

The Role of Faculty Development on Social Capital In Distance Education Context (Case: Payame Noor University)

Sana Safari*

Assistant Professor of Payam Noor University

Received: 2017/10/02

Accepted: 2017/12/05

Abstract

This study aimed to explain a role of faculty development on social capital in distance education. The research method was descriptive and data analysis method was SEM that Sample size was determined 181 faculty members of Tehran branch of Payam Noor University by Stratified random sampling. Faculty development made questionnaire design with the reliability [$\alpha = 0/94$] and social capital questionnaire of Nahapiet & Ghoshal[1998] with the reliability [$\alpha = 0/92$] were used to collect data. Results showed faculty development and social capital of sample size higher than the average and faculty development [$r = 0/71$] had a significant positive correlation with social capital of sample [$p < 0/01$]. Stepwise regression analysis showed that among the components of FD, individual development and professional development predicted 72% of social capital. The study of fitness indicators showed that the model has a relatively good fit with the data. Structural equation modeling showed faculty development on cognitive capital [$\gamma = 0/84$], relational capital [$\gamma = 0/85$] and structural capital [$\gamma = 0/93$] has impact on social capital.

Keywords

Faculty, Development, Social Capital, Higher Education Institutions, Distance Education.

Introduction

The developments in the field of higher education emphasize the need for a change in faculty members of universities, especially considering the fact that the role of universities in comprehensive development of countries is indisputable. Like other organizations, universities and higher education institutions are subject to complex transformational factors that have inevitably led them to consistently adapt to survive. Regarding the growth and promotion of human resources in the form of development programs in organizations is inevitable in facing changes and increasing the productivity and faculty members are no exception. The efficiency of faculty members has a direct impact on the performance of a university. The higher education system, as a source for producing science and comprehensive development has two quantitative and qualitative dimensions, that its balanced development must be considered in parallel in both dimensions.

The development of faculty members is one of the most important ways of improving the quality of universities. In fact, the development of faculty members is considered as the main factor in the cultivation and the support of this valuable resource to enable them to meet their individual goals as teachers, researchers and educational leaders in pursuit of more general goals and missions of the training institution [1].

There is no doubt that having this role and the effectiveness of higher education depends on the efficiency of human resources, especially its faculty members. The development of faculty members plays an essential role in innovation and the promotion of academic excellence. With a proper understanding of their social environment, faculty members can be considered as a factor in university excellence. Therefore, faculty members have a very important role in creating an environment worthy of teaching and research [2].

Investigating the activities performed in recent decades has shown an increasing emphasis on the growth of faculty members in higher education systems in different countries and educational institutions have formed some departments called the centers of renovation and excellence of faculty members which their activities cover the entire organization and the special programs of faculty members [3]. The purpose of making these centers is to facilitate organizational change and improve the atmosphere of the universities [4]. These activities have mainly reflected the increased quality of teaching and learning processes.

Given the various assumptions and descriptions about the work of faculty members, it is clear that like many people in different professions, they have multiple needs such as a constant progress, satisfaction and communication with others in order to update their skills, knowledge and competencies [5] and their programs are important in introducing and expressing such needs.

The findings related to the “The factors affecting the productivity of universities and higher education institutions in Iran” show that among 13 identified factors affecting the productivity of universities and higher education institutions, the one related to the performance of faculty members dominates 30 percentage of the share of the effective factors on productivity [6] which suggests their critical role in advancing the mission of higher education and the rapid and dramatic changes in all aspects of science and practice in the world. Another issue that requires the need to upgrade the knowledge and skills of faculty members to train human resources in accordance with developments and meeting the needs of the community [7].

To study the scientific activities in the last three decades and the development of faculty members is a matter for the future life of campuses and the sustained effectiveness of universities depends on this issue [8]. Therefore, the number of published articles in international journals about the growth and promotion of faculty members from 1975 to 2005 represents that this number has reached from 0 articles in 1975 to approximately 50 articles in 2005 [9] and in order to perform the programs related to the promotion of faculty members in the united states until 1975, 167 higher education institutions have made some centers called Faculty Development Center or have performed some related programs [10].

In the current literature, there are many definitions regarding the promotion of faculty members. This term has been defined in two general and specific perspectives. In general, this term includes a variety of activities whose purpose is to improve the performance of the faculty members. But specifically, it includes those activities which help faculty members in their professional development and promotion [11]. Gaff believes that faculty members’ development means raising the level of their interest, improving competencies and in other words, facilitating their personal and professional faculty development [10]. This definition is so broad that it involves any kind of activity that ultimately leads to the personal and professional development of faculty members. This comprehensive vision encompasses both personal and professional dimensions that did not appear in their programs until 1980s.

Francis also has acknowledged that the faculty growth is as an organizational process that seeks to modify their attitudes, skills and behaviors and is more effective in meeting their individual, students' and university needs [11]. On the other hand, growth is a part of learning in the life of faculty members of a college or university, and in fact, it is a fundamental component of the transformations that are happening in higher education. Their development is a process of professional training or re-training that they are committed to do it [12]

Faculty development can be considered as a two-dimensional activity. One dimension is their professional advancement, and the other one is their personal development. In the first dimension, according to "Jennings", their development depends on the role of teaching, research, and services and in order to create such promotions, activities such as sabbatical leave are suggested and in individual dimension, their development helps to improve communication with colleagues, students and their health and well-being [13].

Regarding the definition of Professional and Organizational Development Network in Higher Educational Center, development includes all the programs focusing on faculty members as the instructors [teachers] and the professionals in this area who provide all the programs for helping and consulting in the fields like teaching, class management, research and professional activities for faculty members [14]. Also, the faculty development includes all planned activities that provide the individual knowledge and basic skills necessary for a better performance at universities [15].

POD Network in Higher Education represents 3 general fields about the development of faculty members: 1- personal development programs which focus on individual's growth.

2- Professional development programs which focus on the general promotion of the institution.

3- Organizational development programs which focus on increasing the effectiveness of the institution.

This network believes that these programs emphasize on the development of faculty members as instructors [educational improvement, class organization, students' evaluation, teaching skills in the classroom and...], as researchers [professional improvement, professional planning, publishing, management activities] and as individuals [individual improvement, management excellence, inter-individual skills, time management and stress and welfare [14].

The history of the faculty members' development is not completely clear, nevertheless, some believe that activities in this subject have begun from the nineteenth century and at the time of the formation of sabbatical leave for professional development of these individuals at Harvard University in 1880 [16]. Sorensinelli et al. presents five time periods for the development of faculty members. Until 1980s, the main goal of the programs was to provide the grounds for enhancing the competencies and skills of faculty members as educators. The faculty is a person who uses various educational tools, develops good concepts and provides effective communication [17]. But since 80's onwards, most of the development programs were student-centered and comprehensive, which faculty members, as a conveyer of knowledge, should facilitate student learning. This transition from teaching to learning requires acquiring new skills that is necessary for students' learning in the new outcome-based education millennium [18].

Some American universities have designed plans and models for the faculty members' professional development [19]. However, the reasons for the professional development of faculty members in adapting with social changes is due to the following five reasons: 1-changing expectations about the

quality of education 2- changing social needs 3- changing technology and its influence on teaching and learning 4- changing students population and their expectations 5- changing paradigms in teaching and learning and each of these challenges require that not only faculty members, but also universities review their traditional strategies [20].

Different models that have presented for faculty members' promotion and development include: Bergquist & Philips model [1977], Gaff model [1976], Higdon model [1982], Stritter model [1983], Bland & Schmitz model [1988], Wilkerson & Irby model [1998] and Power model [2008].

Investigating the available model shows that in most of these models, the components of development in various dimensions, such as individual, professional, educational, organizational, etc., have been formulated and categorized based on the expectations of faculty members, especially on effective teaching and learning. Obviously, these efforts and activities should be properly and appropriately developed and implemented in a context appropriate to the requirements of different universities, in order to achieve the ultimate goal of universities and higher education institutes through training experts to meet the needs of society and its development.

Despite the importance of faculty members' development globally, the studies and researches conducted inside the country indicate that the status of programs and activities related to the faculty growth is at an intermediate level and was not evaluated appropriately [21]. However, the development and empowerment of human resources, especially faculty members of universities and higher education institutions have been stated as the priorities of higher education, but the present situation and the results of studies show that just several inconsistent workshops have been executed.

One of the fundamental reasons is the lack of clarity and limitations of the concepts related to the development of faculty members in Iran. In fact, a correct understanding of the scientific concept of universities has not formed yet. On the other hand, it seems that the concepts related to the development of faculty members are limited and unclear. Currently, most programs which are performed in the framework of growth courses of faculty members are those performed in the form of educational ones. Actually, it should be considered that the development of faculty members is not a managerial and superficial action.

Doaie et al.,(2015) investigated the components of empowerment and development of human resources in the view point of employees in Mashhad mayoralty. These dimensions along with the components related to the questionnaire of empowerment and development of human resources include meaningfulness, autonomy, effectiveness, confidence and growth in a sample of 215 employees of 13 districts of Mashhad mayoralty. In fact, the findings provided the dimensions and components of empowerment and development in the viewpoint of employees to develop this area in organizational studies [22].

Doming (2002), in a research called "The methods of managing human resources, efficiency of faculty members and its influence on their teaching and university's effectiveness" concluded that the level of faculty members, their workload and an accurate evaluation of their performance influences their increased efficiency [23].

Poor Karimi (2009), in a study called "Designing the model of faculty members' improvement" have represented his final model in 3 professional, organizational and individual dimensions which are under the influence of regulations, managers and officials' viewpoints, organizational culture and faculty members' partnership in university activities [24].

Ejtehadi et al, (2011), in a study called “Recognizing the growth dimensions and components of faculty members in Islamic Azad University in order to present a conceptual model” represented the dimensions of faculty members’ growth in 5 educational, research, organizational, individual and moral fields and the current situation of them in Islamic Azad University in the mentioned dimensions has been considered undesirable [25].

In addition, the results of a research by Hosseini Nasab (1993) as “ approaches and methods of developing the capabilities of faculty members in Iran Universities “ with the cooperation of Institute for Research and Planning for Higher Education indicate that programs and activities related to the growth of faculty members at universities are often scattered and costly, and many of them prefer to have individual activities [26].

Despite the newness of faculty members’ development issue, many activities like publishing scientific articles and books, conducting extensive studies and making various types of activities related to universities have been performed. In this regard, the results of some researches indicate that the constant efficiency of universities and higher education institutions depend on the development of faculty members [8]. Today, the concept of promotion and the development of faculty members have been accepted as a common issue among the members, managers and high school administrators. As Molali and Dafi [1978] represent, this concept has changed into an important part of the dictionary of higher education, but there’s not a comprehensive definition or approach regarding this issue and as it was mentioned in theoretical section, none of the represented models have indicated the dimensions, skills and required activities for development [27].

The suggested definition for the development of faculty members in this research is such that it includes all the planned activities [formal and informal] and the purpose is to increase the knowledge of faculty members in their activities and higher education and this is performed in 3 individual (opinions, morals and moral-humanistic characteristics), professional (as experts an specialists to present the required service) and educational (as instructors relating to teaching-learning process) dimensions. The dimensions of development have been evaluated in 3 different fields. The individualistic dimension which corresponds the results of Bergquist & Philips [1977] [28], Stritter (1983) [29], and Bland & Schmitz [1988] [30] studies, emphasizes the development of faculty members in different fields of humanistic interactions, morals and values and a behavior is expected from faculty members that an educated person is expected to behave.

The professional or specific dimension of faculty members introduce them as experts and journalists who can be active in the processes of providing services and resolution due to knowing the current methods and philosophies governing the science and having up to date information. This form of growth which has been represented in scientific activities and in providing specialized services in the mentioned model can be observed in the studies of Higdon [1982][31], Stritter [1983] [29], Wilkerson & Irby (1988)[17] and Power (2008) [32].

The dimension related to the educational development of faculty members that have been presented in sub-dimensions like familiarization with theoretical and practical aspects of specialized major, teaching skills and the ability to easily and quickly transfer content, educational technology, and use them in presenting the contents correspond the studies of Bergquist & Philips (1977)[28], Gaff (1976)[10], Higdon (1982)[31], Bland & Schmitz [1988] [30], Wilkerson & Irby (1988) [27] and Power (2008).

The term social capital is one of the new concepts that have been introduced in the economic and social studies of developed societies. Representing this approach in many economic, social and cultural debates reflects the importance of the role of social structures and social relations among individuals capital on economic, social and cultural variables. Social capital is a term that has entered the social and economic field in recent years.

Several studies have been carried out on this subject and the following critiques have provided several definitions of social resources: Jane Jacob (1961), GCK (1966), Gain Lower (1970), Ben Pratt (1980), Vieimensen (1981) Baker (1983) and Frazise Fukuyama (1990)[33].

Social resources is mainly based on cultural and social factors and its identification as a type of resources both at the level of macro level development of countries and at the level of management of organizations and enterprises can create a new understanding of socio-economic systems and helps administrators to better manage systems.

Social resources is considered a suitable platform for human and physical resources efficiency and a way to succeed; on the other hand, social resources gives meaning to ones life and makes life easier and more enjoyable. Social capital is not a set of community-based institutions but is a connecting ring of individuals in the form of volunteer institutions, networks and formations. Paying attention to the important role of social capital has desirable influence and workability even on the most formal institutional relations and structures such as government, political regime ,rule of law, judicial system and citizenship freedom.

In sum, it can be said that the purpose of the social capital, network of relationships and links based on social trust between individuals and between groups and interactions of individuals with groups, organizations and other social institutions that are permanent and have social cohesion and the encountering the individuals and groups of social protection and necessary force to facilitate action in order to reach individual and group goals. Nahapit features the various aspects of social capital with organizational approach in three main categories which include cognitive, relational and structural resources [34].

The cognitive element refers to capital that provide manifestations and interpretations and systems of common meanings among groups[35]. The most important aspects of this dimension are: language and common codes, common narrations [36].relational element of social resources describes the kind of personal relationships that individuals make with each other because of the history of their interactions.[34]. The relational element of the social capital are trust, norms, requirements and expectations of identity [37].

The structural element of social resources refers to the general pattern of contacts between individuals, ie; who you have access to and how you have access to them [38]. The most important aspects of this element are: Network Relationships: The main proposition of social capital theory is that network relationships provide access to resources such as knowledge. Social relationships create the channels of information that reduce the amount of time and investment needed to collect information. Configuring network relationships: Density, linkage and hierarchy all contribute to the flexibility and ease of exchange of information through the impact on the amount of contact or access to network members. For example, Brett argued that the dispersed network with a very low number of contacts, provides more informational benefits. Dense network because of the fact that the diverse information provider is distributed less with the same network cost, the network is inefficient [38]. Hansen also found that weak links prevented the transfer of knowledge [39]. Suitable organization:

Social resources created including relationships and linkage ,norms and trust in a particular environment can often be transferred from one social environment to another. In this way, it can affect social exchange patterns. Suitable social organizations can provide a potential network of access to individuals and their resources including information and knowledge and through the cognitive and social dimensions of social resources may provide incentives and capabilities for exchange. At the same time,these organizations may hinder this exchange.

The experts have shown areas in relation to factors affecting the promotion of social capital such as education [Smith Billy & Siranin], Health [Smith],Confidence and trust in the political institutions [Berihem and Rahen] and the satisfaction of the government and political commitment [Puntem][40].

Unlike other capital. social resources does not exist physically but is a result of group and social interactions and norms and on the other hand, an increase in it can lead to a serious fall in the level of administrative expenses of the community as well as operating costs of the organizations[41]. It can be said that the concept of social resources is a network of relationships and links based on interpersonal and intrapersonal social trust and the interactions of individuals with groups, organizations and social institutions that the strongest solidarity and social cohesion and the encountering the individuals and groups of social protection and energy necessary to facilitate action in order to reach individual and group goals.

Demori and others [2009] in a research study have concluded that there is a positive and meaningful relationship between knowledge management and social resources with topic of the relationship between knowledge management and social resources in Islamic University from the point of view of the faculty members of Yazd University. So that social capital plays a significant role in the development of knowledge management at Islamic University. Also, the findings of this research indicate that social resources components have a positive and meaningful relationship with the ten dimensions of knowledge management. The research results indicate that there is a close relationship between social resources and knowledge management in the organization. Other results of this study showed that the dimensions of social resources provide a basis for strengthening knowledge management in Islamic university so that cognitive capital,rational capital and structural capital have a positive and meaningful relationship with knowledge management[42]. The term distance education was first introduced by Cross, in his view,it refers to the types of training that use Internet and Internet technologies for learning. Cooper (2004) describes electronic learning as a set of educational activities that use electronic tools including audio,video,computer,and network[43]. Meyer (2005) has defined the concept of e-learning and considers it as an active and intelligent learning that will play a central role in the process of learning to learn in expanding and deepening the culture of information and communication technology (ICT). Distance learning, taking advantage of rapid advances in the field of communication technology has undergone a rapid interaction rather than its initial form of correspondence education. The provision of distance learning services, with the help of new communication tools, the advancement of technical knowledge of mass media and the attention of scholars to the social education dimensions of this technological advance have achieved good results that nowadays almost all countries in the world both developed and developing countries have switched to using it and put distance education in their training sets.

Regarding to what was said, the purpose of this study was to explain the role of faculty members in social capital in the field of distance education. By analyzing the results, efficient and effective strategies for the development of the faculty members of the distant educational administrative centers including the studied community could be achieved.

The study of literature and the history of the subject shows that development of faculty members is an emerging field and a necessary requirement for higher education. An upsurge is in fact an action designed to update the knowledge and information of faculty members but it is difficult to determine their needs. Commitment to related programs and activities is one of the most important and key pillars of the effectiveness of the faculty members; development programs. Hence, the development of faculty members are considered to be one of the ways of creating and maintaining human resources in universities and educational and research centers. Scientific and academic professionalism in universities is considered as a serious issue.

Methodology

The research method was applied from the perspective of the research goal and in terms of collecting data it was descriptive and analytical method has been the type of structural equation modeling. The research statistical community consisted of 340 faculty members of Payame Noor University in Tehran that to select the sample, the stratified sampling method was fitted appropriately and for determination of sample size, the Cochran sampling formula was used with a 0.05 error. In this way, the sample of the study was categorized by the groups of the basic sciences, engineering, humanities, social sciences and art in proportion to the size of society and then randomly examined. Accordingly, a sample size was calculated 181 people and the data needed for this study were collected through two questionnaires as follows:

Table 1. Sample size divided by different classes

Art	Social Sciences	Humanities	Technical Engineering	science
%05	%29	%26	%21	%19

F. Development Questionnaire: A *made* questionnaire that is based on research literature and evaluates three components. The alpha coefficient of the questionnaire [$\alpha = 0.96$] was obtained and the alpha coefficient of the elevated components including individual development [0.92], educational development [0.8] and professional development [0.94] was obtained. In order to study the validity of the tool in terms of the number of components and sample size, in addition to content analysis, a confirmatory factor analysis was used with Lisrel software that evaluation of fitting indices [RFI=0.4], [IFI=0.94], [NNFI=0.94], [NFI=0.93], [RMSEA=0.049], [GFI=0.89], [$\chi^2/df=1.43$] confirmed factor analysis. Therefore, it can be said that the research instrument has been constructive.

Social Capital Questionnaire: To measure the social capital of Nahapiet and Ghosal [1998] has been used. In which three dimensions of social capital including cognitive, relational and structural are examined. Alpha coefficient of the questionnaire [$\alpha = 0.96$] is calculated. Also, the alpha coefficient of recognition resources [0.91], relational resources [94.0%] and structural resources [92.9%] were obtained; In order to study the validity of the questionnaire in addition to content analysis, a confirmatory factor analysis was used. Estimating of fitting indices; NNFI=0.94, [NFI=0.96], [RMSEA=0.067], [GFI=0.91], [$\chi^2/df=2.08$], [IFI=0.96]

confirmed factor analysis. Therefore, it can be said that the research questionnaire has been constructive.

Findings

The findings of the research is expressed by focusing on the realization of the research goal that prior to addressing the goal, descriptive results of the project are also presented. In the present study, the demographic characteristics of respondents regarding sex indicate that 82.37% of respondents are female and 17.62% of them are male respondents. Faculty members have been examined by the faculties of engineering, literature and humanities, social sciences and economics, basic science, art and architecture and agriculture. To evaluate the status of the variables of research, we used a single-sample T-test with the value of test 3, because the scores are between 1 and 5, the number 3 was used as the median [50% of the scores] to determine the status of the variables. The results showed that the faculty development with T (812.8) and the meaningful level [0.000] and social capital with T [164.12] and significant level [0.000] were significantly higher than the average. All the components of faculty development and social capital have been higher than average.

Table 2. T-test scores of variables

Variables	Average	T	F.degree	Significance
FD	3/70	8/812	180	•/•••
ID	3/46	6/584	180	•/•••
OD	3/45	5/242	180	•/•••
PD	3/69	9/379	180	•/•••
SC	3/94	12/164	180	•/•••
CC	3/44	6/385	180	•/•••
RC	3/89	11/431	180	•/•••
SC	3/50	6/667	180	•/•••

To investigate the relationship between variables, Pearson correlation test was used. Results of Pearson coefficient shows that there is a strong and direct correlation between the two variables of faculty development and social capital in population. Pearson's coefficient is equal to 0.67 and its corresponding significant is equal to 0.000. Due to the significance level of less than 0.01 and considering 1% error the observed correlation in the sample is applicable to population. As a result, there is a correlation between faculty development and social capital variables in statistical population of study.

Table 3. Faculty development correlation coefficients and social capital

Variables	1	2	3	4	5	6	7	8
1 IF	1							
2 EF	**/.63	1						
3 PF	**/72/	**/69/	1					
4 SF	**/88/	**/74/	**/79	\				
5 CF	**/51	**/49	**/52	**/.49	\			
6 RF	**/54	**/57	**/55	**/54	**/53	\		
7 SF	**/64	**/57	**/67	**/63	**/50	**/63	\	
8 FD	**/65	**/59	**/63	**/67	**/84	**/70	**/71	\

0/01 Meaningful level **0/05 Meaningful level *

Stepwise regression analysis showed that among the components of FD, individual development and professional development predicted 72% of social capital.

Table 4. Stepwise regression analysis of variables

St. Index	R	R ²	Regression Coefficient	
			1	2
Predictive variable				
ID	.79	.68	.79 • β = t =12/66	
ID, PD	.84	.72	.71 • β = t =6/48	.28 • β = t =3/35

To investigate the role of faculty members in social capital, the Structural Equation Modeling and LaserList software is used [Table 5, Diagram 1

Table 5. Model fitting indices

Fitness Index	IFI	NNFI	NFI	RMSEA	GFI	AGFI	SRMR	χ ² /df
Ad. domain	0 - 1	>0.9	>0.9	<0.08	>0.9	>0.9	>0.05	1- 5
Am.calculated	.795	.796	.794	.073	.795	.793	.064	1/38

After eliminating covariance errors, the study of fitness indicators such as χ²/df ratio, goodness-fit index [GFI], incremental fertility index [IFI], root mean square error approximation [[RMSEA, Normalized Fitness Index [NFI]] And Adaptive Adequacy Goodness Index [AGFI] show that the model has a relatively good fit with the data [Table 5 and Figure 1].

Structural equation modeling showed faculty member development on cognitive capital [γ=0/84], relational capital [γ=0/85] and structural capital [γ =0/93] have impact on social capital. The t-test statistic [t-value] was used to determine the significance of the relationships between variables. Since the significance was checked at the error level of 0.05, so if the value of the values obtained with the t-value test is less than 1.96, then there is no significant relationship. The value of t-test calculated between development and cognitive capital [5.66], relational capital [9.43] and structural capital [8.17], which is significant at level 0.05.

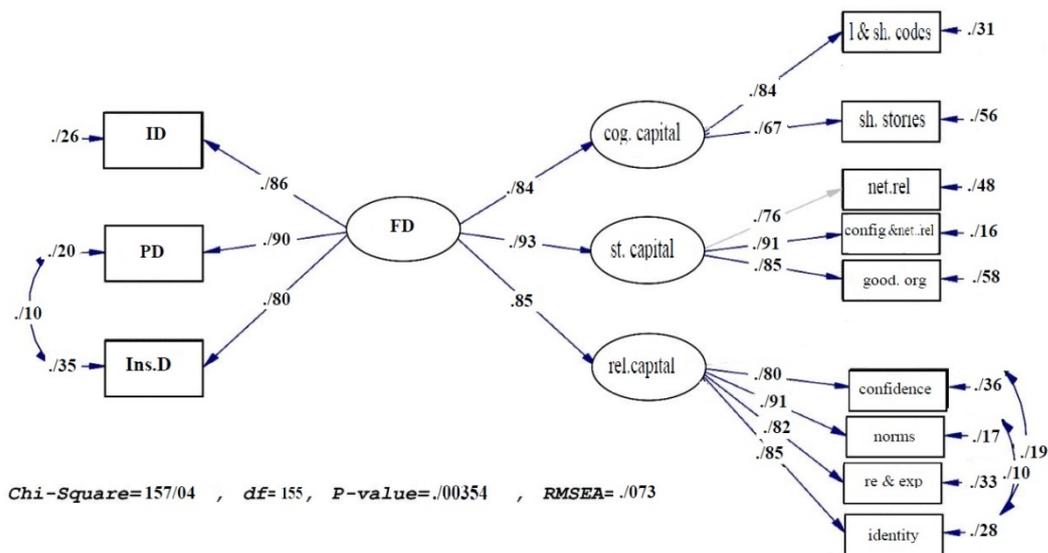


Diagram 1. Structural equation modeling

The direct and indirect paths studied in the model and their path coefficients are given in the following table. As the results show, all of the coefficients of the paths were significant, indicating the effect of the faculty members on the cognitive capital, relational capital and structural capital.

Table 6. Directions examined in the model

Path	Test statistic	Significance	Path coefficient	Status
FD → cognitive capital	5/66	0/05	D ./.84	meaningful
FD → relational capital	9/43	0/05	D./85	meaningful
FD → structural capital	8/17	0/05	D./93	meaningful
FD → cognitive capital → language & shared codes	6/52	0/05	ID./83	meaningful
FD → cognitive capital → shared stories	6/42	0/05	ID./67	meaningful
FD → relational capital → confidence	7/68	0/05	ID./80	meaningful
FD → relational capital → norms	5/99	0/05	ID./91	meaningful
FD → relational capital → requirements & expectations	8/99	0/05	ID./82	meaningful
FD → relational capital → identity	7/28	0/05	ID./85	meaningful
FD → structural capital → network relationship	8/51	0/05	ID./76	meaningful
FD → structural capital → configuration & network relationship	8/30	0/05	ID./91	meaningful
FD → structural capital → good organization	7/08	0/05	ID./85	meaningful

Discussion and conclusion

The purpose of this study was to explain the role of faculty development on social capital in Payam Noor University of Tehran. The results of this study showed that faculty development and social resources in statistical society was higher than average. The necessity of the present research and its findings are consistent with the researches of Geller and Pearson (2005) Doayi et al (1394), Madhushi et al (1394), Arghavan (2010) and Abysi,Kurd (2009). So, it can be said that human resource development is one of the most powerful, effective and efficient tools in all aspects of organizational performance.

Given the fact that the variables in the field of human sciences are constantly improving and developing, thus, paying more attention to these variables will turn them into competitive advantages of organizations especially educational organizations.

In other words, the attention of faculty members in higher education institutions that are responsible for the process of macro-scale development and improvement in society is to be the basis for the sustainable development of human resources. There are many things faced by faculty members who face challenges in the field of excellent education in the third millennium. Given the diversity and expansion of faculty activities, growth programs will be successful ,if it will be viewed as an interconnected set and includes all the functions of the faculty.

The results of correlation showed that faculty members development has a positive and meaningful relationship with social capital. The results of stepwise Regression showed that among the components of development; personal and professional development had a predictability of social capital. The results obtained for individual development are consistent

with the studies of Orthos Leonid (2015), Chandan (2011), Siegler and Pearson (2005) and Doayi and colleagues (1394).

It also requires the justification of the capacity of individual development to lead to increasing of social capital. Concerning the effect of professional development ,it has correspondence with the study of Arghavan (2010), Abysi, Kurd (2009), Wajhang et al. (2014). Therefore, it can be said that professional growth understanding, policy implications and understanding of the importance of specialized ability are based on the competitive ability and structure of the system. However, this results of the internal consistency of an organization improve the faculty members with respect to the suitable development strategy.

The point that is especially important is [especially at the level of policy-making] examining the issue of development as a whole and an interconnected set. Although it is possible to do different kinds of planning for different departments; not necessarily the only emphasis on a section of the process of development to give a comprehensive view of this case. Reflecting on a single dimension does not reflect the development of the faculty member. But various dimensions together and with each other complete meaning and concept. Considering that the rate of addressing each aspect of the development dimension can vary according to the needs of individuals and also vary at different universities.

The structural equation modeling also showed that the faculty development influence on social capital. With regard to these results, any action taken to educate, encourage and support faculty members to use development mechanisms will lead to the development of social capital of its

organization. The development depends on strategies that their use by individuals will improve their knowledge, expertise and skills. Creating a lifelong learning and development approach is a requirement for current personal development processes. Because the needs and requirements demanded by the organization and the environment are constantly changing and it is essential that people fit this approach. An approach that learning and development is a continuous human need and it is a rational justification for focusing on new approaches to development.

Based on the findings of the research, it is suggested that: the faculty members be informed about the high levels of growth and their participation in the public, specialized and executive committees. This will have a faster and more favorable impact on organizational positioning. The field of entrepreneurial thought and initiative will be provided in faculty development programs. Adopting comprehensive policies by the university staff in order to pay attention to faculty development will greatly improve the quality of services provided by the great education centers. organizational opportunities is given for the initiative and decision making actions in the affairs related to the faculty. Flexible policies are designed for empowering and responsibilities and executive positions at the organization level. It is suggested that a professional development plan is based on continuous improvement in the three functions of teaching, research and specialized services of faculty members and these plans will be provided with the participation of various levels of excellent education centers. Possibility of the participation of staff in scientific and specialized committees and the exchange of ideas and information are provided. Challenges and scholarship requests from faculty members to improve the level of the development from system are conducted. In this regard, training workshops will be held with the various skills required by faculty members and the opportunity to attend seminars, congresses, conferences and scientific gatherings inside and outside the country will be provided.

References

- [1] Mackinnon.G.E. Administrator and deen perceptions toward faculty development in academic pharmacy. *Am J Pharm Educ.*(2013).67- 97.
- [2]Abzari M, Shaemi M, Talebi H, Abdul Manaf S. The gap between current and desired status of knowledge management in Iran's car industry, public administration, Vol, 3, No.6. (2011),19-34.
- [3].Grant, M. Faculty development in community colleges: A model for Part-time faculty, to improve the academy: Resources for faculty. *Instructional and Organizational Development*, Vol 23,No.6. (2005),122-131.
- [4]. Matthew, N., Mines, C., & Brown, B. Evolving as nurse education in problem-based learning through a community of faculty development. *Journal of Professional Nursing*, 23[2], (2007), 75-82..
- [5]. Deci, E., & Ryan, R. The “what” and “why” of the goal pursuits. *Psychological Inquiry*, 11[4].(2000), 212-219.
- [6]. Khorshidi, A., Mahdavi, M., & Soleimani, A. Effective factors and indicators of productivity of universities and centers of higher education. *Quarterly Journal of Research in Educational System*, No.5. (2008).
- [7].Hejazi, S.I .; Pardakhtchi, M.H. and Shahpasand, M.R. *Teachers' Professional Development Approaches* : Tehran University Press. (1388).

- [8] Phrastkhah, M., A Survey of the Model of Higher Education Interactions and University with Other Production and Service Systems, *Quarterly Journal of Research and Planning in Higher Education*, No. 57.(1399), pp. 45-64.
- [9]. Sorcinelli, M., Austin, A., Eddy, P., & Beach, A. *Creating the future of faculty development, learning from the past, understanding the present*. Bolton: Anker Publishing.(2006).
- [10]. Gaff, J. G. *Towards Faculty renewal*. San Francisco: Jossey-Bass.(1976).
- [11]. Alstete, W. *Posttenure Faculty Development: Building a System for Faculty Development*.(2000).
- [12]. McGriff, Steven J. " Leadership in Higher Education; Instructional designers in faculty development programs". Presented at National Convention of association for Educational communications and Technology ,vol.1,No.2 . (2000),306-314.
- [13]. Jennings, C.M, Barler, A.D & Bartling, C.A. Trends in colleges and universities faculty development programs. *Journal of Higher Education*, Vol.9.No.3, (1991), 147-154.
- [14]. Safari, S, The Role of the Development of Academic Members in Promoting Interdisciplinary Studies, *Quarterly Journal of Interdisciplinary Studies in the Humanities*, Volume 4, Issue 4, Autumn (2012), pp. 35-51
- [15]. Mclean, G. N . Strategic HRD practices as Key Factors Organizational learning. *Journal of European Industrial Training*, Vol.3, No. 6.(2008), 418-432
- [16]. Eble, K., & Mckeachie, W. *Improving undergraduate educational through faculty development*. San Francisco: Jossey-Bass. (1985).
- [17]. Wilkerson, L., & Irby, D. M. Strategies for improving teaching practices: A comprehensive approach to faculty development. *Aca Med.*, 73[4]. (1998),122-129.
- [18]. Garcia, R., & Calantone, R. A critical look at technological innovation typology and innovativeness terminology: A literature review .*The Journal of Product Innovation Management*, 19.(2002), 110–132
- [19]. Grant, M. [2005]. Faculty development in community colleges: A model for Part-time faculty, to improve the academy: Resources for faculty. *Instructional and Organizational Development*, 23 [6] (2005), 122-131.
- [20]. Lawler & P. A. & King, K, P. *Refocusing Faculty Development: The View from an Adult Learning Perspective*. Adult Education Research Conference. Conference Proceedings ,Vancouver, BC, Canada(2000).
- [21]. Marzban, z. *Investigating the Necessity of Establishing Faculty Members' Center at Shahid Beheshti University [Human Resources, Equipment, Programs]*, Thesis for Master's Degree, Faculty of Educational Sciences and Psychology, Shahid Beheshti University (1388).
- [22]. Doaei, H, Farahi, M. M, Homayouni, M.H. The role of employee empowerment in improving their mutual trust in managers. *Management Research Journal* 1 [1].(1388).
- [23]. Boswell, W.R & Boudreau, J.W [2002]. Separating the development and evaluation performance appraisal usage. *Journal of business and Psychology*. Vol. 16. No. 3. (2002). 391-411

- [24]. Pourkarimi, c. Pattern of professional development of faculty members of research organizations (Case: Academic Jihad), Quarterly of Human Resource Management Researches, Imam Hossein University. 1, 6, (1389), 141-155
- [25] . Ijtihadi, m. Identifying Dimensions and Components of Faculty Improvement in order to provide a Conceptual Model, Quarterly Journal of Research and Planning in Higher Education, No. 62, (2011), pp. 21-46.
- [26] Hosseini Nasab, S. D. Development centers for faculty members in universities, Institute for Research and Planning for Higher Education, Tehran. (1373)
- [27]. Mullally, L. J., & Duffy, N. V. The goal of faculty development, improving instruction and surviving. *Improving College and University Teaching*, Vol.3No.26,(1978), 121-122.
- [28]. Bergquist, W. H., & Phillips, S. R. A handbook for faculty development. V2, Washington DC: The Council of the Advancement of Small Colleges.(1977).
- [29]. Stritter, F. T. Faculty evaluation and development. In Mcguire, C.H. & Foley, R. P. [Eds.], *A Handbook of Health Professions Education*. San Francisco: Jossey-Bass.(1983). 294-318.
- [30]. Bland, C. J., & Schmitz, C. C. Faculty renewal: Concepts, strategies and lessons from the past twenty years. San Francisco: Jossey-Bass.(1988).
- [31]. Higdon, D. W. Don't tell them, show them. *School Science and Mathematics*, Vol.32 No.5.(1982), 23-28.
- [32]. Power, M. A dual-mode university intractational design model for academic development. *International Journal for Academic Development*,Vol. 13,No.1.(2008), 31-39.
- [33]. Putnam, R.D. Bowling Alone: America's Declining Social Capital,*Journal of Democracy*, Vol. 6.No.3.(1995).
- [34].Nahapiet, J. & S. Ghoshal . Social Capital, Intellectual Capital and the Organizational Advantage, *Academy of Management Review*, vol.23,No.2.(1998).
- [35]. Cicourel, A.V . *Cognitive Sociology*, Harmondsworth, England, Penguin Books.(1973).
- [36]. Orr, J . *Sharing knowledge, Celebrating Identity: Community Memory in a Service Culture*.(1990).
- [37]. Lewicki, R.J. & B.B. Bunk . Developing and Maintaining Trust in Work Relationships, In R.M. Kramer & T.M. Tyler [Eds.], *Trust in Organizations: Frontiers of Theory and Research: Thousand Oaks, C.A: Sage* .(1996). 114-139.
- [38]. Burt, R.S . *Structural Holes: The Social Structure of Competition*, Cambridge, M.A: Harvard University Press. (1992) [39]. Hansen, M.T . The Search-Transfer Problem: The Role of Weak Ties in Sharing knowledge Across Organization Subunits,*Administrative Science Quarterly*.(1999).
- [40]. Zahedi Mazandarani.M, *The Functional Requirements of the Development of Employment in the Agricultural Sector*. *Agricultural Economics and Development*. No. 45, (1383), 41-83
- [41] Akhtar Research, M. *Social capital*. The publication of the author, Tehran. (1385).

[42].Demoory, D. Mansouri, h. Taheri Demne, M. The Relationship between Knowledge Management and Social Capital in Islamic University [From the Viewpoint of Faculty Members of Yazd University]. Cognitive Studies at Islamic University. No. 41, Spring (2009).

[43].Cooper, R. E-learning in the World; London: Falmer.(2004).