

ORIGINAL ARTICLES

The study of Training impact on Knowledge Management and organizational performance

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ABSTRACT

Human resources are invaluable assets for firms desiring to achieve Knowledge Management (KM) goals and improve of Organizational Performance (OP). So Training of Human Resources (THR), KM and OP are believed to be the essential of success in business. Different results in literatures declare KM affects organizational performance positively. But there are still some confusing relations between KM and THR. Accordingly, we propose some hypotheses to verify relationships among THR, KM and OP. Present study is practical, descriptive and is of correlative type. Hence, hypotheses of the study will be analyzed using Structural Equation Modeling/Path Analysis, and Tests of Fit. The population of this study is "all staffs of Kharg Petrochemical Complex (KPC) in Iran. The results show that the training of human resources is effective on achieving the objectives of knowledge management and organizational performance. Therefore, it is recommended that to improve productivity in organizations, national and international markets companies should take steps to improve knowledge- based organizational human resources training.

Key words: Training of Human Resources, Knowledge Management, Organizational Performance, Kharg Petrochemical Complex

Introduction

The Human Resources Management literature recognizes training as a critical enabler for firms to create value and sustain competitive advantage in the increasingly complex and rapidly changing environment (Frazis and Loewenstein, 2005). Firms with greater training will be more successful in responding to changing environments and in developing new capabilities that allow them to achieve better knowledge in levels of organization. The knowledge-based view depicts firms as repositories of knowledge and its effect in organizational performance (Helm, 2010; Slagter, 2007). According to this view, prior studies recognize the knowledge of human resource as valuable asset for firms (Collins and Clark, 2003; Wright *et al.*, 2001).

Knowledge management (KM) is regarded as an integrated approach to identify, manage, share and capitalize on the know-how, experience and intellectual capital of human resource in an organization (Helm, 2010; Slagter, 2007; Noe, 2008). By managing knowledge, organizations can improve their efficiency, allow professionals to learn more efficiently and effectively, provide a better foundation for making decisions, improve communication between human resources and enhance the synergy between human resources (Gooijer, 2000). The actual outcome of KM is hard to predict. Nevertheless, it is safe to claim that human resources should be the main driver of KM (Civi, 2000; Gooijer, 2000; Soliman and Spooner, 2000). And that KM is

actually an evolved form of human resource management, using Training of Human Resource (THR) as the supporting factor for achieving goals of KM and organizational performance (OP). Soliman and Spooner (2000) view employees' collective knowledge as competitive advantage and suggest that the training function is well positioned to ensure the success of KM programs which are directed at capturing, using and re-using employees' knowledge. Moreover, THR can assist in employee development, building quality, creativity, leadership and problem solving skills (Carlisle, 2000; Gloet, 2004). THR can also be viewed as HRM emphasizing on acquisition, transfer, creation and application of knowledge of human resource in organization (Armstrong, 2000). THR is commonly practiced as a part of the overall organizational training planning, and implicitly intended for internal customer satisfaction, across organizational team working, career development, and improve of knowledge in organization Furthermore, the coherent purpose of performance management in THR and KM is for systems enhancement and sustaining continuous organizational improvement. Therefore, the training is not only for enhance the performance of the people, but also to performance improvement in the KM system and OP. The main objective of this paper is to theoretically grounded assessment of the impact of the THR on the KM success and OP. KM process discussed in this study, based on a framework grounded the next objectives of this study are as follows: 1) identify training methods of human resources, 2) study of training role in success to goals of KM and OP, 3) present a conceptual framework to display relationship between THR, KM and OP.

2. Research background:

2.1 Training of human resource (THR):

Training of human resource is defined as a process of developing work-related knowledge and skills in employees for the purpose of improving performance systematically (Blanchard & Thacker, 2009). Caligiuri & Tarique (2004) all define training as a deliberate, planned and systematic process to modify and develop knowledge, values, attitudes, techniques and skills through learning experiences, to achieve a set level of performance in an activity or a range of activities. They all share the belief that training must be derived from understanding the learning process and if successful, will speed up the learning process; training is focused on making the individual proficient by instruction and practice. Managers, executives, and supervisors can have a significant impact on human resources for the acquisition, transfer, creation and application of knowledge and skills (Soliman and Spooner, 2000). The training of extension personnel contributes directly to the development of human resources within extension organizations. Training has to start with the recognition of training needs through job analysis, performance assessment, and organizational analysis. Once the training needs of extension personnel have been identified, the next step is to organize training programs. On the other hand, the industry sector is considered as one of the most dynamic and complex business environments (Loosemore, *et al*, 2003). Using later acquisition, documentation, transfer, creation and application of knowledge of organizations, Frazis and Loewenstein (2005) has found that while the incidence of training is positively related both to knowledge levels and to knowledge growth. Their finding suggests that there is substantial congruousness in returns to training, and the acquisition, transfer, application knowledge.

Armstrong (2000) divided training techniques that can be used into: on-the-job techniques; off-the-job and on-or-off-the-job techniques. We accept this classification because Armstrong appears to have captured the views of other notable authorities. On-the-job training (OJT) is planned in structured occurring on the job during work, centered on the knowledge and skills peoples should possess in order to perform competently (Kuijer, 2007). OJT can be defined as an organized, structured, intentional form of training that contains well-directed pedagogical interventions, in which the workplace functions as a place for teach (Racine, 2005). To establish an OJT program a company needs to assess the needs of the organization as well as the skills of the employees to determine the training needs; design the training to determine what the training needs are; and evaluate the effectiveness of the training. Training should be conducted in a setting that is conducive and appropriate for learning. Off-the-job training (FJT) where learning assignments are related to problem-solving and task centered activities linked to the strategic business intent of the organization. This method involves training employees away from the work place so that experts may conduct the training and employees are free from immediate pressure of completing the jobs at hand. On or off-the-job Training (OFT) in view of Armstrong (2000) include instruction, question and answer, action learning, assignments, projects, guided reading, computer-based training, interactive video and video. Table 1 shows dimensions of THR in Model of Armstrong (2000) and another researcher.

Table 1: THR Dimensions

Model of Armstrong (1999)			
On-the-job training (OJT)	Coaching	Coaching in organizational context as “those managerial actions and behaviors specifically focusing on developing an employee so that he or she can perform at maximum capability	Champathes, (2006); Ellingeic, <i>et al</i> (2003)
	Apprenticeships	Usually involve several related groups of skills that allow the apprentice to practice a particular trade, and they take place over a long period of time in which the apprentice works for, and with, the senior skilled worker.	Freeman (2001)
	Job rotation	Job rotation involves moving an employee through a series of jobs so he or she can get a good feel for the tasks that are associated with different jobs.	Weihrich and Koontz (2002)
	Training within Industry	This comprises Job Instruction Training (JIT), Job Relations Training (JRT), and Job Method Training (JMT). This teaches supervisors and team leaders how to quickly train employees to do their jobs correctly, safely, and conscientiously	AM&T (2005); Redstone (2005)
	Self-Study	Learning by a student alone without the presence of an instructor but normally using structured training materials.	Patel (2004); Walter (2005)
Off-the-job training (FJT)	Lectures	Present training material verbally and are used when the goal is to present a great deal of material to many people.	Walter (2005)
	Role playing and simulation	They are training techniques that attempt to bring realistic decision-making situations to the trainee. Likely problems and alternative solutions are presented for discussion.	Feinstein (2001); Feinstein, <i>et al</i> (2002)
	Classroom Training	One advantage is that the presentation is the same no matter how many times it's played	Patel (2004)
	Laboratory or workshop	It is usually conducted at a neutral site and is used by upper-and middle-management trainees to develop a spirit of teamwork and an increased ability to deal with management and peers	Smith (2002)
	Audiovisual methods	Such as television, videotapes and films are the most effective means of providing real world conditions and situations in a short time.	Smith (2002)
On or off-the-job Training (OFT)	Computer-based training	It focuses on the specific knowledge, attitudes and skills needed to carry out a procedure or activity. This training involving interaction between a computer and a learner in which the computer provides data or questions and the learner responds	Brown (2001); Goodyear & Ellis (2008)
	Web-based training (Internet)	Web-based training makes an opportunity to address many known business issues, such as cost reduction, access to information, learning accountability, and increased employee competence	Chan & Ngai (2007); Goodyear & Ellis (2008)

Knowledge management (KM):

Knowledge management is ‘any process or practice of creating, acquiring, capturing, sharing and using knowledge, wherever it resides, to enhance learning and performance in organizations’ (Scarborough and Carter, 2000).

Organizations that effectively manage and leverage the knowledge and expertise embedded in individual minds will be able to create more value and achieve superior competitive advantage (Davenport, *et al.*, 2001). HRT is the primary approaches to elicit and reinforce employees' knowledge and expertise that a firm requires

(Lengnick-Hall & Lengnick-Hall, 2003). Since people are carriers of much of organization-specific knowledge and expertise, firms may be best to utilize HR work practices to manage knowledge and expertise (Scarborough and Carter, 2000).

According to Currie & Kerrin (2003) knowledge is a comprehensive concept with profound meanings, bearing the belief that it increases an organization's ability for effectual action.

Although Knowledge management researchers embrace varying views of what KM entails (e.g., Liebowitz, 2000; Stein and Jonas, 2001; Wiig, 2000; Liao, *et al.*, 2008), knowledge acquisition (KA), knowledge documentation (KD), knowledge transfer (KT), knowledge creation (KC), and knowledge application (KP) are generally regarded as the five basic dimensions of the process. KM focuses on capturing an organization's knowledge and using it to foster human resources learning and organizational learning. Table 2 shows dimensions of KM in Model of Filius *et al.*, (2000) and another researcher.

Table 2: KM Dimensions

	Model of Filius <i>et al.</i> (2000)	
knowledge acquisition	Process of developing insights, skills, and relationships, enabling an organization to go through a process of self-renewal and expand its boundaries. It's a continuous process during which the organization's tacit and explicit knowledge is augmented or replaced	Tiwana (2000); Desouza, 2003; Edwards (2003); Davenport <i>et al</i> (2001)
Knowledge documentation	Codification refers to the mechanisms that an organization uses to institutionalize its knowledge so that it can be reused in the future. These mechanisms or forms, e.g., documents, databases, pictures, illustrations, spreadsheets on a disk, e-mails, video tapes, web pages, make it explicit, portable, accessible and usable (an organizational memory)	Tiwana (2000); Handzic (2003)
Knowledge transfer	refers to the activities that diffuse and share knowledge. It includes the exchange tacit and explicit knowledge, among individuals, groups, and units at the same and different organizational levels. In this research, KT focuses only on intra-organizational knowledge transfer.	Argote and Ingram (2000); Abou-Zeid (2002)
Knowledge Creation	activities aiming at reconfiguring and recombining existing pieces of knowledge, developing competence by focusing on capabilities and limiting shortcomings, strengthening research and development (R&D) capabilities, scanning and monitoring external environments, and borrowing and employing external technologies.	Bhatt (2001); Sanchez (2001)
Knowledge application	describes the methods and mechanisms that an organization adopts to use available knowledge to improve its processes, products and services, and OP.	Tiwana (2000); Lengnick-Hall & Lengnick-Hall (2003) Bhatt (2001)

2.3 Human Resource Training, Knowledge Management, and Organizational Performance:

The aim of this study is to examine the relationship between human resource training on achievement of knowledge management goals and thus organizational performance. Hence, as was previously stated in this section hypotheses are discussed based on existing literature.

Human resource, with their knowledge, expertise, and skills, are a valuable resource of firms (Lawler, *et al.*, 2000). Organizations that effectively manage and leverage the knowledge and expertise embedded in individual minds will be able to create more value and achieve superior competitive advantage (Armstrong, 2008). THR is the primary approach to elicit and reinforce employees' knowledge and expertise that a firm requires (Armstrong, Baron, 2003; Collins, Clarck, 2002). HR can make an important contribution to KM simply because knowledge is shared between people; so it is a matter of capturing explicit knowledge through the use of training. The role of THR is to ensure that the organization has the intellectual capital it needs. Certainly, both knowledge and HR are being increasingly regarded as key levers of improving of OP in today's global, dynamic and complex organization environment. Importantly, in the context of knowledge management (e.g. Meso and Robert 2000; Robertson and Hammersley, 2000; Soliman and Spooner, 2000), people and knowledge are two concepts inextricably joined. HR beings are the ultimate knowledge creators and bearers (organizations do not think by themselves, although they may have "knowledge enabling" contexts and "memory" systems). In fact, both people and knowledge are to be regarded as having special potential as scarce and idiosyncratic resources and productivity, consistent with the premises of the resource-based approach

to KM (e.g. Helm, 2010; Slagter, 2007; Noe, 2008). In many studies have been shown role of training-based view in success of the Knowledge Management goals (e.g. Hall, 2001; Davenport, Völpe, 2001; Efimova and Swaak, 2002), thus, we may hypothesize that:

H1: Training of human resources is effective on attaining Knowledge Management goals.

Performance is a recurrent theme in most branches of management, and it is of interest to both academic scholars and practicing managers. Although the importance of the performance concept (and the broader area, organizational effectiveness) is widely recognized, the treatment of performance in research setting is perhaps one of the thorniest issues confronting the academic researcher today. With the volume of literature on this topic continually increasing, there appears to be little hope of reaching any agreement on basic terminology and definitions. Some have expressed considerable frustration with this concept. Therefore, financial performance (financial indicator such as return on investment, sales growth, return on equity), operational performance (such as market share, new product introduction, product/service quality and marketing effectiveness), and organizational effectiveness (organizational health, success, efficiency, productivity or excellence) should involve in performance (Arino, 2003).

Anyway, the essential point to be noted is that the prerequisite to organizational performance improvement is to improve the financial and operational performance. With improved performance in these two sections, organization will be the moving toward organizational effectiveness.

However, the notion of performance embraces a far wider dimension of interpretations. With the focus on KM, the performance outcomes associated with it need to be more carefully dealt with. The importance of performance measurement system is manifold. Not only does it demonstrate how an organization does, how well it does it and how much progress it makes over time in achieving its goals, most importantly, it helps to manage creating, acquiring, capturing, sharing and using knowledge in organization (Scarborough and carter, 2000) and increase HR productivity (Ramlall, 2003). However, similar to any organizational resource, effective KM through the development of capabilities should contribute to key aspects of OP (Darroch, 2005). Also, when firms develop greater KM capabilities, they can more effectively develop marketing offerings to improve OP (Kalling, 2003). With greater knowledge management capabilities, firms can obtain and use knowledge more effectively and efficiently, which results in above-normal performance. Thus, we may hypothesize that:

H2: Knowledge Management is effective on improvement of the organizational performance

H3: Training of human resources is effective on improvement of the organizational performance

3. Methodology:

In this study, because of dealing with testing the effect of training of human resources variables on Knowledge management and organizational performance, and developing practical knowledge about the quality of relation and effectiveness between these three variables, from the aiming view point is practical and from method of data collection and analysis view point is descriptive and is of correlative type (Kumar, 2005; Yin, 2003a).

3.1 Data Collection and Analysis:

The Questionnaire comprised four different sections. The first section questions have been used. 5 questions are related to personal information of the respondents. The second section contains 15 statements measuring the five KM activities: Knowledge acquisition, Knowledge documentation, Knowledge transfer, Knowledge creation, and Knowledge application. These statements are formulated by Filius et al. (2000). Respondent were asked to indicate their extent of agreement using a five point likert scale (with 5 = completely agree, to 1 = completely disagree). The third section contains 9 statements measuring the three training dimensions: On-the Job Training, Off-the-Job Training, and on or Off-the-Job Training. These statements are formulated by Armstrong (2000). Respondent were asked to indicate their extent of agreement using a five point likert scale (where 5 = extensively covered, to 1 = weakly covered). The fourth section contains 9 statements measuring the three organizational performance dimensions: financial performance, operational performance, and organizational effectiveness. These statements are formulated by Venkatraman & Ramanujam, 1986 (Arino, 2003). Respondent were asked to indicate their extent of agreement using a five point likert scale (with 5 = completely agree, to 1 = completely disagree). For analyzing data derived from questionnaire Structural Equation Modeling / Path Diagram has been used and the software's which have been used for analyzing the data are LISREL 8.54 and SPSS 17.

3.2 Reliability and Validity:

For determining reliability of the study Cronbach's Alpha method has been used. Table 3 shows reliability of the study.

Table 3: reliability of the study

Questions	Cronbach's Alpha
Training of human resources	0.77
Knowledge management	0.78
Organizational performance	0.81

For determining validity of the questionnaire content credit has been used (Kumar, 2005; Yin, 2003). Content credit of this questionnaire has been justified by guide professors and co-guides and also initial distribution of questionnaire among number of experts, scholars and considering their corrective comments, it has the necessary credibility.

3.3 Statistical Population and Statistical Samples:

The data were collected from employees in Kharg Petrochemical Complex (KPC) in Iran. All respondents were full-time employees and volunteered to participate in the study. This Complex as one of High-tech industries has the characteristics of high R&D budgets, higher level of technology, more high education employees, advanced training for all staffs, advanced systems of Information technology, etc. Total number of staff according to report of Human Resources Management department is about 340 people. 200 questionnaires were delivered to employees by a researcher and 175 useful questionnaires were returned. Usable questionnaires entered into Excel datasheet and analyzed with the use of SPSS 17 and Lisrel 8.54. We computed our samples based on Morgan's table. Male employees accounted for 75.3% of the total participants, while female employees accounted for 24.7%. From 175 respondents, 16 people under high school graduation, 38 people high school graduated, 57 people has associated diploma, 42 with bachelor degree, 18 people with master degree, and finally 4 people hold a PhD degree. This is while the age of 27 of these people were 18-25, 48 people between 26-35, 64 between 36-45, 34 people between 46-55 and 2 people were more than 56 years old.

3.4.1-Goodness of Fit Tests:

Structural equation modeling (SEM) with LISREL 8.54 (Petroutsatou and Lambropoulos, 2007) was used to test and analyze the hypothesized relationships of the research model. SEM aims to examine the inter-related relationships simultaneously between a set of posited constructs, each of those is measured by one or more observed items (measures). The goodness of fit of a statistical model describes how well it fits a set of observations. Measures of goodness of fit typically summarize the discrepancy between observed values and the values expected under the model in question. Such measures can be used in statistical hypothesis testing. Generally, in this study to assess the goodness of fit of the entire model measures such as χ^2/df , RMR, GFI, AGFI, RMSEA, NFI, NNFI, CFI has been used. The relative chi-square (chi-square/degree of freedom; χ^2/df), standardized root mean square residual (standardized RMSR), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), normed fit index (NFI), and comparative fit index (CFI) were used as goodness-of-fit measures. Due to the sensitivity of the chi-square test to sample size, the relative chi-square was used (it should be 3 or less for an acceptable model (Tomer & Pugsek, 2003), Standardized RMSR should not be greater than 0.10 and GFI, AGFI, NFI, and CFI should exceed 0.90 to be acceptable (Hair *et al.* 2006). The rate of each index has come in the table 4:

Table4: Goodness of fit tests

χ^2/df	Root Mean Square Residual (RMR)	Goodness of Fit Index (GFI)	Adjusted Goodness of Fit Index	Root Mean Square Error of Approximation	Normed Fit Index (NFI)	Non-Normed Fit Index	Comparative Fit Index (CFI)
1.04	0.045	0.97	0.94	0.019	0.94	0.92	0.99

The measurement model with all three constructs was using confirmatory factor analysis (Petroutsatou and Lambropoulos 2007). Table 5 presents factor loading and the corresponding t-values of indicators in the measurement model. All loading exceed 0.5 and each indicator is significant at 0.05 levels. The measurement model exhibited a good level of model fit.

Table 5: factor loading and t-values of the measurement model

construct/indicator	factor Loading	t-value
Training of human resources		
on-the-Job Training	.68	2.59
off-the-Job Training	.64	.46
on or Off-the Training	.33	.52
Knowledge Management		
knowledge Acquisition	.52	.67
knowledge Documentation	.38	.59
knowledge Transfer	.73	.40
knowledge Creation	.65	.04
knowledge Application	.22	.27
Organizational Performance		
financial Performance	.59	.64
operational Performance	.23	.18
organizational Effectiveness	.78	.76

3.4.2 Testing Hypotheses:

The specification of the model consists of the translation of the verbal hypotheses into a series of equations previously represented in the form of a causal or a path diagram. The path diagram shows the causal relationships among all variables in the system. It should be based upon a priori knowledge of such relationships which are ultimately related to previous experience or theoretical basis (Fox, 2003). Thus, the path diagram represents the working hypothesis about the causal relationships among variables.

Diagram 1 shows structural model of the study for confirming first secondary hypotheses of the study in standard estimation state.

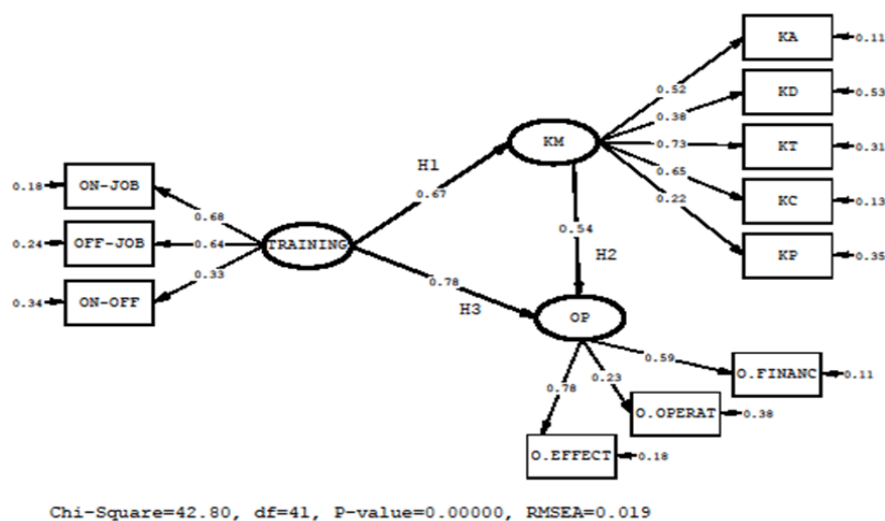
**Diagram 1:** structural model of study for confirming hypotheses in Standard estimates state

Diagram 2 also shows significance and resulted parameters from primary hypothesis test. Significance value of 5.75 is for the primary hypothesis was determined. Significance value of the primary hypothesis is placed out of (-1.98, 1.98) interval, therefore, formed relation is out of the null hypothesis and indicates the ratification of the primary hypothesis of the research. According to results of these two models (relation is based on standard estimation of 0.61 and is based on significance equal to 5.75) hence, primary hypothesis confirmed.

Based on analysis done using path analysis, results of testing hypotheses of the study can be seen in table 8. Standard estimation test and significance value in confirming or rejecting considered hypotheses (significance of hypotheses) has been used.

Table 8: results of testing the hypotheses of the study using path analysis

hypotheses	Path	Standardized estimated	The Significance of Parameters	Testing Hypotheses
first hypothesis	TRAINING → KM	.68	.08	confirmed
second hypothesis	KM → OP	.54	.43	confirmed
third hypothesis	TRAINING → OP	.78	.86	confirmed

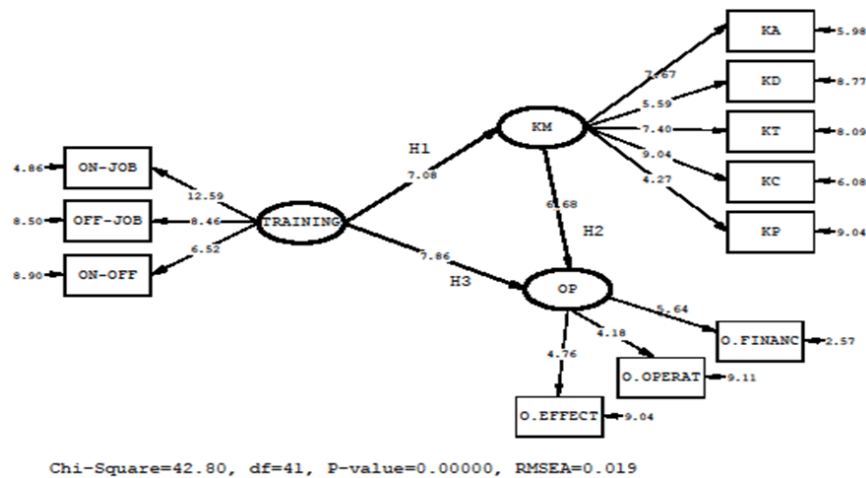


Diagram 2: structural model of study for confirming hypotheses in Standard estimates state

Discussion and Conclusions:

This paper investigates the role of training of human resources in successful goals of knowledge management and organizational performance. Results indicate that training of human resources positively relates to knowledge management and organizational performance, and knowledge management also, relates positively to organizational performance. The formation of attitudes based on the role of the training on knowledge management can be observed in most of the studies such as: (Collins & Clark, 2003; Aldisent, 2002; Blanchard & Thacker, 2009; Calo, 2008; Helm, 2010; Noe, 2008). Therefore, these studies have also been used to advance research goals. Like all these researches the present study present relationship between the two variables of human resources training and knowledge management has been determined positive and significant. What distinct this study from other researches is the examination of human resources training in the form of three types of trainings (on-the-job / off-the-job / on or off-the-job) on the dimensions of knowledge management (acquisition, registration, transfer, creation and application of knowledge and skills). The thing that has put this research in line with other researches is the approach of human resource to improve organizational performance.

Researchers such as (Argote, *et al.*, 2003; Darroch, 2005; Yeo, 2003; Easterby & Lyles, 2003) have argued that human resource training due to its functions in organizational learning has a significant and positive effect on the organizational performance

In other words, what improves organizational performance (financial performance, operational performance and organizational effectiveness) is latent in the training that manpower learns while entering and performing the job of organization activities.

On the other hand the second hypothesis also has been confirmed on the role of knowledge management to improve institutional performance. The researches done by (Gloet & Terziowski, 2004; Darroch, 2005; Kalling, 2003; Feliciano, 2006) ratifies and confirms this hypothesis.

These studies show that achievement of the objectives of knowledge management in organizations is only dependent upon the degree of importance that the manpower gives to the acquisition, registration, transfer, creation and application of knowledge in the organization. So, results obtained from the third hypotheses of the study showed the effectiveness of role of training of human resources on organizational performance. Hence, the last hypothesis has also been confirmed. The results also show that the conceptual model possess adequate fitness for confirmation of research hypotheses. However, it is essential to note that acceptance of the current model, does not confirm the rejection of other proposed models, but based on the current situation and according to the fitness model standards in LISREL 8.5 software the proposed model has the necessary credibility. As the evaluation of the model corroborate based on factor loading and t-values in the table 2. Conceptual model of the study showed that on-the job training has had the greatest impact on employee learning and achievement of knowledge management objectives in the organization. Therefore, training that involve the employees directly with the work process is of top propriety and most importance. Also acquisition, transfer and knowledge creation in the organization on improving organizational performance has been more effective than the registration and application of the knowledge. These effects are seen mostly in the areas of

financial performance and organizational effectiveness. Therefore, organizational knowledge can be outlined as a sustainable competitive advantage to increase and improve financial performance and increase employee motivation to contribute in achieving organizational goals. Staff training, on the other hand had direct impact on organizational performance. In other words, the impact of direct education shows highest effects on organizational performance than through knowledge management. This means that in the population study synergy role of knowledge management to improve organizational performance has not been well-specified and employees and management still have not reached a consensus to implement the Knowledge Management objectives in organizations. Eventually it should be added that the association between the variables clearly shows their influence and effectiveness on each other.

Recommendations:

In examining various trainings in Kharg Petrochemical Company the diminishing role of web and computer-based training (On or Off-the-job training) is noticed in the achievement of the objectives of knowledge management and organizational performance improvement. This diminishing role is not due to the weakness in the IT infrastructure rather it is due to staff reluctance to use this type of training. Therefore, it is recommended that Kharg Petrochemical Company in the first step take action towards introducing the functions of web computer-based training services to personnel and change their attitude towards this type of training and to achieve management goals and improve organizational performance. Considering the dimensions of knowledge management and role of human resources in fulfilling knowledge management goals, two components of KD and KP have least impact manpower training. This means that employees still enjoy traditional practices in recording and storing in individual and organizational knowledge. Since knowledge recording in an organization has a completely direct relation with its applications in the organization, KP has also received minimal influence out of the training. Therefore, it is recommended that with the use of IT-based training, Kharg Company should familiarize employees with new ways of recording and documenting information in the organization that in addition to accelerating the business, creating and transferring knowledge, enhance its applications to improve organizational Performance. Results of the proposed model show that organizational performance from operations dimension is weaker than the other two dimensions human resource training influences and organizational knowledge management are also weaker than the other two dimensions respectively. Therefore, it is recommended that in addition to promoting and improving training levels of marketing and customer relationship, organizational knowledge should be utilized to create a culture of customer relationship in the organization.

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