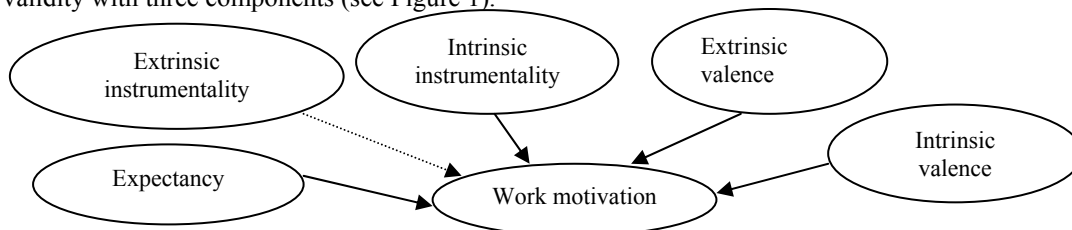
be sufficiently stimulated and energetic, must have a clear focus on what is to be achieved, and must be willing to commit their energy for a long enough period of time to realize their aim. Since, a leading function of management involves influencing others to work toward organizational goals, motivation is an important aspect of that function. In today's highly competitive labor market, there is extensive evidence that organizations regardless of size, technological advances, market focus, are facing retention challenges (Ramlall, 2004). Fitz-enz (1997) stated that the average company loses approximately \$1 million with every ten managerial and professional employees who leave the organization combined with the direct and indirect costs; the total cost of an exempt employee's turnover is a minimum of one year's pay and benefits. Motivation constitutes a central element when going through the process of human learning. If the organization does not possess the ability to motivate its employees, the knowledge within the organization is not practically used to a maximum. Therefore, it becomes the aim of every learning organization to find the factors that enable it to motivate its employees to continuous learning and to take advantage of this knowledge to ensure its living (Osteraker, 1999). In the fields of human resource management and organizational behavior, motivation is often described as being "intrinsic" or "extrinsic" in nature (Sansone and Harackiewicz, 2000). Extrinsic motivation occurs when employees are able to satisfy their needs indirectly, most importantly through monetary compensation (Osterloh et al., 2002, p. 64). In contrast, intrinsic motivation is apparent when individuals' behavior is oriented towards the satisfaction of innate psychological needs rather than to obtain material rewards (Ryan and Deci, 2000). In other words, motivation is intrinsic when people perform an activity for itself (Van Yperen and Hagedoorn, 2003); trying to experience the satisfaction inherent in the activity or to secure the obligations of personal and social norms for their own sake (March, 1999, p. 377). Intrinsic motivation appears to be self-defined (Loewenstein, 1999) and self-sustained (Calder and Staw, 1975) and is fostered by commitment to the work itself, which must be both satisfying and fulfilling for the employees (Deci, 1975). In organizations, employees can be motivated by both extrinsic and intrinsic factors that will fulfill their perceptions regarding success, reward and satisfaction. The expectancy theory of motivation, originally developed by Vroom (1964), is a theory explaining the process individuals use to make decisions on various behavioral alternatives. The motivational force for a behavior, action, or task is a function of three distinct perceptions: expectancy, instrumentality, and valence. Motivational force is the force directing specific behavioral alternatives, which are suggested when deciding among behavior options. Expectancy theory generally is supported by empirical evidence (Tien, 2000; Vansteenkiste et al., 2005; Chiang and Jang, 2008) and is one of most commonly used theories of motivation in the workplace (Campbell and Pritchard, 1976; Heneman and Schwab, 1972; Mitchell and Biglan, 1971). Expectancy theory provides a general framework for assessing, interpreting, and evaluating employee behavior in learning, decision-making, attitude formation, and motivation (Chen and Lou, 2002). However, Mitchell (1974) suggested that the construct validity of the components of expectancy theory remains little understood. The results of the meta-analysis by Van Eerde and Thierry (1996) suggest that Vroom's model does not yield higher effect sizes than the components of the models, implying that the model lacks external validity. In addition, little research has been devoted to developing a theory for the process of employee motivation, and the lack of a strong theoretical framework may negatively affect the validity of the Vroom's model. In a study, Chiang and Jang (2008) tried to gain more understanding of employee motivation and its decision-making process by testing a proposed model that was based on Vroom's expectancy theory. In this paper we employ and modify Chiang and Jang's (2008) proposed model to determine the influential factors on employees' motivation for participating in the in-service training courses. The paper is structured as follows: Section 2 introduces literature review; Section 3 outlines the research methodology and our model. To test the model, seven hypotheses are suggested; Sections 4 and 5 illustrate results and discussion, conclusion, limitations, and directions for future research.

## **2. LITERATURE REVIEW**

People within organizations are assumed to follow conscious processes and make rational choices among the different behavior alternatives available to them, always selecting the behavior they perceive to be more likely to lead to the achievement of their personal goals (Lawler, 1994). Individuals are seen to make their behavioral choices on the basis of anticipated reward or outcome preferences (valences) and their forward-looking estimations (expectancies) of the possibility of attaining these outcomes. Eventually, the

decision to engage in a given behavior is made only when they perceive this behavior will indeed provide the rewards and outcomes they need and, subsequently, value (Porter and Lawler, 1968; Nadler and Lawler, 1977). The expectancy theory of motivation, originally developed by Vroom (1964), is a theory explaining the process individuals use to make decisions on various behavioral alternatives. Expectancy theory is presented as follows:  $\text{motivation force} = \text{expectancy} \times \text{instrumentality} \times \text{valence}$ . Motivation force is a force directing specific behavioral alternatives, which are suggested when various behavior options are selected by individuals. The theory asserts that they will select the option with the greatest motivation forces. The motivational force for a behavior, action, or task is a function of three distinct perceptions: expectancy, instrumentality, and valence. Expectancy is the perceived probability that effort will lead to good performance; variables affecting the individual's expectancy perception include self-efficacy, goal difficulty, and perceived control. Expectancy that one's effort will lead to a desired performance is based on past experience, self-confidence, and the perceived difficulty of the performance goal. Instrumentality is the perceived probability that good performance will lead to desired outcomes; trust, control, and policies are variables affecting the individual's instrumentality perception. Hence, the instrumentality is the belief that if an individual does meet performance expectation, he or she will receive a greater reward. Valence refers the value the individual personally places on rewards: the function of needs, goals, values and preferences. Expectancy theory generally is supported by empirical evidence (Tien, 2000; Vansteenkiste et al., 2005) and is one of most commonly used theories of motivation in the workplace (Campbell and Pritchard, 1976; Heneman and Schwab, 1972; Mitchell and Biglan, 1971). Corroborating evidence tends to come from studies that have attempted to develop expectancy models tailored to the research questions and settings examined (Rockness, 1977; Jiambalvo, 1979). House (1971), for instance, developed an expectancy model to explain the potential effects of leadership style on subordinate motivation and performance. His framework essentially extended the traditional the expectancy theory by breaking down the original valences and expectancies into variables that had specific relevance for leadership, and his results provided support for the majority of the hypotheses that derived from the extended model. House's (1971) model was subsequently adopted by Ronen and Livingstone (1975), who used the extended the expectancy framework to reconcile the fragmented research findings on budget and managerial behavior in the accounting literature. The same expectancy model was later employed in a laboratory experiment by Rockness (1977), who found evidence to support the model's descriptive validity, and a survey-based study by Brownell and McInnes (1986) used the model to examine the effect of budgetary participation on managerial motivation and managerial performance. Jiambalvo (1979) also extended the traditional expectancy model to examine the impact of the performance evaluation process on auditors' motivation. His framework incorporated expectancies regarding the performance evaluation process in CPA firms, and his empirical findings offered support for the extended model. Kopelman and Thompson (1976) argue that the real validity of the expectancy model and its applicability to real organizational situations cannot be revealed unless "those factors which complicate the prediction of work motivation and job performance are taken into account within the expectancy models employed" (p. 255). Most previous studies have concentrated on identifying the factors that motivate employees and on suggesting implications for further improving employee motivation (Simons and Enz, 1995; Siu et al., 1997; Wong et al., 1999). Expectancy theory is a theory of the process of motivation. Rather than simply explaining what will motivate an employee, process theories define how motivation comes about. Process theories are working models of the decision-making processes that individuals perform in order to determine whether they will be motivated to pursue a certain activity and sustain a certain level of productivity. Process theories help describe and explain how behavior is directed, energized, sustained, or stopped. While several process theories of motivation exist, one of the most respected theories of motivation among organizational and industrial psychologists is the process theory of expectancy. Expectancy theory provides a general framework for assessing, interpreting, and evaluating employee behavior in learning, decision making, attitude formation, and motivation (Chen and Lou, 2002). However, Mitchell (1974) suggested that the construct validity of the components of expectancy theory remains little understood. Many different interpretations, organizational plans, applications, and methods of statistical analysis have been used in conjunction with expectancy theory, but a major concern remains: that the validity of the expectancy theory remains unclear (Van Eerde and Thierry, 1996). Landy and Becker (1990) suggested that the key to improving the predictions of an expectancy model might lie in variables such as the number of outcomes, the valence of the outcomes, and the particular dependent variable chosen for study. Schwab et al. (1979) examined the

relationship between the VIE model and two criterion variables: effort and performance. They included several moderators of this relationship in 32 between subject studies in a statistical analysis. Van Eerde and Thierry (1996) used meta-analysis to examine the expectancy model further and its relationship to five types of criterion variables: performance, effort, intention, preference, and choice. Results showed average correlations between Vroom's (1964) model and work-related criterion variables that were slightly lower than those reported previously in narrative reviews (Mitchell, 1974; Wanous et al., 1983). In particular, the use of a simple correlation between the sum-of-product variables of the models and the criterion variable may be problematic (Evans, 1991; Mellenbergh et al., 1990). Other important issues addressed by Van Eerde and Thierry (1996) indicated criterion variables that are more strongly related to the models and that components appear to be attitudinal (intention and preference) rather than behavioral (performance, effort, and choice) because of response biases in the self-report measures of attitudinal criterion variables. VIE variables should be related to cognition and not directly to actions (Gollwitzer, 1993; Kanfer, 1990; Vroom, 1964). Campbell et al. (1970) and Lawler (1971) distinguish between intrinsic and extrinsic rewards that accrue to an individual as a result of job effort and/or job performance. Extrinsic outcomes are those rewards that are distributed by some external agent (e.g., organization, boss) while intrinsic outcomes are mediated by the individual and are internal, personal rewards (e.g., self-fulfillment, self-esteem). Graen (1969) and Mitchell and Albright (1972) have suggested that intrinsic outcomes yield predictions of job performance and job satisfaction that are superior to those yielded by extrinsic outcomes. Other authors (Wahba and House, 1974) have suggested that intrinsic outcomes may have more power to motivate than extrinsic outcomes, primarily because the instrumentality perceptions associated with outcomes that are self-administered should approach certainty. Parker and Dyer (1976) noted that the roles of intrinsic and extrinsic outcomes in expectancy theory research are very complex and agreement about their roles remains very much unsettled. Among the three constructs of expectancy theory, instrumentality and valence are related with outcomes. Thus, instrumentality and valence could be divided into extrinsic and intrinsic parts: extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence. It is possible to think that instrumentality and expectancy are conceptually equivalent because both refer to a perceived degree of relationship between two variables. Expectancy is the relationship between effort and performance, while instrumentality is the relationship between performance and job outcomes. This conceptual similarity presumably has led some researchers (e.g., Gavin, 1970; Hackman and Porter, 1968; Lawler, 1968; Porter and Lawler, 1968) to combine expectancy and instrumentality into one variable and discuss the relationship between efforts and job outcomes. By combining these, one can consider job outcomes that are a direct function of efforts. Tests of the model by Gavin (1970), Hackman and Porter (1968), Lawler (1968), and Porter and Lawler (1968) have combined expectancy and instrumentality into one measure. Recently, Chiang and Jang (2008) modified expectancy theory model and examined its validity with three components (see Figure 1).



**Figure 1: The modified expectancy theory model for employee motivation proposed by Chiang and Jang (2008)**

They tried to assess employees' attitudinal cognition by asking their perceptions. Their results show that a modified expectancy theory with five components (expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence) best explains the process of motivating employees. Their study also indicates that intrinsic motivation factors are more influential than extrinsic factors for hotel employees. Based on the literature review, the study model was developed using the modified expectancy theory. Further, in previous studies, "training course and working situation" influenced employees' motivation (Harkins, 1991; Clasen, 1997; Mathieu and Martineau 1997; Tsai and Tai, 2003). We defined training course situation as the level of desired situation that an employee try to have a desired performance. In the other words, the more desired situation, the more desired performance. In our study desired situation consisted of well goal-setting, suitable content (such as materials and trainer), correct

perform, and exact appraisal. Therefore, we used this variable as an influential factor on motivation accompanied by other variables. In fact, our modified model (situation, expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence) provides a more obvious understand about employees' motivation for participating in in-training courses. Thus, hypotheses were proposed as follows:

H1: Training course situation has a significant impact on employee motivation for participating in in-service training courses.

H2: Expectancy has a significant impact on employee motivation for participating in in-service training courses.

H3: Extrinsic instrumentality has a significant impact on employee motivation for participating in in-service training courses.

H4: Intrinsic instrumentality has a significant impact on employee motivation for participating in in-service training courses.

H5: Extrinsic valence has a significant impact on employee motivation for participating in in-service training courses.

H6: Intrinsic valence has a significant impact on employee motivation for participating in in-service training courses.

H7: There is a significant difference between current and ideal situation in regarding to utilizing influential factors on motivation.

### **3. METHODOLOGY AND RESEARCH MODEL**

#### **3.1 Sampling**

To achieve research goal, a field survey was used at Isfahan and Kurdistan. The target population was formal and temporary employees of Iran's Oil Company in the mentioned states. A confidence interval approach was used to determine the sample size, suggested by Burns and Bush (1995). The sample size was set at 177 at the 95% confidence level (Burns & Bush, 1995). We used cluster sampling plan to achieve estimated sample. Surveys with cover letters were delivered to managers in the selected Iran's Oil Company agencies in Kurdistan and Isfahan. The managers distributed the surveys to their employees. A total of 250 surveys were distributed to employees in these participating agencies, and 175 were returned.

#### **3.2 Instrument**

The main instruments used in current study were semi-structured interview and questionnaire. The main cause of applying interview was determination of employee's perspective on each variable (for example, what employees think about situation of training courses and what are their expectations in regarding to these courses, and/or what rewards are awarded to success employees, and what rewards they are expected) because previous questionnaires took employee motivation into account. We applied Chiang and Jang's (2008) questionnaire and modified it according to interview results to investigate employee's motivation for participating in the in-service training courses. By taking situation variable into account, we designed several questions regarding four steps of training programming (including goal, content, perform, and appraisal). The survey questionnaire consisted of two major formats. The A format is about current situation of training courses and the B format is about ideal and expected situation of training courses. These two formats concluded 56 items that will be described as fellow. Motivation is dependent variable. Situation, expectancy, intrinsic instrumentality, extrinsic instrumentality, extrinsic valence, and intrinsic valence are independent variables. Measurement items for all the variables were drawn from Chiang and Jang's (2008) study and all the items were used to gauge each respondent's expectation of work outcomes on a 7-point scale ranging from strongly disagree to strongly agree. Ten items were used for situation (Mathieu and Martineau 1997; Tsai and Tai, 2003). Five measurement items were used for expectancy (Campbell et al., 1970; Graen, 1969; Porter and Lawler, 1968). Instrumentality is the belief that if one meets performance expectations, one will receive a greater reward. Rewards were identified in the

elicitation study as extrinsic rewards (pay, monetary bonus, advancement, and promotion) as well as intrinsic rewards (being able to take on more challenging work, having a feeling of accomplishment, and feeling very good about oneself). Seventeen items of instrumentality were drawn from the literature: seven items for extrinsic instrumentality and the rest ten items for intrinsic instrumentality (Gavin, 1970; Matsui and Ohtsuka, 1978; Reinharth and Wahba, 1975). For valence, 17 items were used: 7 extrinsic valence and 10 intrinsic valence (Galbraith and Cummings, 1967; Gavin, 1970; Mobley, 1971; Mitchell, 1974). Work motivation is defined as the act or process of an employee being moved to work. Seven items were adapted to measure work motivation (Arvey and Mussio, 1973; Ivancevich, 1976; Kopelman, 1979; Landy and Guion, 1970). A pilot test was conducted to fine-tune the survey instrument. Oil Company employees in Isfahan and Kurdistan were asked to participate in the pilot test. Fifty survey questionnaires were distributed, and 35 surveys were returned for pilot test. Wording for the final questionnaire was slightly modified based on the respondent feedback of the pilot test. Cronbach's alpha was used to verify the internal consistency reliability. The results of the pilot study show overall Cronbach's alphas of 0.93 and 0.92 for both A and B formats, respectively.

### 3.3 Data analysis

To test the proposed hypotheses, descriptive analysis, MANOVA analysis, paired sample t-test, and structural equation modeling (SEM) were performed and the results were reported in the result section. The data was processed with the statistical softwares of SPSS 16.0 and LISREL 8.8.

## 4. RESULTS

Prior to model proposition and hypothesis testing, we need to compare employees' comments of both Isfahan and Kurdistan regarding research variables. Results showed that employees' comments in both areas were similar ( $P > 0.05$ ) (see Table 1.). SEM with LISREL 8.8 was used to examine the hypothesized relationships in the expectancy theory of employee motivation. A regression model was employed to test H1 to H6 and each independent variable relationship with dependant variable of motivation were modeled. Goodness-of-fit indices were used to evaluate the overall model fit of the structural model. All fit indices exceeded their acceptance level ( $\chi^2 = 5.10$ ,  $df = 4$ ,  $RMR = .028$ ,  $RMSEA = .000$ ,  $NFI = .98$ ,  $IFI = 1.00$ ,  $CFI = 1.00$ ,  $AGFI = .96$ ). Standardized path coefficients were estimated to test the hypotheses. Based on the results presented in Figure 2, most hypotheses were supported: H1: Situation has a significant impact on employee motivation for participating in in-service training courses, H2: Expectancy has a significant impact on employee motivation for participating in in-service training courses, H4: Intrinsic instrumentality has a significant impact on employee motivation for participating in in-service training courses, and H6: Intrinsic valence has a significant impact on employee motivation for participating in in-service training courses.

**Table1: MANOVA analysis for employees of Oil Company in Isfahan and Kurdistan**

Statistical index	Groups	Frequency	Mean square	S.D	F	P
Variable						
Situation	Isfahan	115	41.08	6.5	0.04	0.82
	Kurdistan	60	41.31	6.5		
Expectancy	Isfahan	115	20.16	3.6	0.009	0.92
	Kurdistan	60	20.11	2.7		
Extrinsic instrumentality	Isfahan	115	13.99	5.8	0.005	0.94
	Kurdistan	60	14.06	5.5		
Intrinsic instrumentality	Isfahan	115	42.11	6	0.29	0.58
	Kurdistan	60	42.61	5.4		
Extrinsic valence	Isfahan	115	26.84	6.4	0.2	0.65
	Kurdistan	60	27.3	6		
Intrinsic valence	Isfahan	115	42.16	6	0.11	0.73
	Kurdistan	60	42.48	5.8		
	Isfahan	115	29.19	4.5		
	Kurdistan	60	28.26	4.5		

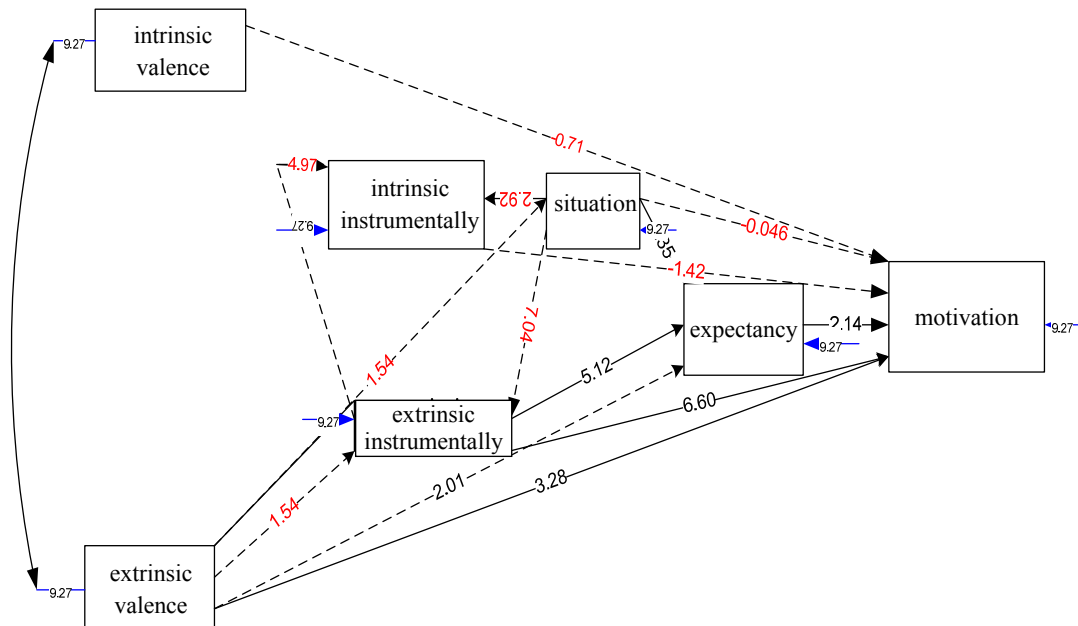
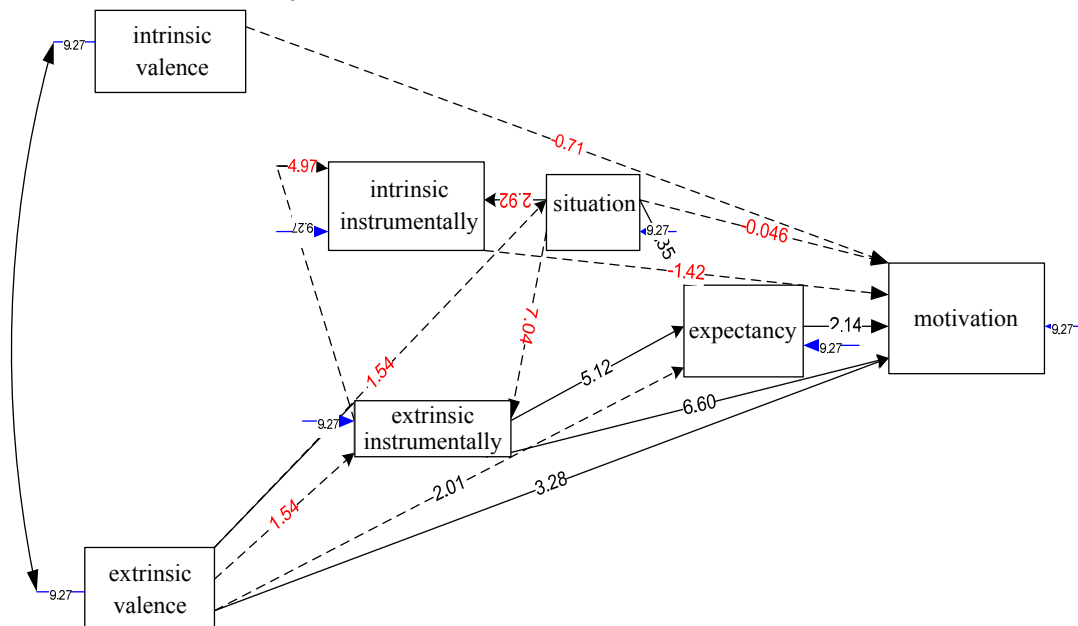


Figure 2. Standardized path coefficients for situation, expectancy, intrinsic instrumentality, extrinsic instrumentality, intrinsic valence, and extrinsic valence in current situation



Chi-square = 5.10, df = 4, p-value = .531, RMSEA = .000

Figure 3: T-values for research variables in current situation, —> indicates uninfluenced and - - -> indicates influence.

As illustrated in Figure 3, expectancy, intrinsic instrumentality, and intrinsic valence have significant t-values with motivation ( $|t| > 1.96$ ). Situation and intrinsic instrumentality also have significant t-value with expectancy. In other words, situation and intrinsic instrumentality have indirect effect on motivation. Direct and indirect effects of variables presented in Table 2. In sum, situation and intrinsic valence have positive significant direct effects on motivation, intrinsic instrumentality has a positive significant direct and indirect effect on motivation, and intrinsic valence has a positive significant direct effect on employees' motivation for participating in training courses. The standardized path coefficient and t-value for

hypothesis H3 showed a negative sign for the relationship between extrinsic instrumentality and work motivation ( $\beta = -.11$ ,  $t = -1.42$ ), not supporting our hypothesis. These findings are consistent with Chiang and Jang's (2008) findings. In addition, results showed a negative sign for the relationship between extrinsic valence and work motivation ( $\beta = -.042$ ,  $t = -.71$ ), not supporting hypothesis H5. This finding is not consistent with Chiang and Jang's (2008) finding. They indicated that extrinsic valence has a positive effect on employee motivation.

**Table 2: Effects of situation, expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence on motivation in current situation**

Criterion variable	Situation		Expectancy		Extrinsic instrumentality		Intrinsic instrumentality		Motivation	
	t	$\beta$	t	$\beta$	t	B	t	$\beta$	t	$\beta$
Predictive variable										
Situation	-	-	6.35	0.2	2.92	0.15	7.04	0.5	-0.046	-0.0028
Expectancy	-	-	-	-	-	-	-	-	2.14	0.29
Extrinsic instrumentality	-	-	-	-	-	-	-	-	-1.42	-0.11
Intrinsic instrumentality	-	-	5.12	0.15	4.97	0.24	-	-	6.6	0.38
Extrinsic valence	-	-	-	-	-	-	-	-	-0.71	0.042
Intrinsic valence	1.54	0.14	-	-	-	-	1.54	0.13	3.28	0.2

To test H7, we used paired sample t-test. According to above mentioned, situation, expectancy, intrinsic instrumentality, and intrinsic valence have influenced motivation. Thus these variables were considered to compare current and ideal situation. As showed in Table 3, there was a significant difference between current and ideal situation in regarding to desired situation-effort and scores mean of situation variable in ideal situation was more than current situation ( $P < .05$ ).

**Table 3: Paired sample t-test for comparing situation, expectancy, intrinsic instrumentality, and intrinsic valence's mean in both current and ideal situation**

Variable	Mean	S.D	Mean	S.D	df	t	P
	Situation-effort in current situation		Situation-effort in ideal situation				
Situation	30.91	8.12	61.16	6.5	174	-12.71	0.001
Expectancy	16.64	3.86	20.14	3.34	174	-10.42	0.001
Intrinsic instrumentality	42.49	8.71	42.28	5.81	174	-13.56	0.001
Intrinsic valence	40.94	6.9	42.27	5.96	174	-3.29	0.01

According to Table 3, there was a significant difference between current and ideal situation in regarding to expectancy ( $P < .05$ ). In other words, expectancy variable has not been employed in a desired way. Further, there was a significant difference between current and ideal situation in regarding to desired performance-immaterial rewards and scores mean of intrinsic instrumentality variable in current situation was more than ideal situation ( $P < .05$ ). That is, intrinsic instrumentality has not been employed in a desired way. Finally, there was a significant difference between current and ideal situation in regarding to desired immaterial rewards-importance and scores mean of intrinsic valence variable in ideal situation was more than current situation ( $P < .05$ ). In sum, there was significant difference between scores mean of influential



factors on motivation including situation, expectancy, intrinsic instrumentality, and intrinsic valence in both current and ideal situation. According to findings, H7 was supported.

## **5. DISCUSSION, CONCLUSION, LIMITATIONS, AND FUTURE RESEARCH**

In today's business environment, the future belongs to those managers who can best manage change. To manage change, organizations must have employees committed to the demand of rapid change and as such committed employees are the source of competitive advantage (Dessler, 1993). Productivity improvement requires more than just customer service, technology, decentralization, or process reengineering. Whether these approaches succeed or fail will depend largely on the motivation of the employees who are asked to implement them. This paper aims to determine influential factors on employees' motivation for participating in the in-service training courses based on the modified expectancy theory. The findings suggest the modified expectancy theory (expectancy, intrinsic instrumentality, intrinsic valence, and situation (in our model)) would enhance understanding of employee motivation for participating in the in-service training courses in the oil industry setting. Training course situation including well goal-setting, suitable content (such as materials and trainer), correct perform, and exact appraisal influenced widely employees' motivation. If training course situation is expected and suitable for employees, they will consider it as a suitable condition in trying to perform desired performance. Expectancy led employees to believe their effort will lead to desired performance. Instrumentality is the belief that if an employee meets performance expectations, he or she will receive a greater reward, particularly for intrinsic instrumentality. Employees think if they perform well in their job, they will definitely have a sense of accomplishment and feel good about themselves. But employees do not think they will get better pay, monetary bonus, pay increases, or promotion even if they meet performance expectations. Employees thought valence was an important attribute in motivation. Employees prefer responsibility over job, using their abilities, and feeling of accomplishment, which are intrinsic valences to extrinsic valences of good pay, monetary bonuses, pay raises, and promotions. In sum, the revisited expectancy theory model of this study (situation, expectancy, extrinsic and intrinsic instrumentality, extrinsic and intrinsic) was approximately valid in the Oil Company employee setting and can be used to explain the attitudes of Oil Company employees in the workplace. However, extrinsic instrumentality and extrinsic valence showed a negative effect on work motivation. When employees perform well, expect good pay, monetary bonuses, and pay increases or promotions, the motivation of employees who decreases if they do not receive those extrinsic rewards. Results showed that intrinsic variables (both instrumentality and valence) contribute more to employee motivation than extrinsic variables do. This finding is consistent with the studies of Graen (1969) and Mitchell and Albright (1972) that intrinsic outcomes yield predictions of job performance and job satisfaction that are superior to those affected by extrinsic outcomes. Wahba and House (1974) suggested that intrinsic outcomes may have more power to motivate than extrinsic outcomes, primarily because the instrumentality perceptions associated with outcomes that are self-administered should approach certainty. This study confirms that employees weight intrinsic factors higher; when employees feel a sense of accomplishment about their jobs, they are more motivated to work hard. This study illustrated that when employees are highly motivated, they will participate in the in-service training courses and as a result, they will put more effort on the job and enhance their productivity and the quality of their performance. Finally, according to findings, there was a significant difference between current and ideal situation in regarding to using influential factors on motivation. That is, influential factors have not been utilized in a correct way. In fact, ideal situation defined as a situation that employees considered its rational and expected. Employees expect that training courses are well-programming and matched with their ability. As a result, employees who are success in these courses, expect to get satisfying rewards. Interestingly, managers make mistakes by assuming what motivates employees. Motivation is an intrinsic matter to a human being. Since human beings are of widely varied nature, so are their motivators. Schein (1980) saw human nature as complex; with human needs and motivation varying according to the different circumstances people face, their life experiences, expectations, and age. Rowley (1996, p. 11) writes: The effective manager needs to recognize that different motivators are appropriate for different staff and that different staff will demonstrate differing inherent levels of motivation in setting their own targets and striving towards them. Organizational resources are scarce and all efforts should be made to utilize these resources in the best possible manner. The staff

development plan is expected to motivate them for participating in the in-service training courses, but if it does not, then there is something wrong. We maintain that employee involvement is the key in designing an effective motivation program. Furthermore, good training and subsequently working condition have been widely favored by the employees. An employee's suggestions system is expected to be in place to know their suggestions in order to improve organization's training and working condition. It is widely known that an effective suggestion system improves organization's training and working conditions and saves organization's resources from being wasted (Polzin, 1998; Trunko, 1993). Training needs determination is critical that creates ideal situation in training courses. Thus, Training needs determination should be performed prior to training. Managers should listen to employees, care about employees, encourage employees involved in job or job-related decisions, take care of employee advancement or career growth, and reward employees with pay increases or bonuses. The most important factor is for managers to support employees and recognize employees. This study is not free from limitations. First, the findings may not be generalized to all Oil Companies because data were collected from limited agencies of Iran Oil Company in Isfahan and Kurdistan. Second, the questionnaires were distributed by Oil Company managers to their employees and also collected by the managers, which may influence employees' responses. That is, collected responses may have biases about work motivations. To control and to identify possible effects that were not considered in this study, future study can include more variables, such as demographic characteristics and personal characteristics in examining employee motivation for participating in the in-training courses.

## REFERENCES

- Arvey, R.D., Mussio, S.J., (1973). A test of expectancy theory in a field setting using female clerical employees. *Journal of Vocational Behavior*, 3, 421–432.
- Bartol, K.M. and Martin, D.C. (Ed.). (1998). *Management (3rd)*. New York, NY: McGraw-Hill.
- Brownell, P., McInnes, M. (1986). Budgetary participation, motivation, and managerial performance. *The Accounting Review*, LXI(4), 587–600.
- Burns, A. C., & Bush, R. F. (1995). *Marketing research*. Upper Saddle River, New Jersey: Prentice Hall.
- Calder, B.J. and Staw, B.M. (1975). The self-perception of intrinsic and extrinsic motivation. *Journal of Personality and Social Psychology*, 31(4), 599-605.
- Campbell, J.P., Pritchard, R.D. (1976). Motivation theory in industrial and organizational psychology. In Dunnette, M.D., Hough, L.M. (Eds.). *Handbook of Industrial and Organizational Psychology* (pp. 63–130). New York, NY: Wiley.
- Campbell, J.P., Dunnette, M.D., Lawler, E.E., Weick, K.E. (1970). *Managerial Behavior, Performance, and Effectiveness*. New York, NY: McGraw-Hill.
- Chen, Y., Lou, H. (2002). Toward an understanding of the behavioral intention to use a groupware application. *Journal of End User Computing*, 14, 1–16.
- Chiang, C. F. and Jang, S. C. (2008). An expectancy theory model for hotel employee motivation. *International Journal of Hospitality Management*, 27, 313–322.
- Clasen, P. S. (1997). *Expectancy theory predictions of the transfer of training skills to the job*. San Diego, California: California School of Professional Psychology.
- Deci, E. (1975). *Intrinsic Motivation*. New York, NY: Plenum Press.
- Dessler, G. (1993). *Winning Commitment – How to Build and Keep a Competitive Workforce*. New York, NY: McGraw-Hill.
- Evans, M.G. (1991). The problem of analyzing multiplicative composites, Interactions revisited. *American Psychologist*, 46, 6–15.

- Fitz-enz, J. (1997). Fitz-enz it's costly to lose good employees. *Workforce*, 76(8), 50-51.
- Gallbraith, J., Cummings, L. (1967). An empiric investigation of the motivational determinants of past performance: interactive effects between instrumentality–valence, motivation, and ability. *Organizational Behavior and Human Performance*, 2, 237–257.
- Gavin, J.F. (1970). Ability, effort, and role perception as antecedents of job performance. Experimental publication system, *manuscript number 190A*. APA. Washington, DC.
- Gollwitzer, P.M. (1993). Goal achievement: the role of intentions. *European Review of Social Psychology*, 4, 141–185.
- Graen, G. B. (1969). Instrumentality theory of work motivation: some experimental results and suggested modifications. *Journal of Applied Psychology*, 53, 1–25.
- Hackman, J.R., Porter, L.W. (1968). Expectancy theory predictions of work effectiveness. *Organizational Behavior and Human Performance*, 3, 417–426.
- Harkins, P. J. (1991). *The changing Role of corporate Training and development, Corporate Development in the 90s, Supplement to Training* (pp. 26-29). Minneapolis, MN: Lakewood.
- Heneman, H. G., Schwab, E. P. (1972). Evaluation of research on expectancy predictions of employee performance. *Psychological Bulletin*, 78, 1–9.
- House, R. J. (1971). A path theory of leader effectiveness. *Administrative Sciences Quarterly*, 16(3), 321–338.
- Ivancevich, J. M. (1976). Expectancy theory predictions and behaviorally anchored scales of motivation: an empirical test of engineers. *Journal of Vocational Behavior*, 8, 59–75.
- Jiambalvo, J. (1979). Performance evaluation and directed job effort: model development and analysis in a CPA firm setting. *Journal of Accounting Research*, 17(2), 437–455.
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In Dunnette, M.D., Hough, L.M. (Eds.), *Handbook of Industrial and Organizational Psychology, vol. 1, second ed* (pp. 75–170). Palo Alto, CA: Consulting Psychologists Press.
- Kopelman, R.E. (1979). Directionally different expectancy theory predictions of work motivation and job satisfaction. *Motivational and emotion*, 3(3), 299–317.
- Kopelman, R.E., Thompson, P.H. (1976). Boundary condition for expectancy theory predictions of work motivation and job performance. *Academic Management Journal*, 19 (2), 237–258.
- Landy, F.J., Becker, W.S. (1990). Motivation theory reconsidered. In Staw, B.M., Cummings, L.L. (Eds.), *Work in Organizations* (pp. 1–38). Greenwich, CT: Jai Press.
- Landy, F.J., Guion, R.M. (1970). Development of scales for the measurement of work motivation. *Organizational Behavior and Human Performance*, 5, 93–103.
- Lawler, E.E. (1994). *Motivation in Work Organisations*. San Francisco, California: Jossey-Bass Inc. Publishers.
- Lawler, E.E. (1971). *Pay and Organizational Effectiveness*. New York, NY: McGraw-Hill.
- Lawler, E.E. (1968). A correlational-causal and of the relationship between expectancy and job performance. *Journal of Applied Psychology*, 2, 122–142.
- Lawler, E.E., Porter, L.W. (1967). Antecedent attitudes of effective managerial performance. *Organizational Behavior and Human Performance*, 2, 122–142.

- Loewenstein, G. (1999). Because it is there: the challenge of mountaining for utility theory. *Kyklos*, 52(3), 315-343.
- March, J.G. (1999). *The Pursuit of Organizational Intelligence*. Oxford, England: Blackwell.
- Matsui, T., Ohtsuka, Y. (1978). Within-person expectancy theory predictions of supervisory consideration and structure behavior. *Journal of Applied Psychology*, 63(1), 128–131.
- Mathieu, J.E. and Martineau, J.W. (1997). Individual and situational influences on training motivation. In Ford, J.K., Kozlowski, S.W.J., Kraiger, K., Salas, E. and Teachout, M.S. (Eds.), *Improving Training Effectiveness in Work Organizations* (pp. 193-221). Mahwah, NJ: Erlbaum.
- Mellenbergh, G.J., Molendijk, L., De Haan, W., Ter Horst, G. (1990). The sum-of-products variable reconsidered. *Methodika*, 4, 37–46.
- Mitchell, T.R. (1982). Motivation: new direction for theory, research, and practices. *Academy of Management Review*, 7, 80-88.
- Mitchell, T.R. (1974). Expectancy models of job satisfaction, occupational preference and effort: a theoretical, methodological and empirical appraisal. *Psychological Bulletin*, 81, 1053–1077.
- Mitchell, T.R., Albright, D.W. (1972). Expectancy theory predictions of the satisfaction effort, performance, and retention of Naval Aviation Officers. *Organizational Behavior and Human Performance*, 8, 1–20.
- Mitchell, T.R., Biglan, A. (1971). Instrumentality theories: current uses in psychology. *Psychological Bulletin*, 76(6), 432–454.
- Mobley, W.H. (1971). *An inter-organizational test of a task-goal expectancy model of work motivation and performance* (Doctoral dissertation). University of Maryland, College Park, MD.
- Nadler, D.A., Lawler, E.E. (1977). Motivation: a diagnostic approach. In Hackman, J.R., Lawler, E.E., Porter, L.W. (Eds.), *Perspectives on Behavior in Organisations* (pp. 26–36). New York, NY: McGraw-Hill.
- Osteraker, M.C. (1999). Measuring motivation in a learning organization. *Journal of Workplace Learning*, 11, 73-77.
- Osterloh, M., Frey, B. and Frost, J. (2002). The dynamics of motivation of new organizational forms. *International Journal of Economics and Business*, 9(1), 61-77.
- Parker, D.F., Dyer, L. (1976). Expectancy theory as a within-person behavioral choice model: an empirical test of some conceptual and methodological refinements. *Organizational Behavior and Human Performance*, 17, 97–117.
- Polzin, M.J. (1998). Employee suggestion system: boosting productivity and profits. *Human Technology Management*, 21(3), 49-50.
- Porter, L.W., Lawler, E.E. (1968). *Managerial Attitudes and Performance*. Homewood, Illinois: Irwin-Dorsey Press.
- Ramlall, S. (2004). A review of employee motivation theories and their applications for employee retention within organizations. *Journal of American Academy of Business*, 5, 52-63.
- Reinhardt, L., Wahba, M.A. (1975). Expectancy theory as a predictor of work motivation, effort, expenditure, and job performance. *Academy of Management Journal*, 18(3), 520–537.
- Rockness, H.O. (1977). Expectancy theory in a budgetary setting: an experimental examination. *The Accounting Review*, 52(4), 893–903.

- Ronen, J., Livingstone, J.L. (1975). An expectancy theory approach to the motivational impacts of budgets. *The Accounting Review*, 50(4), 671–685.
- Rowley, J. (1996). Motivation and academic staff in higher education. *Quality Assurance in Higher Education*, 4, 11-16.
- Ryan, R.M. and Deci, E.L. (2000). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- Sansone, C. and Harackiewicz, J.M. (2000). *Intrinsic and Extrinsic Motivation: The Search for Optimal Motivation and Performance*. San Diego, CA: Academic Press.
- Schein, E.H. (1980). *Organizational Psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Schwab, D.P., Olian-Gottlieb, J.D., Heneman III, H.G. (1979). Between subjects expectancy theory research: a statistical review of students predicting effort and performance. *Psychological Bulletin*, 86, 139–147.
- Simons, T., Enz, C.A. (1995). Motivating hotel employees. *The Cornell Hotel and Restaurant Administration Quarterly*, 36(1), 20–27.
- Siu, V., Tsang, N., Wong, S. (1997). What motivates Hong Kong's hotel employees? *The Cornell Hotel and Restaurant Administration Quarterly*, 38(5), 44–49.
- Tien, F.F. (2000). To what degree does the desire for promotion motivate faculty to perform research? Testing the expectancy theory. *Research in Higher Education*, 41(6), 723–752.
- Trunko, M.E. (1993). Open to suggestions: Suggestion systems are changing to meet today's needs for employee involvement. *HR Magazine*, 38(2), 85-89.
- Tsai, W. C. and Tai, W. T. (2003). Perceived importance as a mediator of the relationship between training assignment and training motivation. *Personnel Review*, 32(2), 151-163.
- Van Eerde, W., Thierry, H. (1996). Vroom's expectancy models and work related criteria: a meta-analysis. *Journal of Applied Psychology*, 81(5), 575–586.
- Van Yperen, N.W. and Hagedoorn, M. (2003). Do high job demands increase intrinsic motivation or job strain or both? The role of job control and social support. *Academy of Management Journal*, 46(3), 339-348.
- Vansteenkiste, M., Lens, W., De Witte, H., Feather, N.T. (2005). Understanding unemployed people's job search behavior, unemployment experience and well-being: a comparison of expectancy-value theory and self-determination theory. *British Journal of Social Psychology*, 44(2), 268–286.
- Vroom, V.H. (1964). *Work and Motivation*. New York, NY: Wiley.
- Wahba, M., House, R. (1974). Expectancy theory in work and motivation: some logical and methodological issues. *Human Relations*, 27, 121–147.
- Wanous, J.P., Keon, T.L., Latack, J.C. (1983). Expectancy theory and occupational/organizational choices: a review and test. *Organizational Behavior and Human Performance*, 32, 66–86.
- Wong, S., Siu, V., Tsang, N. (1999). The impact of demographic factors on Hong Kong hotel employees' choice of job-related motivators. *International Journal of Contemporary Hospitality Management*, 11(5), 230–241.